# QUINCY AREA EMS Policy and Procedure Manual



Revised 3.10.2025 April Ragan

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## QUINCY AREA EMS SYSTEM ADDITIONAL PROCEDURES

### Revised 12/2020

These protocols approved by

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## QUINCY AREA EMS SYSTEM ADDITIONAL PROCEDURES

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Revised: 12/2020

#### ADDITIONAL APPROVED MEDICATIONS/EQUIPMENT

- I. Purpose: To identify medications/equipment utilized in the Quincy Area EMS System that are not standard equipment and have received approval from IDPH.
  - A. Must be approved by IDPH
  - B. Require additional *initial* Inservice training by *reviewing the PowerPoint Transfer and Medication Infusion Update, then successfully completing the quiz with score of 85% or>.*
- II. Medications approved for interfacility ALS transport only that have been initiated at the transferring facility.
  - A. Amiodarone (A-6)
  - B. Antibiotics (A-10)
  - C. Diltiazem (Cardizem) (A-9)
  - D. Glycoprotein IIb/IIIa receptor inhibitors (Aggrastat, Integrilin and Reopro)(A-5)
  - E. Heparin drip (A-3)
  - F. Nitroglycerin drip (A-4)
  - G. IVs containing potassium (A-8)
- III. Additional equipment:
  - A. Arterial line sheath (A-2)
- IV. Documentation
  - A. Documentation on the Patient Care Report form should include normal documentation for medications being administered including drug, route, dose, indication and assessment findings prior to, during and after administration.
  - B. An event report (PS-3) should be initiated for any unexpected reactions to these medications or issues related to equipment.

4/92, re: 11/97, 8/01, 4/03, 9/09, 12/20

(reviewed: 8/95, 2/06)

#### TRANSFER OF PATIENTS WITH ARTERIAL LINES

- I. Inservice
  - A. Paramedics and Prehospital RN's may transfer patients with heparin maintenance infusions after completing additional in-service training consisting of:
    - 1. Review PowerPoint QAEMS Transfer & Medication Infusion Update
    - 2. Complete quiz with score of 85% or >.
- II. Prior to moving a patient to the ambulance stretcher, the following must be completed:
  - A. The paramedic will have a R.N. check all connections and confirm that they are tight.
  - B. The paramedic will assess circulation in the extremity and document the color, pulse intensity, capillary refill, and sensation.
  - C. The paramedic will inspect the puncture site, noting any swelling orbruising.
  - D. The paramedic will examine the pressure bag to assure it is working properly.
- III. During the transfer, the paramedic will:
  - A. Check all connections every 30 minutes and document the findings
  - B. Check circulation in the extremity as in II.B. every 30 minutes and document the findings
  - C. Check the puncture site every 30 minutes and document.
  - D. Maintain 300 mmHg of pressure at all times in the pressure bag for adults. (For pediatrics, request pressure limit from RN or physician.)
- IV. If blood backs up into the line:
  - A. Check the position of all stopcocks.
  - B. Check all connections.
  - C. Check the bag pressure to assure 300 mmHg of pressure (adults).
  - D. Flush the *catheter tail (red tail, pull to flush)* until the line iscleared.
  - E. Do not allow the valve to remain open causing the patient to receive too much fluid.
  - F. Do not flush with a syringe.
  - G. Do not allow blood to back up to transducer dome. If it does, notify the receiving hospital uponarrival.
- V. Should an assessment reveal a loss or weakening of pulse distal to the site or a loss of warmth, sensation or mobility below the site, notify the receiving hospital immediately.
- VI. Apply direct pressure to the site should the catheter become dislodged or if you note a hematoma forming.
- VII. Should an air embolism be suspected due to an empty IV container, air in the tubing or loose connections as evidenced by a decrease in blood pressure, weakness, rapid pulse, or cyanosis of the affected extremity:
  - A. Check the line for leaks.
  - B. Notify the receiving hospital or medical control immediately.
  - C. Check vital signs.
  - D. Administer O2 as ordered.
  - E. Provide care as ordered.

#### TRANSFER OF PATIENTS WITH ARTERIAL LINES (CONTINUED)

- VIII. If air bubbles appear in the line:
  - A. Check for leaks and loose connections in the line
  - B. Flush air through an open stopcock
- IX. Notify the receiving hospital of any complications encountered during transport

4/92, re: 11/97, 2/06, 12/20 (reviewed: 8/95, 8/01, 9/09)

#### TRANSFER OF PATIENTS RECEIVING IV HEPARIN

#### I. Inservice

- A. Paramedics and Prehospital RN's may transfer patients with heparin maintenance infusions after completing additional Inservice training consisting of:
  - 1. Review PowerPoint QAEMS Transfer & Medication Infusion Update
  - 2. Complete quiz with score of 85% or >.

#### II. Drug action/Use

- Anticoagulant used to help prevent clots from forming by inactivating the enzyme thrombin
- B. Used in the prevention and treatment of emboli and thrombi

#### III. Potential adverse effects

- A. The chief complication is hemorrhage, which can occur at virtually any site in patients receiving heparin.
- B. Any unexplained change, symptom or hypotension in your patient should be a clue to assess further for a possible bleed.
- C. Other effects include local irritation at the IV site and hypersensitivity.

#### IV. Procedure

- A. Obtain patient report from the RN caring for the patient at the transferring facility with special attention to the following:
  - 1. Patient condition including recent vital signs
  - 2. All drugs currently being infused know rate of infusion for each
  - 3. Transfer orders
- B. The Heparin drip must be maintained on an IV pump at all times during transport.
- C. Check the infusion frequently to ensure it is infusing at the correct rate.
- D. Observe the IV site for signs of infiltration if this occurs, discontinue the site and apply a pressure dressing. Restart the line as soon as possible and continue with the same rate of infusion. Make note of the length of time the infusion was stopped and report to staff at the receiving facility.
- E. Contact Medical Control or the receiving facility if any problems or questions regarding the heparin infusion while enroute.

4/92, re: 11/97, 8/01, 2/06, 9/09, 12/20

(reviewed: 8/95)

#### TRANSFER OF PATIENTS RECEIVING IV NITROGLYCERIN

#### I. Inservice

- A. Paramedics and prehospital RN's may transfer patients with nitroglycerin infusions after completing additional Inservice training consisting of:
  - 1. Review PowerPoint QAEMS Transfer & Medication Infusion Update
  - 2. Complete guiz with score of 85% or >.

#### II. Drug action/Use.

- A. Drug Action: relaxation of vascular smooth muscle with dilation of peripheral arteries and veins.
- B. Use: unstable angina, acute myocardial infarction, congestive heart failure, to decrease blood pressure/workload on the heart.

#### III. Adverse effect

- A. Adverse effects with this drug are usually dose related and almost all reactions area result of vasodilator properties:
  - 1. Headache
  - 2. Lightheadedness related to drop in blood pressure
  - 3. Hypotension

#### IV. Procedure:

- A. Obtain patient report from the RN caring for the patient at the transferring facility with special attention to the following:
  - 1. Patient condition including recent vital signs
  - 2. All drugs currently being infused know rate of infusion for each
  - 3. Transfer orders the order should specifically indicate whether the nitroglycerin infusion is to be titrated according to pain and the blood pressure parameters to be maintained.
- B. The nitroglycerin drip must be maintained on an IV pump at all times during transport.
- C. Check the infusion frequently to ensure that it is infusing at the correct rate. If titrating the infusion, a nitroglycerin rate table should be used to increase or decrease dosage.
- D. Monitor the patient's vital signs every 15 minutes if stable and every 5 minutes if unstable.

- E. If the patient experiences a drop-in blood pressure you should:
  - 1. Administer a 200 ml fluid bolus if not contraindicated (i.e. pulmonary edema).
  - 2. If the blood pressure does not return to the minimum systolic parameter listed in the transfer orders (or 90 systolic if no minimum indicated), stop the infusion and contact Medical Control or the receiving facility.

#### V. Other

- A. Special tubing may or may not be utilized depending upon the transferring facilities policies.
- B. Do not administer other medications through the nitroglycerin infusion line.

4/92, re: 11/97, 8/01, 2/06, 9/09, 12/20 (reviewed: 8/95)

## TRANSFER OF PATIENTS RECEIVING GLYCOPROTEIN IIb/IIIA RECEPTOR INHIBITORS (AGGRASTAT, INTEGRILIN, REOPRO)

#### I. Inservice

- A. Paramedics and Prehospital RN's may transfer patients with approved glycoprotein receptor inhibitor maintenance infusions after completing additional Inservice training consisting of:
  - 1. Review PowerPoint QAEMS Transfer & Medication Infusion Update
  - 2. Complete quiz with score of 85% or >.

#### II. Drug Action/Use

- A. Used in the treatment of cardiac patients with signs/symptoms of ischemia or AMI. Also used in cardiac catheterization labs to reduce complications.
- B. These drugs are reversible antagonists of fibrinogen binding to prevent platelet aggregation.
- C. They coat platelets causing "slickness" and prevent platelet aggregation.

#### III. Potential adverse effects

- A. The chief complication is hemorrhage.
- B. Any unexplained change, symptom or hypotension in your patient should be a clue to assess further for a possible bleed.

#### IV. Procedure for transfer

- A. Obtain patient report from the RN caring for the patient in the transferring facility with special attention to the following:
  - 1. Patient condition including recent vital signs
  - 2. All drugs being infused know rate of infusion for each
  - 3. Transfer orders including measures to be taken if bleeding occurs which cannot be controlled with direct pressure.
- B. Assess the patient for any signs of bleeding
- C. The glycoprotein inhibitor infusion must be maintained on an IV pump at the ordered rate of infusion.
- D. Check the infusion frequently to ensure it is infusing at the correct rate.
- E. Observe the IV site for any signs of infiltration if this occurs, discontinue the site and apply a pressure dressing. Restart the line as soon as possible and continue with the same rate of infusion. Make note of the length of time the infusion was stopped and report to staff at the receiving facility.

F.	Monitor the patient for any potential hemorrhage especially at infusion sites, other needle stick sites and mucous membranes. If bleeding or suspected bleeding is noted which cannot be controlled with direct pressure, follow transfer orders or contact Medical Control for instructions.

#### TRANSFER OF PATIENTS RECEIVING AMIODARONE

#### I. Inservice

- A. Paramedics and Prehospital RN's may transfer patients with amiodarone maintenance infusions after completion of Inservice training.
  - 1. Review PowerPoint QAEMS Transfer & Medication Infusion Update
  - 2. Complete quiz with score of 85% or >.

#### II. Drug Action/Use

- A. Drug action: Antiarrhythmic with effects on sodium, calcium and potassium channels. Possesses both alpha- and beta-adrenergic blocking properties.
- B. Use: A maintenance drip is utilized after conversion from dysrhythmia.

#### III. Potential adverse effects/side effects:

- A. Hypotension is the most common side effect.
- B. Bradycardia and AV blocks.
- C. CHF
- D. Arrhythmia/cardiac arrest

#### IV. Procedure

- A. Obtain patient report from the RN caring for the patient at the transferring facility with special attention to the following:
  - 1. Patient condition including recent vital signs
  - 2. All drugs currently infusing, infusion rates for each
  - 3. Transfer orders
- B. The amiodarone infusion must be maintained on an IV pump during the transport.
- C. Check the infusion frequently to ensure it is infusing at the correctrate.
- D. Due to the potential for drug incompatibilities, other drugs should NOT be administered through the same IV line.
- E. Observe the IV site for signs of infiltration. If infiltration occurs, restart the IV lineas soon as possible. Continue the drug at the ordered infusion rate.
- F. Contact Medical Control or the receiving facility if any problems or questions regarding the amiodarone infusion while enroute.

#### TRANSFER OF PATIENTS RECEIVING CRYSTALLOID SOLUTIONS WITH OR WITHOUT POTASSIUM

- I. Inservice: Paramedics and Prehospital RNs may transfer patients with crystalloid solution infusions and potassium-containing IV solutions after completing Inservice training consisting of:
  - A. Review PowerPoint QAEMS Transfer & Medication Infusion Update
  - B. Complete quiz with score of 85% or >.
- II. Approved IV Crystalloid Solutions:
  - A. The paramedic or Prehospital RN may monitor and adjust the following IV crystalloid solutions:
    - 1. 0.9% Sodium Chloride (Normal saline)
    - 2. Dextrose 5% in Water (D5W)
    - 3. Ringer's Lactate solution (LR)
    - 4. 0.45% Sodium Chloride (1/2NS)
    - 5. Dextrose 5% in Water and ½ Normal Saline (D5 ½ NS)
    - 6. Dextrose 5% in Water and ¼ Normal Saline (D5 1/4 NS)
    - 7. Normosol R, Normosol M

NOTE: All of the solutions mentioned above can contain up to 20 mEqof potassium. Use caution.

- B. The paramedic or Prehospital RN may monitor solutions containing 20 mEq of potassium or less.
- III. Potential adverse effects
  - A. Fluid overload if fluids are allowed to infuse too rapidly.
  - B. Hyperkalemia if potassium containing fluids are allowed to infuse off the pump.
    - Signs of hyperkalemia: Numbness and tingling, weakness, bradycardia, hypotension, EKG changes such as tall peaked T waves and widened QRS complex.

#### IV. Procedure:

- A. Obtain patient report from the RN caring for the patient at the transferring facility with special attention to the following:
  - 1. Patient condition including recent set of vital signs
  - 2. All drugs and IV solutions currently being infused know rate of infusion for each.
  - 3. Transfer orders
- B. Solutions containing potassium MUST be maintained on an IV pump at all times during the transport.
- C. Check the infusion frequently to ensure that it is infusing at the correctrate.

- D. Observe the IV site for signs of infiltration if this occurs, discontinue the site and apply a dressing. Restart the line as soon as possible and continue with the same rate of infusion. Do not try to "catch up" on the infusion. Make note of the time the infusion was stopped and restarted. Report this to staff at the receiving facility. Document appropriately.
- E. IV solutions containing potassium are not compatible with many drugs including epinephrine, atropine sulfate and diazepam. Do not administer drugs through the IV line that contains potassium.
- F. Contact Medical Control or the receiving facility if any problems or questions regarding the IV infusion while enroute.

#### TRANSFER OF PATIENTS RECEIVING IV DILTIAZEM (CARDIZEM)

#### I. Inservice

- A. Paramedics and Prehospital RN's may transfer patients with diltiazem infusions after completing additional Inservice training consisting of:
  - 1. Review PowerPoint QAEMS Transfer & Medication Infusion Update
  - 2. Complete quiz with score of 85% or >.

#### II. Drug action/Use

A. Used in the prevention and treatment of rapid atrial fibrillation.

#### III. Potential adverse effects

- A. The chief complications are hypotension, acute MI, pulmonary congestion.
- B. Other effects include local irritation at the IV site and hypersensitivity.

#### IV. Procedure

- A. Obtain patient report from the RN caring for the patient at the transferring facility with special attention to the following:
  - 1. Patient condition including recent vital signs
  - 2. All drugs currently being infused know rate of infusion for each
  - 3. Transfer orders
- B. The diltiazem drip must be maintained on an IV pump at all times during transport.
- C. Check the infusion frequently to ensure it is infusing at the correctrate.
- D. Observe the IV site for signs of infiltration if this occurs, discontinue the site and apply a pressure dressing. Restart the line as soon as possible and continue with the same rate of infusion. Make note of the length of time the infusion was stopped and report to staff at the receiving facility.
- E. Contact Medical Control or the receiving facility if any problems or questions regarding the heparin infusion while enroute.

9/09; 12/20 Re: 4/2017

#### TRANSFER OF PATIENTS RECEIVING IV ANTIBIOTICS

#### I. Inservice

- A. Paramedics and Prehospital RN's may transfer patients with IV antibiotics after completing additional Inservice training consisting of:
  - 1. Review PowerPoint QAEMS Transfer & Medication Infusion Update
  - 2. Complete guiz with score of 85% or >.
- II. Drug action/use: to treat pre-existing infections or as a prophylactic measure in patients that are at high risk of developing an infection or sepsis.
- III. Potential adverse effects:
  - A. Allergic reaction
  - B. Anaphylaxis
  - C. Nausea, vomiting, diarrhea
  - D. Leukopenia
  - E. Ototoxicity
  - F. Nephrotoxicity.

#### IV. Procedure

- A. Obtain patient report from the RN caring for the patient at the transferring facility with special attention to the following:
  - 1. Patient condition including recent vital signs
  - 2. All drugs currently being infused know rate of infusion for each
  - 3. Transfer orders
  - 4. Verify allergies, drug, dose, route and time of administration on physician orders.
- B. IV antibiotics are usually infused over 30-60 minutes, verify with the order, RN orpharmacist.
- C. An infusion pump must be utilized for the antibiotic infusion.
- D. Monitor for any signs and symptoms of allergic reaction or anaphylaxis. If any are noted, stop the infusion and contact Medical Control.
- E. Once the IV antibiotic infusion is complete, maintain the line with Normal Saline at TKO rate or flush the saline lock.
- F. Contact medical Control or the receiving facility if any problems or questions en route.

## QUINCY AREA EMS SYSTEM APPROVED PROCEDURES

Revised 2/2025

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

## QUINCY AREA EMS SYSTEM APPROVED PROCEDURES

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Subcutaneous Injection (ALS)	AP- 8
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#### **NEEDLE CHEST DECOMPRESSION (ALS)**

#### I. INDICATIONS

- A. Procedure is performed when tension pneumothorax is suspected. Tension pneumothorax is a life-threatening emergency in which air enters the pleural pace without any exit or release leading to an increase in intrathoracic pressure. As intrathoracic pressure rises, ventilatory compromise worsens and venous return to the heart decreases resulting in shock.
- B. Perform needle chest decompression only when the following three findings are present
  - 1. Evidence of worsening respiratory distress or difficulty ventilating with a bagmask device
  - 2. Unilateral decreased or absent breath sounds
  - 3. Decompensated shock (systolic blood pressure less than 90 mmHg for adult)
- C. Other findings associated with tension pneumothorax may be subtle and difficult to identify in the field:
  - 1. Distended neck veins
  - 2. Subcutaneous emphysema
  - 3. Tracheal deviation (late finding)

#### II. CONTRAINDICATIONS

- A. Patients with suspected simple pneumothorax
- B. Patients whose tension pneumothorax can be relieved by removal of a previously placed occlusive dressing over an open chest wound.

#### III. COMPLICATIONS

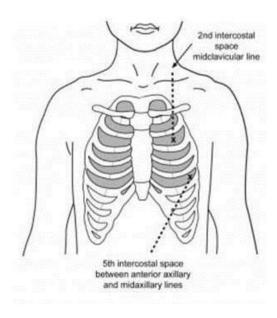
- A. Intercostal vascular or nerve injury
- B. Pneumo / hemothorax
- C. Direct damage to the lung
- D. Pericardial / cardiac injury
- E. Infection

#### IV. EQUIPMENT

- A. PPE
- B. 10-14 gauge over-the-needle catheter at least 3.25 inches (8 cm) in length. A 16 gauge catheter can be used if a larger bore is not available.
- C. 10 mL syringe
- D. Alcohol or other skin prep antiseptic
- E. Tape

#### V. DECOMPRESSION SITE

- A. Preferred site is fifth intercostal space, anterior axillary line (5<sup>th</sup> ICS AAL)
- B. Secondary site is 2<sup>nd</sup> intercostal space, mid-clavicular line.



#### VI. PROCEDURE:

- A. Don appropriate PPE
- B. Attach the over-the-catheter needle to the syringe (if using syringe)
- C. Second rescuer auscultate patient's chest to confirm side to perform procedure.
- D. Locate anatomic landmarks fifth intercostal space anterior axillary line.
- E. Cleanse site with antiseptic wipe.
- F. Stretch the skin over the site with non-dominant hand.
- G. Position the needle over the top of the 6<sup>th</sup> rib.
- H. Insert the needle into the thoracic cavity until air escapes.
- I. Advance the catheter and retract the needle. A rush of air from the hub of the catheter should be heard.
- J. Discard needle in sharps container.
- K. Tape the catheter in place.
- L. Reassess lung sounds, respiratory status, and vital signs.
- M. Needle decompression may need to be repeated if signs and symptoms of tension pneumothorax reoccur.

#### VII. PEARLS

- A. A tension pneumothorax can be precipitated by sealing an open chest wound with an occlusive dressing. The dressing should be removed if signs/ symptoms of tension pneumothorax develop.
- B. Nerves and blood vessels exist just below each rib. To avoid these you should insert the needle just over the top of the rib.
- C. The catheter could become occluded / kinked due to arm placement. Reassess the patient frequently.

#### SPINAL MOTION RESTRICTION

#### PHYSICAL ASSESSMENT

#### 1. BLUNT TRAUMA WITH

- Altered mental status
- Spine pain, tenderness or deformity
- Neurological deficits (numbness, pins and needles sensation, weakness)

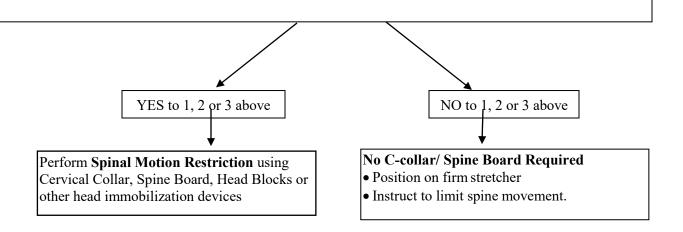
#### OR

#### 2. HIGH ENERGY MECHANISM AND ANY ONE OF THE FOLLOWING:

- Drug or alcohol intoxication suspected or known
- Inability to communicate (Age, language barrier, medical condition etc.)
- Distracting injury

#### <u>OR</u>

## 3. PENETRATING TRAUMA TO HEAD, NECK OR TORSO <u>WITH</u> EVIDENCE OF SPINAL INJURY



#### PATIENT MANAGEMENT PEARLS

- If patient meets assessment criteria but is ambulatory at the scene or if a prolonged transport of greater than 45 minutes is anticipated, place a cervical collar on the patient, position on a firm stretcher and instruct the patient to limit spine movement.
- EMS provider discretion and medical practice should be a guide when determining the need for and circumstances when spinal motion restriction should be employed. (Examples: An uncooperative patient fighting the application of spinal motion restriction is not in the patient's best interest; a patient with airway issues that require patient to be positioned other than supine will take precedence overimmobilization.)
- Spine boards should be removed in the Emergency Department at the discretion of the ED Physician at the earliest appropriate time.
- Increased caution should be used in patients over age 65 with blunt trauma, even lowimpact.
- If in doubt, follow spinal motion restriction guidelines.

#### **DEFIBRILLATION (ALS)**

I. <u>Indications</u>: pulseless patient demonstrating ventricular fibrillation or ventricular tachycardia on the cardiac monitor.

#### *II.* Contraindications:

- A. Patient with pulse.
- B. Cardiac rhythm other than ventricular fibrillation or pulseless ventricular tachycardia.

#### III. Precautions:

- A. Safety when delivering a shock
  - 1. Make a visual check to ensure that no one is touching the patient, the stretcher or other attached equipment prior to pressing the shock button.
  - 2. Call "CLEAR, shocking" in a loud, firm voice prior to delivering the shock.
  - *3.* When pressing the shock button face the patient, not the machine.
- B. Position self-adhesive cardiac therapy pads as indicated on packaging. Pads should not overlap. If using paddles, a conductive gel medium is required.
- C. Be sure that oxygen is not flowing across the patient's chest.

#### IV. Complications:

- A. Burns related to poor skin prep such as hair removal, overlapping pads, poor adherence of pads or oxygen flowing across the chest during the defibrillation.
- B. Muscle contraction during the shock causing loss of IV or other attached equipment.

#### V. Procedure

- A. Verify pulseless patient with ventricular fibrillation or pulseless ventricular tachycardia.
- B. Turn on monitor defibrillator.
- C. Perform skin prep as needed (dry off wet skin, remove chest hair, remove medication patches)
- D. Place electrode therapy pads in desired position. If paddles, apply conductivegel medium directly to paddles.
- E. Charge defibrillator to appropriate joule setting (continue CPR while charging)
  - 1. Biphasic defibrillator initial dose of 120 200 joules. Second and subsequent doses should be equivalent, and higher doses may be considered.
  - 2. If monophasic defibrillator or unknown, deliver the maximal energy dose of the first and all subsequent shocks. (360 joules)
- F. Visualize that no one is touching the patient, stretcher or attached equipment. Verbally call "clear, shocking".
- *G.* Press the shock button.
- *H.* Immediately resume CPR.

6/87, re: 1/94, 11/97, 5/98, 8/01, 9/08, 5/11, 10/2020

(reviewed: 8/95)

#### **CRICOTHYROTOMY (ALS)**

#### I. INDICATIONS:

A. Hypoxemic patient whose airway cannot be managed by any other less invasive means.

#### II. CONTRAINDICATIONS

- A. Relative contraindications include inability to identify anatomical landmarks.
- B. Patient under the age of 8 because the cricothyroid membrane is small and underdeveloped.

#### III. COMPLICATIONS

- A. Incorrect placement with a false passage.
- B. Cricoid and/ or thyroid cartilage damage.
- C. Thyroid gland damage.
- D. Severe bleeding.
- E. Laryngeal nerve damage.
- F. Subcutaneous emphysema.
- G. Vocal cord damage.
- H. Infection.

#### IV. EQUIPMENT

- A. Personal protective equipment-gloves, goggles or face shield, gown
- B. Commercial cricothyrotomy kit OR scalpel/blade, 6.0 7.0 endotracheal tube (smaller patient will require a smaller tube)
- C. Antiseptic such as alcohol to prep skin
- D. 10 mL syringe
- E. Trousseau dilator (optional)

#### V. PROCEDURE (may vary according to equipment used) \_

- A. Don appropriate PPE
- B. Use BVM and supplemental oxygen to maintain oxygenation and ventilation as wellas possible while preparing supplies.
- C. Place patient supine and hyperextend the neck (unless cervical injury is suspected).
- D. Identify the thyroid cartilage (Adam's apple), and the cricoid cartilage. Locate the cricothyroid membrane between these two cartilages.
- E. Clean the site with antiseptic solution.
- F. Stabilize the trachea with non-dominant hand and use the scalpel to make a vertical 2 cm incision through the skin in the midline over the cricothyroid membrane.
- G. Make a 1 cm horizontal incision through the cricothyroid membrane.
- H. Using a Trousseau dilator, curved hemostat or handle of the scalpel, spread the membrane incision open.
- I. Insert the endotracheal tube through the opening directing it distally into the trachea.
- J. Inflate the cuff.
- K. Ventilate the patient and watch for chest rise
- L. Verify tube placement auscultation of lung sounds, auscultate over the epigastrium to verify no epigastric sounds; verify end-tidal CO2.
- M. Secure the tube with tape or commercial device.
- N. Monitor the patient.

#### **ENDOTRACHEAL INTUBATION - ADULT (ALS)**

#### I. <u>INDICATIONS</u>

- A. Comatose patients with inadequate airway
- B. Respiratory arrest

#### II. CONTRAINDICATIONS

- A. Patient able to maintain their own airway.
- B. Comatose patients ventilating adequately

#### III. <u>COMPLICATIONS</u>

- A. Hypoxemia
- B. Equipment malfunction
- C. Damage to teeth and soft tissue trauma
- D. Esophageal intubation
- E. Endobronchial intubation
- F. Aspiration
- G. Elevated intracranial pressure

#### IV. PRECAUTIONS

- A. To avoid hypoxemia during intubation, limit each attempt to no more than twenty seconds before re-oxygenating the patient.
- B. Consider the use of apneic oxygenation to help prevent hypoxia during intubation. Apply a nasal cannula at 5-6 LPM and leave on under the BVM to increase the physiologic reserve of oxygen.

#### V. <u>EQUIPMENT</u>

- A. PPE gloves, goggles or face shield
- B. Laryngoscope handle
- C. Straight or curved laryngoscope blade of appropriate size
- D. 10 ml syringe
- E. Stylet
- F. Approved commercial device or tape
- G. Suction
- H. Bag valve mask
- Oxygen
- J. Appropriate size oral airway
- K. Stethoscope
- L. End Tidal CO2 monitoring device
- M. Esophageal intubation detector (EID)
- N. Gum elastic bougie (optional)

## VI. PROCEDURE

- A. Position the patient in sniffing position (non-traumatic)
- B. Ventilate the patient for at least 30 seconds prior to intubation attempt. For apneic oxygenation, apply nasal cannula at 5-6 LPM under the BVM.
- C. Assemble all equipment and check for proper functioning.
- D. Grasp laryngoscope in left hand
- E. Insert laryngoscope blade gently into the right side of mouth and sweep the tongue to the left
- F. Visualize airway structure landmarks.
- G. Insert the endotracheal tube until cuff or depth marker is 1-2 cm past vocal cords.
- H. Remove the stylet
- I. Inflate cuff & remove syringe
- J. Verify placement by multiple means auscultation of bilateral breath sounds, end tidal CO2 waveform and measurement (or colormetric device gold color), EID plunger pulls back freely.
- K. Secure tube with commercial device (or other secure method)
- L. Insert oral airway if needed to prevent biting on the tube
- M. Monitor patient and reconfirm tube placement after any patient movement or clinical deterioration.
- VII. FIELD EXTUBATION: to be utilized in the rare case when an intubated patient awakens and is intolerant of the endotracheal tube.
  - A. Assess to determine:
    - 1. If the patient is able to maintain his own airway with adequate spontaneous respirations.
    - 2. If the patient is under the influence of any sedating agents.
    - 3. That the problem which initially required intubation is fully resolved.
  - B. Contact Medical Control with the assessment information. The decision to extubate should be made by an EMS physician.
  - C. Be aware that there is a risk of laryngospasms upon extubation of the awake patient that may prohibit successful reintubation.
  - D. Procedure
    - 1. Explain procedure to the patient
    - 2. Prepare suction equipment and suction secretions from the ET tube and mouth.
    - 3. Deflate the endotracheal tube cuff
    - 4. Remove the endotracheal tube upon cough or expiration.
    - 5. Be prepared to suction if vomiting occurs.
    - 6. Provide supplemental oxygen
    - 7. Monitor patient airway for any signs of obstruction, stridor, and dyspnea. Encourage patient to take deep breaths and to cough.

# i-Gel Supraglottic Airway (ALS and BLS)

## I. INDICATIONS

- A. Apneic patient with no gag reflex
- B. Endotracheal intubation is not available or an ALS provider has determined that a supraglottic airway is preferred due to on-scene concerns or patient presentation (ALS providers must document the reason for selecting over traditional intubation).
- C. Failed airway.

# II. <u>CONTRAINDICATIONS</u>

- A. Responsive patients with an intact gag reflex.
- B. Patients with known esophageal disease.
- C. Patients who have ingested a caustic substance.
- D. Upper-airway obstructions due to foreign bodies or pathology.
- E. Trismus, limited mouth opening.
- F. Airway abscess, airway trauma or mass in airway.

This airway device is not proved to protect the airway from the effects of regurgitation and aspiration. The risk of regurgitation and aspiration must be weighed against the potential benefit of establishing an airway.



Code	Description	Size		Weight	Box Oty.
8205000	i-gel®, supraglottic airway	5	Large adult	90+kg	25
8204000	i-gel®, supraglottic airway	4	Medium adult	50-90kg	25
8203000	i-gel®, supraglottic airway	3	Small adult	30-60kg	25
8225000	i-gel®, supraglottic airway	2.5	Large paediatric	25-35kg	10
8202000	i-gel®, supraglottic airway	2	Small paediatric	10-25kg	10
8215000	i-gel®, supraglottic airway	1.5	Infant	5-12kg	10
8201000	i-gel*, supraglottic airway	1	Neonate	2-5kg	10

# Preparations For Use:

- 1. Using the information provided, choose the correct size, based on patient weight.
- 2. Open the i-Gel package and take out the protective cradle containing the device. Remove the accessory pack containing the sachet of lubricant and airway support strap from the protective cradle and set to the side.
- 3. Remove the i-Gel and transfer it to the palm of the same hand that is holding the protective cradle, supporting the device between the thumb and index finger.

- 4. Open the sachet of lubricant and place a small bolus onto the middle of the smooth surface of the cradle in preparation for lubrication. Do not use silicone-based lubricants.
- 5. Grasp the i-Gel with the free hand along the integral bite block and lubricate the back, sides, and front of the cuff with a thin layer of lubricant.

## Insertion Technique:

- 6. Inspect the device carefully; confirm there are no foreign bodies or a bolus of lubricant obstructing the distal opening. Place the i-Gel back into the cradle in preparation for insertion.
- 7. Remove the i-Gel from the cradle. Grasp the lubricated i-Gel firmly along the integral bite block. Position the device so that the i-Gel cuff outlet is facing towards the chin of the patient. The patient should be in the sniffing position with the head extended and the neck flexed. The chin should be gently pressed down before proceeding introducing the leading soft tip into the mouth of the patient in a direction towards the hard palate.
- 8. Glide the device downwards and backwards along the hard palate with a continuous but gentle push until a definitive resistance is felt. The tip of the airway should be located in the upper esophageal opening and the cuff should be located against the laryngeal framework. The incisors should be resting on the integral bite block.
- 9. Utilize the airway support strap or tape the i-Gel in place maxilla to maxilla.

## INTRAMUSCULAR INJECTION (EMT/PHRN/Paramedic)

## I. <u>INDICATIONS:</u>

A. Permits systemic delivery of medication at a moderate absorption rate that is relatively predictable.

#### II. CONTRAINDICATIONS:

A. None

## III. PRECAUTIONS:

- A. Select site based on amount of medication to be given and age of the patient.
  - 1. Deltoid 2.0 mL maximum
  - 2. Dorsal gluteal 5.0 mL maximum
  - 3. Vastus lateralis 5.0 mL maximum adult; 1.0 mL maximum child
  - 4. Rectus femoris 5.0 mL maximum adult; 1.0 mL maximum child

## IV. <u>COMPLICATIONS:</u>

- A. Local pain and burning
- B. Infection
- C. Inadvertent IV injection

# V. <u>EQUIPMENT:</u>

- A. Syringe
- B. 1½ inch, 21-23-gauge needle for adults, 1inch 21-23-gauge needle for pediatrics
- C. Antiseptic solution such as alcohol
- D. Medication
- E. Adhesive bandage

# VI. PROCEDURE:

- A. Don appropriate PPE
- B. Assemble equipment
- C. Explain procedure to patient
- D. Confirm patient not allergic to medication
- E. Inspect medication for clarity and expiration date
- F. Withdraw desired dose from container
- G. Expel air from syringe
- H. Expose the appropriate site
- I. Cleanse site with antiseptic solution
- J. Insert the needle at a  $90^{\circ}$  angle with skin stretched taut
- K. Aspirate to assure that a blood vessel has not been entered
- L. Inject the medication slowly
- M. Remove the needle
- N. Cover the puncture with adhesive bandage
- O. Dispose of needle in sharps container.
- P. Monitor the patient for effects.

6/87, re: 11/97, 8/01, 9/08, 11/18, 10/2020

(reviewed: 8/95)

## **INTRAVENOUS CANNULATION (ALS)**

# I. <u>INDICATIONS</u>

- A. Anticipated administration of IV fluids and / or medications.
- B. Obtaining venous blood specimens for laboratory analysis.

# II. <u>COMPLICATIONS</u>

- A. Infection
- B. Catheter shear
- C. Arterial puncture
- D. Thrombophlebitis
- E. Air embolism
- F. Allergic reaction
- G. Pyrogenic reaction
- H. Circulatory overload

## III. PRECAUTIONS

- A. Factors affecting IV flow rates
  - 1. Venous restricting band left in place
  - 2. Extravasation
  - 3. Cannula abutting the vein wall or valve
  - 4. Administration set clamps are closed
  - 5. IV bag height too low
  - 6. Drip chamber completely full
  - 7. *IV catheter not patent*

# IV. EQUIPMENT

- A. PPE
- B. IV administration set or SLN set
- C. IV solution
- D. Saline flush
- E. IV catheter
- F. Venous restricting band
- G. Antiseptic solution
- H. Tape or commercial device to secure

# V. PROCEDURE FOR EXTREMITY CANNULATION

- A. Don PPE
- B. Assemble and prepare equipment. Prime IV tubing or saline lock set.
- C. Apply venous restricting band proximal to desired site
- D. Locate vein and cleanse site with antiseptic solution
- E. Hold vein in place by applying pressure on vein distal to point of entry
- F. Insert the IV cannula into the vein, observe for flashback.
- G. Advance catheter and retract needle.
- H. Remove venous restricting band
- I. Attach IV tubing or primed saline lock set and flush, observing for patency.

## PROCEDURE FOR EXTREMITY CANNULATION (CONTINUED)

- J. Secure with tape or commercial device / dressing.
- K. Dispose of needle in sharps container.
- L. Monitor patient.
- VI. <u>PROCEDURE FOR EXTERNAL JUGULAR:</u> consider external jugular site if no other peripheral access is seen and there is an immediate need for IV fluids or medications.
  - A. Don PPE
  - B. Place patient supine, or approximately 150 head down (Trendelenburg) position
  - C. Turn patient's head to opposite side unless contraindicated (head/spine injury)
  - D. Cleanse site with antiseptic solution
  - E. Occlude venous return by placing a finger on the external jugular just above the clavicle.
  - F. Make venipuncture midway between angle of jaw and clavicle pointing the IV cannula at the medial third of the clavicle and inserting bevel up at 10-30-degree angle.
  - G. Observe for flashback.
  - H. Advance catheter, retract needle
  - I. Attach IV tubing and flush observing for patency.
  - J. Secure catheter in place
  - K. Dispose of needle in sharps container.
  - L. Monitor patient.

6/84; re: 10/86, 1/94, 11/97, 5/98, 8/01, 9/08, 10/2020 (reviewed: 8/95)

## TRANSCUTANEOUS PACING (ALS)

## I. INDICATIONS:

- A. Hemodynamically unstable bradycardia (e.g. hypotension, acutely altered mental status, signs of shock, ischemic chest discomfort, acute heart failure)
- B. Unstable clinical condition is likely due to the bradycardia.

#### II. CONTRAINDICATIONS:

- A. Patient with bradycardia who is not demonstrating serious signs and symptoms related to the slow rate.
- B. TCP is contraindicated in severe hypothermia.

## III. PRECAUTIONS:

- A. Consider giving atropine per algorithm before pacing in mildly symptomatic patients.
- B. Conscious patients require analgesia for discomfort unless delay for pain medication and / or sedation will cause / contribute to deterioration.
- C. Do not assess the carotid pulse to confirm mechanical capture; electricalstimulation causes muscular jerking that may mimic the carotid pulse.
- D. Consider placing TCP electrodes in anticipation of clinical deterioration in patients with acute MI with asymptomatic Mobitz type II second-degree AV block, third degree AV block.

## IV. PROCEDURE:

- A. Apply standard cardiac monitoring electrodes.
- Apply self-adhesive cardiac therapy pads in appropriate position per packaging.
- C. Turn the pacer on.
- D. Set the demand rate to 60. The rate can be adjusted up or down once pacing is established.
- E. Begin increasing the current (milliamperes) slowly until electrical capture is observed by noting pacer spike followed by a wide bizarre QRS.
- F. Assess for mechanical capture pulse matches the set rate. Set the milliamperes output approximately 2 mA above the dose at which consistent capture is observed (safety margin).
- G. Monitor patient for signs / symptoms of improving clinical status:

6/90, re: 11/97, 8/01, 9/04, 5/11, 9/2020 (reviewed: 8/95, 9/08)

## **AUTOMATED EXTERNAL DEFIBRILLATION (AED)**

I. <u>INDICATION:</u> Unresponsive patient with no pulse

## II. CONTRAINDICATIONS

- A. Conscious patients
- B. Patients with a pulse

# III. PRECAUTIONS

- A. Early defibrillation is a high priority.
- B. Safety when delivering a shock
  - 1. Make a visual check to ensure that no one is touching the patient, the stretcher or other attached equipment prior to pressing the shock button.
  - 2. Call "CLEAR, shocking" in a loud, firm voice prior to delivering the shock.
  - 3. When pressing the shock button face the patient, not the machine.
- C. Position self-adhesive cardiac therapy pads as indicated on packaging. Pads should not overlap.
- D. Be sure that oxygen is not flowing across the patient's chest.
- E. Pediatric defibrillation pads are recommended for patients under the age of 1 year. If not available, can use adult pads ensuring they do not overlap.
- F. Water is a good conductor of electricity and could provide a pathway for energy from the AED to rescuers and bystanders. Remove the patient from freestanding water and dry the chest before using the AED.
- G. Ensure defibrillation pads are not placed directly over implanted devices such as pacemakers.

#### IV. COMPLICATIONS

A. Burns related to poor skin prep such as hair removal, overlapping pads, poor adherence of pads or oxygen flowing across the chest during the defibrillation.

# V. <u>PROCEDURE</u>

- A. Don appropriate PPE
- B. Verify no pulse.
- C. Position the AED close to the supine patient's head.
- D. Power on the AED.
- E. Perform skin prep if needed (dry off wet skin, remove excessive chest hair by shaving the chest in the area pads will be placed, remove medication patches).
- F. Place the electrodes in the correct position illustrated on the pads or packaging.
- G. Analyze the rhythm ensure no-one is touching the patient while analyzing.
- H. If shock is indicated, ensure no-one is touching the patient or stretcher. Loudly and firmly state a message such as "CLEAR, shocking".
- I. Press the shock button.
- J. Follow subsequent AED voice prompts.

9/92, re: 11/97, 8/01, 9/08, 10/2020 (reviewed: 8/95)

## INHALED MEDICATION / NEBULIZER (EMT/PHRN/Paramedic)

#### I. INDICATIONS

- A. Bronchospasm with wheezing
- B. Reversible obstructive airway disease

## II. CONTRAINDICATIONS

- A. Allergy or contraindication to receiving the medication
- B. Inadequate ventilation / tidal volume

#### III. PRECAUTIONS

A. Nebulized medications should be avoided in patients suspected of having a respiratory illness transmitted by droplet or aerosol, such as Covid-19. Consider an alternative such as Metered Dose Inhaler with spacer (AP-30).

## IV. EQUIPMENT

- A. Medication
- B. Nebulizer delivery system mask or handheld device with medication reservoir chamber, oxygen supply tubing
- C. Oxygen source

## V. PROCEDURE

- A. Prepare patient explain procedure, apply cardiac monitor (ALS), pulse oximetry, obtain vital signs and lung sounds as baseline.
- B. Gather equipment choose mask or handheld device based on patient condition.
- C. Instill the medication into the medication chamber and assemble the device.
- D. Connect to oxygen and set flow rate at 6-10 LPM to produce a steady visible mist.
- E. Coach the patient to inhale and exhale slowly and deeply through the mouth.
- F. The treatment should last until all medication is gone. Tapping the medication reservoir chamber near the end of the treatment will assist in utilizing all of the medication.
- G. Reassess patient for response to treatment lung sounds, respiratory status, vital signs, pulse oximetry, cardiac rhythm (ALS)

9/95; re: 11/97, 9/99, 8/01, 9/08, 11/18, 10/2020

## **INTRAVENOUS MEDICATION ADMINISTRATION (ALS)**

#### I. INDICATIONS:

- A. When a rapid rate of medication absorption and distribution throughout the body is needed.
- II. CONTRAINDICATIONS: None
- III. PRECAUTIONS
  - A. Always ensure the IV line is patent before injecting medications.
- IV. COMPLICATIONS
  - A. Local pain and burning
  - B. Allergic reaction
  - C. Some medication can cause tissue necrosis if extravasation occurs

## V. <u>EQUIPMENT</u>

- A. PPE
- B. Patent IV or saline lock.
- C. Medication
- D. Syringe (if needed, of size to accommodate volume of medication to be administered)
- E. Needle (if needed to draw up medication. 18-20 gauge 1-1.5 inches in length. Filter needle for ampule)
- F. Antiseptic wipe such as alcohol prep
- *G.* Saline flush (as required)

## VI. PROCEDURE IV PUSH / IV BOLUS ADMINISTRATION

- A. Dons appropriate PPE
- B. Ensures IV line is patent
- C. Prepares equipment
- D. Inspects medication for clarity and expiration date; inspects medication label for correct drug, route and concentration.
- E. Draw up medication or prepare pre-packed medication
- *F.* Select and clean administration port closest to the patient with antiseptic solution.
- *G*. Pinch or clamp the IV line above the medication port.
- *H.* Inject the medication at the correct rate.
- I. Release the tubing and open the IV tubing flow regulator to allow a 20 mL flush. If saline lock, flush after the medication with 10 mL saline flush.
- J. Dispose of needles in sharps container.
- *K*. Monitor patient for effects.

# VII. PROCEDURE FOR IV MEDICATION INFUSION (IV PIGGY BACK - IVPB)

- A. Don appropriate PPE
- B. Ensure that a patent IV line with Normal saline has been established (this is the primary line)
- C. Prepare the medication infusion bag (if medication is premixed, proceed to step D)
  - 1. Draw up the desired medication and dose
  - 2. Cleanse the IV bag medication port with antiseptic solution
  - 3. Insert the needle through the IV bag medication port and inject the medication into the bag.
  - 4. Gently agitate the bag to mix the contents.
  - 5. Label the bag with the medication, dose, date, time and your initials
- D. Connect administration tubing to the medication bag and prime the tubing. Most medications infusions require microdrip tubing. If using an IV pump it may require specialized tubing. (This is the secondary line)
- E. Select and clean a medication port on the primary line closest to the patient with antiseptic solution.
- F. Attach the IV medication infusion tubing to the selected medication port on the primary line. (May require a needle, if the tubing is not needleless. If that is the case, tape the hub of the needle to prevent disconnect)
- G. Shut down the primary IV line so no fluid will flow from the primary solution bag.
- *H.* Adjust the medication infusion to the appropriate drip rate.
- I. Dispose of needles in sharps container.
- J. Monitor patient for effects.

#### **ENDOTRACHEAL MEDICATION ADMINISTRATION (ALS)**

- I. INDICATIONS: Can be utilized to administer specific medications if venous access routes are not available and patient has been intubated.
- II. CONTRAINDICATIONS: None in emergency situation.
- III. PRECAUTIONS:
  - A. Only specific drugs may be given this route
    - 1. Lidocaine
    - 2. Epinephrine
    - *3.* Atropine
    - 4. Naloxone
  - B. Usual dose via endotracheal tube is 2-2.5 times the usual dose, and should be diluted in 10 mL of saline. Example of adult doses:
    - 1. Lidocaine 2 mg/kg initial dose (this is two times the normal 1 mg/kg dose)
    - 2. Epinephrine 1:10,000 2 mg (this is two times the normal 1 mg standard dose)
    - 3. Atropine 1 mg (this is two times the normal standard 0.5 mg dose)
    - 4. Naloxone 4 mg (this is two times the standard 2 mg dose)

#### IV. COMPLICATIONS

A. Allergic reaction

#### V. EQUIPMENT

- A. PPE
- B. Endotracheal tube in place and patient being ventilated appropriately
- C. Medication
- D. Syringe (if needed, of size to accommodate the volume of medication to be administered)
- E. Needle (if needed to draw up the medication. 18-20 gauge, 1-1.5 inches in length.)
- F. Saline to dilute to 10 mL total if needed

# VI. PROCEDURE

- A. Dons appropriate PPE
- B. Ensures patient is being ventilated via endotracheal tube.
- C. Prepares equipment
- Inspects medication for clarity and expiration date, inspects medication label for correct medication and concentration.
- E. Draw up medication or prepare pre-packaged medication.
- F. Quickly inject half the desired dose down the endotracheal tube and immediately ventilate the patient.
- G. Repeat with the remainder of the medication.
- H. Continue to ventilate at a normal rate to aerosolize the medication and enhance absorption.
- I. Dispose of needle in sharps container.
- J. Monitor patient for effects.

## **NEEDLE CRICOTHYROTOMY (ALS)**

#### I. INDICATIONS

A. Hypoxemic patient whose airway cannot be managed by other less invasive means.

#### II. CONTRAINDICATIONS

A. Relative contraindication includes inability to identify anatomical landmarks.

## III. PRECAUTIONS

- A. This is a temporizing technique and is most often used for pediatric patients under the age of eight in whom open cricothyrotomy is contraindicated.
- B. Allow time for exhalation through the small lumen catheter.

#### IV. COMPLICATIONS

- A. Barotrauma from over-inflation of the lungs.
- B. Hypoventilation.
- C. Bleeding.
- D. Subcutaneous emphysema.
- E. Infection

#### V. EQUIPMENT

- A. Personal protective equipment gloves, goggles or face shield
- B. Commercial needle cricothyrotomy kit OR 14-16-gauge IV catheter
- C. Antiseptic such as alcohol to prep skin
- D. 10 mL syringe attach to IV catheter
- E. Means to ventilate the patient
  - If using a bag valve device, use the 15 mm adapter from the top of a size
     3.5 endotracheal tube to connect from the hub of the IV catheter.
  - 2. Jet ventilation device specifically designed for this use.
- F. Tape

# VI. <u>PROCEDURE</u> (may vary according to equipment used)

- A. Don appropriate PPE
- B. Use BVM and supplemental oxygen to maintain oxygenation and ventilation as wellas possible while preparing equipment.
- C. Place patient supine and hyperextend the neck (unless cervical spine injury is suspected).
- D. Identify the thyroid cartilage (Adam's apple), and the cricoid cartilage. Locate the cricothyroid membrane as the indentation between these two cartilages.
- E. Clean the site with antiseptic solution.
- F. Firmly grasp the laryngeal cartilages and reconfirm site.
- G. Carefully insert the IV needle into the cricothyroid membrane at midline, directing it at a 45-degree angle toward the feet.
- H. Advance the needle while aspirating with the syringe. If air returns easily, the catheter is in the trachea.
- I. Once in the trachea, advance the catheter to the skin and retract the needle.
- J. Attach the prepared ventilation device to the hub of the IV catheter.
- K. Begin ventilation, observing for chest rise. Allow extra time for exhalation.
- L. Secure the device.
- M. Verify bilateral lung sounds and end tidal CO2.
- N. Monitor the patient.

#### **SYNCHRONIZED CARDIOVERSION (ALS)**

#### I. INDICATIONS

- A. Hemodynamically unstable tachycardias with a pulse (e.g. hypotension, acutely altered mental status, signs of shock, ischemic chest discomfort, acute heart failure)
- B. Unstable condition is likely due to the rapid heart rate.

#### II. CONTRAINDICATIONS

A. Patient with tachycardia who is not demonstrating serious signs and symptoms related to the fast rate.

#### III. PRECAUTIONS

- A. Ventricular rates less than 150 / minute usually do not cause serious signs and symptoms.
- B. If the R wave peaks of a tachycardia are undifferentiated or of low amplitude, the monitor sensors may be unable to identify an R-wave peak and not deliver the shock.
- C. Conscious patients require analgesia for discomfort unless delay for pain medication and / or sedation will cause / contribute to further deterioration.
- D. Initial recommended joule setting dosages
  - 1. Unstable SVT (narrow QRS) 50-100 joules
  - 2. Unstable rapid Atrial flutter 50-100 joules
  - *3.* Unstable rapid atrial fibrillation 100 joules
  - 4. Unstable monomorphic ventricular tachycardia (wide QRS) 100 joules

#### IV. COMPLICATIONS

- A. Burns related to poor skin prep such as hair removal, overlapping pads, poor adherence of pads or oxygen flowing across the chest during the defibrillation.
- B. Muscle contraction during the shock causing loss of IV or other attached equipment.

## V. EQUIPMENT

- A. Cardiac monitor/defibrillator with sync capability
- B. Defibrillation therapy pads

#### VI. PROCEDURE

- A. Don appropriate PPE
- B. Turn on the monitor defibrillator
- C. Perform skin prep as needed (dry off wet skin, remove chest hair, remove medication patches)
- D. Place electrode therapy pads in desired position. If paddles, apply conductivegel medium directly to paddles.
- *E.* Press the sync control button to engage synchronization mode.
- F. Look for markers on the R waves indicating sync mode is engaged.
- G. Charge defibrillator to appropriate joule setting
- H. Visualize that no one is touching the patient, stretcher or attached equipment. Verbally call "clear, shocking".
- *I.* Press the shock button.
- J. Check the monitor. If the unstable tachycardia persists, consider increasing the joules setting.
- K. If additional synchronized shocks are necessary, ensure the synch mode is engaged.
- *L. Monitor the patient.*

## **ENDOTRACHEAL INTUBATION - PEDIATRIC (ALS)**

## I. INDICATIONS:

- A. Comatose patient with inadequate airway.
- B. Respiratory or cardiopulmonary arrest

## II. CONTRAINDICATIONS:

- A. Patient with gag reflex
- B. Patient with adequate ventilations

#### III. PRECAUTIONS:

- A. Tube size is critical. The following can be utilized to determine pediatric ETT size:
  - 1. Broselow tape
  - 2. (Age in years + 16) divided by 4
  - 3. Match to diameter of the child's pinky finger
  - 4. A cuffed tube may require ½ size smaller.
- B. Depth of ETT
  - 1. For an uncuffed tube the black glottic marker band at the distal end of the tube should be placed at the level of the vocal cords.
  - 2. For a cuffed tube the cuff should be placed just below the vocal cords.
- C. Children are more prone to decreases in oxygen saturation during intubation attempts. Ensure adequate pre-oxygenation and keep intubation attempts short.

## IV. COMPLICATIONS

- A. Hypoxemia
- B. Equipment malfunction
- C. Damage to teeth and soft tissue trauma
- D. Esophageal intubation
- E. Endobronchial intubation
- F. Aspiration
- G. Elevated intracranial pressure

#### V. EQUIPMENT

- A. Laryngoscope handle
- B. Straight or curved laryngoscope blade of appropriate size
- C. 10 ml syringe (if cuffed tube)
- D. Stylet
- E. Approved commercial device or tape
- F. Suction
- G. Bag valve mask
- H. Oxygen
- I. Appropriate size oral airway
- J. Stethoscope
- K. End Tidal CO2 monitoring device

## VI. PROCEDURE

- A. Don appropriate PPE
- B. Preoxygenate the patient. Ventilate at appropriate rate.
- C. Assembles and checks the equipment.
- D. Position the patient place a towel roll under the shoulders of an infant or toddler; under the head of an older child.
- E. Hold laryngoscope in the left hand, insert the blade gently into the right side of the mouth.
- F. Look for the tip of the epiglottis and place the blade into the proper position (curved blade into the vallecula, straight blade under the epiglottis to lift it).
- G. If the epiglottis cannot be visualized, the blade is probably too deep. Gently and slowly withdraw the blade while continuing to visualize until the vocal cords fall into place.
- H. Grasps the endotracheal tube with the right hand and under direct visualization of the vocal cords or posterior cartilages, insert it into the right side of the patient's mouth and direct the tube into the glottis opening.
- I. Advance the tube to the appropriate depth (see precautions)
- J. Remove the stylet, inflate the cuff if using cuffed tube and remove syringe.
- K. Verify placement by multiple means auscultation of bilateral breath sounds, end tidal CO2 waveform and measurement (or colormetric device gold color).
- L. Secure tube with commercial device (or other secure method)
- M. Monitor patient and reconfirm tube placement after any patient movement or clinical deterioration. Continue ongoing waveform capnography monitoring if possible.

#### INTRAOSSEOUS INFUSION (ADULT AND PEDIATRIC) (ALS)

I. PURPOSE: Intraosseous infusion provides a rapid alternative to gaining vascular access in both adult and pediatric patients during critical situations when establishing a peripheral IV may be extremely difficult or impossible.

#### II. INDICATIONS:

- A. Presenting or imminent cardiopulmonary failure or arrest.
- B. Multisystem trauma with associated shock.
- C. Critical patient with immediate need for medication or fluids and IV access is unsuccessful.

#### III. CONTRAINDICATIONS:

- A. Fracture in targeted bone.
- B. Pre-existing medical condition such as osteogenesis imperfecta, infection or cellulitis at the site, tumor at the site, prosthetic limb or joint replacement near the site.
- C. Inability to locate anatomic landmarks: edema, obesity, joint replacement or other previous surgical intervention at or near the site, deformity.

#### IV. EQUIPMENT

- A. EZ-IO driver and needle sets can only be used on patients greater than 3 kg (6.6 pounds).
  - 1. 15-gauge 15 mm needle set (pink hub) use for 3-39 kg (6.6 86 pounds)
  - 2. 15-gauge 25 mm needle set (blue hub) use for 3 kg or > (6.6 pounds and over). Primarily to be used on larger pediatric patients or adults.
  - 3. 15-gauge 45 mm needle set (yellow hub) use for 40 kg or >. Primarily would be used on heavier patients with excessive tissue depth.
- B. Jamshidi style needle (For manual insertion)
  - 1. 18 gauge with adjustable flange use for 9 months and less
  - 2. 15 gauge with adjustable flange use for 9 months to age 6
- C. Other necessary equipment:
  - 1. PPE
  - 2. Skin cleansing agent
  - 3. 10 mL saline flush
  - 4. Primed extension set or EZ Connect set
  - 5. Primed IV tubing with appropriate IV fluid
  - 6. Dressing or gauze pads and tape
  - 7. Pressure bag (can use BP cuff if no pressure bag available)

V. APPROVED SITES: Currently the only site approved for use in the QAEMS System by ground crews is the proximal tibia.

#### VI. EZ-IO PROCEDURE

- A. Don appropriate PPE.
- B. Aseptic technique must be used.
- C. Identify landmarks at the proximal tibia site and choose a needle set appropriate to patient weight.
- D. Attach the needle set to the driver.
- E. Cleanse the site.
- F. Stabilize the extremity. Do NOT position your hand behind the site.
- G. Position the needle at a 90-degree angle to the bone and push the needle through the soft tissue until the tip of the needle touches the bone. At least one black line, (5 mm mark) must be visible. If not, choose a longer needle set.
- H. Gently squeeze the trigger of the EZ-IO driver while applying light, steady pressure until a sudden decrease in resistance is felt as the needle seats into the medullary space or the flange touches the skin.
- I. Stabilize the needle set hub while removing the driver by pulling it straight off. Do not rock, twist or turn the driver.
- J. Continue to stabilize the needle set and unscrew the stylet counter clockwise from the catheter. Remove the stylet and dispose of in a sharps container.
- K. Attach a primed extension set with 10 mL syringe attached and attempt to aspirate bone marrow. Flush with 10 mL 0.9% sodium chloride for adults or 2-5 mL for infants and children. Note: Do not attach the syringe directly to the EZ-IO catheter as damage may occur.
- L. Verify placement: the needle should be firmly seated in the bone, able to flush, observance of bone marrow or blood when aspirating (will not occur 100% of the time), no evidence of extravasation when palpating around site during and after flush.
- M. Connect primed IV tubing, apply a pressure bag and adjust to desired flow rate. In small children it may be preferable to utilize a three-way stopcock and infuse fluid boluses via IV push.
- N. Secure with dressing so that the site may continue to be observed. Monitor the site for any signs of extravasation and monitor the IV fluid infusion.

Note: In the rare case of a driver failure, you can manually insert the EZ IO needle by grasping the needle set at the hub and applying firm downward pressure in a twisting motion until a sudden decrease in resistance is felt.

# VII. JAMSHIDI STYLE PROCEDURE (MANUAL INSERTION)

- A. Don appropriate PPE
- B. Aseptic technique must be used.
- C. Identify landmarks at the proximal tibia site and choose a needle length appropriate to patient age / size.
- D. Cleanse the site.
- E. Stabilize the extremity.
- F. Insert the needle at a 90-degree angle through the soft tissue and apply firm downward pressure with a twisting motion until a sudden decrease in resistance is felt.
- G. Stabilize the needle while unscrewing the cap and removing the stylet. Dispose of the stylet in a sharps container.
- H. Attach a primed extension set with 10 mL syringe attached and attempt to aspirate bone marrow. Flush with 10 mL 0.9% sodium chloride for adults or 2-5 mL for infants and children.
- I. Verify placement: the needle is firmly seated in the bone, able to flush with 10 mL saline, observance of bone marrow or blood with aspiration, no evidence of infiltration into the tissues when palpating around the site during and after flush.
- J. Connect primed IV tubing, apply a pressure bag and adjust to desired flow rate. In small children it may be preferable to utilize a three-way stopcock and infuse fluid boluses via IV push.
- K. Secure with dressing so that the site may continue to be observed. Monitor the site for any signs of extravasation and the IV fluid infusion.

#### **QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM PULSE**

## OXIMETRY (BLS/ ALS)

## I. INDICATIONS

- A. Determine a baseline oxygen saturation level.
- B. Monitor oxygen saturation and quickly identify issues with oxygenation.

#### II. PRECAUTIONS

- A. Interpretation of readings (some COPD patients may experience lower than normal reading. Correlate reading to other assessment findings.)
  - 1. 95-100% = normal
  - 2. 91-94% = mild hypoxemia. Increase oxygen percentage (FiO2) to increase saturation.
  - 3. 86-90% = moderate hypoxemia. Increase oxygen percentage (FiO2) to increase saturation. Assess ventilation and be prepared to assist ventilations.
  - 4. < 86% = severe hypoxemia. Likely need for assisted ventilations and high oxygen percentage (FiO2)
- B. False readings are infrequent and vary with type of equipment used. False readings can be due to equipment malfunction, nail polish or false nails, carbon monoxidepoisoning, and poor perfusion.

## III. EQUIPMENT

- A. PPE
- B. Pulse oximeter

#### IV. PROCEDURE

- A. Don appropriate PPE.
- B. Place sensor probe over a peripheral capillary bed fingertip, toe, ear lobe. In infants wrap the sensor around the heel.
- C. Determine that the sensor is detecting by noting pulse rate and SpO2 waveform and/ or numeric reading.

5/98, 9/08, 10/2020 (reviewed 8/01)

## FINGER STICK GLUCOSE (BLS / ALS)

# I. INDICATIONS

- A. History of diabetes with signs and symptoms of hypoglycemia (e.g. altered mental status, diaphoresis, tachycardia, trembling)
- B. Any unexplained altered mental status or syncope.
- C. Seizures
- D. Possible stroke

## II. CONTRAINDICATIONS

A. None

## III. PRECAUTIONS

- A. Factors that can lead to inaccurate readings include
  - 1. Not calibrating the device regularly
  - 2. Using expired test strips
  - 3. Improper cleaning of the site must allow alcohol to dry if used as the antiseptic. Alcohol can absorb into the test strip and provide inaccurate reading.
  - 4. Recent use of waterless hand cleaner by the patient could react with the test strip and provide an inaccurate reading.
  - 5. Device stored in location with high temperature, high humidity or dirty meter.

## IV. COMPLICATIONS

A. Infection

# V. <u>EQUIPMENT</u>

- A. PPE gloves
- B. Blood glucose monitoring device
- C. Reagent test strips for the device
- D. Sterile lancets
- E. Alcohol or other antiseptic
- F. Gauze pad
- G. Adhesive bandage

# VI. PROCEDURE

- A. Don PPE
- B. Prepare equipment
- C. Prepare the patient allow arm to hang down, if patient's fingers are cold, briefly warm them
- D. Match the code number on the device screen to the code number on test strip vial
- E. Cleanse the site with antiseptic and allow it to dry completely.
- F. Use a lancet to prick the finger
- G. Place a drop of capillary blood onto the chemical reagent strip
- H. Follow manufacturer's instructions for placement of the strip into the device
- I. Observe reading

# TWELVE LEAD EKG (EMT, PHRN, Paramedic)

I. PURPOSE: The twelve lead EKG allows prehospital personnel to proceed beyond simple dysrhythmia recognition. It is designed to assist in the diagnosis of acute myocardial infarction, conduction abnormalities and other electrophysiological problems. EMTs can perform and transmit a 12 lead EKG when equipment is available.

## II. INDICATIONS

- A. Signs and symptoms of an acute coronary event (chest pain, arm or jaw pain, dyspnea, syncope, near-syncope, weakness, diaphoresis etc.)
- B. Arrhythmia
- C. Respiratory failure

## III. POTENTIAL COMPLICATIONS

A. Potential delay in treatment/transport if a good tracing is hard to obtain.

#### IV. PRECAUTIONS/CONTRAINDICATIONS

A. Cardiac Arrest

# V. <u>EQUIPMENT</u>

- A. Cardiac monitor with 12 lead EKG capability and cables
- B. Electrodes
- C. Skin prep razor or clippers.

## VI. PROCEDURE

- A. Explain the procedure to the patient
- B. Prep the skin
  - 1. Wipe the skin dry, cleanse if needed
  - 2. You may abrade the skin slightly by rubbing briskly with a 4X4 gauze pad to help ensure adherence
  - 3. If the patient is very hairy, shave or clip the hair immediately over the electrode site. Use caution to avoid nicks.
- C. Place the 4 limb leads on the limbs.
- D. Place the precordial leads
  - 1. V1 Right of the sternum, 4th intercostal space
  - 2. V2 Left of the sternum, 4th intercostal space
  - 3. V4 Left midclavicular line, 5th intercostal space
  - 4. V3 Midway between V2 and V4
  - 5. V5 Anterior axillary line same level as V4
  - 6. V6 Mid axillary line same level as V4
- E. Turn on the machine
- F. Ensure the patient is sitting or lying still, breathing normally and not talking.
- G. Observe for a clear tracing
- H. Acquires the 12 lead EKG.
- I. Examines the tracing for acceptable quality.
- J. Transmit the tracing to the treating hospital if technology is available
- K. Consider printing a copy of the 12 lead EKG, labeling with patient name and providing to the physician upon arrival to the Emergency department.

# EPINEPHRINE AUTOINJECTOR FOR ALLERGIC REACTION (EMT, PHRN, PARAMEDIC)

# I. INDICATIONS:

- A. Patient is demonstrating signs and symptoms of a moderate to severe allergic reaction or anaphylaxis.
  - 1. Severe generalized hives or swelling to face, neck, hand, feet, tongue
  - 2. Respiratory distress
  - 3. Dyspnea
  - 4. Hoarseness
  - 5. Wheezing
  - 6. Stridor
  - 7. Tightness in throat or chest
  - 8. Signs of shock (hypoperfusion)

#### II. CONTRAINDICATIONS

A. There are no absolute contraindications if the patient is experiencing a potentially life- threatening allergic reaction.

#### III. PRECAUTIONS

A. Patient may experience increased heart rate, palpitations, sweating, nausea or vomiting, nervousness or anxiety.

## IV. EQUIPMENT

- A. Epinephrine auto-injector
- B. Antiseptic to cleanse skin
- C. Adhesive bandage

## V. PROCEDURE

- A. Don PPE
- B. Ask patient about allergies to medications.
- C. Check the medication label and expiration date.
- D. Prepare the injection site on the lateral thigh.
- E. Remove the safety cap.
- F. Place the tip of the auto-injector against the patient's lateral thigh at a 90-degree angle.
- G. Press the device firmly into the thigh until the auto-injector mechanism functions. Hold in place for ten seconds.
- H. Withdraw the auto-injector and apply an adhesive bandage to the injection site.
- I. Dispose of auto-injector in sharps container.
- J. Monitor patient for effects.

#### CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) (EMT/PHRN/Paramedic)

- I. PURPOSE: Continuous Positive Airway Pressure (CPAP) has been shown to rapidly improve vital signs, gas exchange, reduce the work of breathing, decrease the sense of dyspnea, and decrease the need for endotracheal intubation in patients who suffer from shortness of breath from asthma, COPD, pulmonary edema, CO poisoning, drowning, CHF, and pneumonia. In patients with CHF, CPAP improves hemodynamics by reducing left ventricular preload and afterload.
- II. INDICATIONS: Any patient who is in respiratory distress as indicated above **AND** is:
  - A. Awake and able to follow commands
  - B. Over 12 years of age and able to fit the CPAP mask
  - C. Has the ability to maintain an open airway

## **AND** exhibits two or more of the following:

- D. Respiratory rate greater than 25 breaths per minute
- E. SPO2 of less than 94% at any time
- F. Use of accessory muscles during respirations

#### III. CONTRAINDICATIONS

- A. Hypotension (below 90 mmHg systolic)
- B. Altered mental status, unable to follow commands
- C. Respiratory arrest/apnea
- D. Suspected pneumothorax or chest trauma
- E. Tracheostomy
- F. Active vomiting or upper GI bleeding
- G. Gastric distention

#### IV. PRECAUTIONS

- A. Is not able to *tolerate* the procedure
- B. Has failed at past attempts at CPAP or BiPAP
- C. Recent gastric surgery
- F. Has excessive secretions
- G. Has a facial deformity that would prevent an adequate mask seal

## V. PROCEDURE

- A. Prepare the patient apply cardiac monitor, pulse oximetry and end-tidal CO2 monitor. Assess vital signs and ensure blood pressure is at least 90 mmHg systolic.
- B. Determine mask size it should sit on the bridge of the nose and fully cover the nose and mouth.
- C. Assemble the CPAP device.
- D. Select 5 cm H2O pressure initially. Patients usually tolerate CPAP better if starting with a lower initial pressure.
- E. Ensure adequate oxygen supply and connect to CPAP device.
- F. Explain the procedure to the patient. Patient may require calm coaching during initial application of CPAP.
- G. Place the CPAP mask over the patient's mouth and nose and ask the patient to hold the mask firmly in place. Make sure the mask has a god seal on theface.
- H. Coach the patient to breathe slowly through his/her nose and exhale through mouthor nose.
- I. Once the patient is comfortable with the mask, secure it in place with the straps.
- J. Gradually increase the H2O pressure up to 10 cm H2O pressure maximum.
- K. Monitor for air leaks around the mask and adjust as needed.

- L. Obtain a complete set of vital signs every five minutes.
- M. Monitor for response to treatment, respiratory and neuro status.
- N. If level of consciousness and / or respiratory status deteriorates, remove the device and consider ventilation with bag-valve-mask device and/or definitive airway management (ALS).
- O. Notify the receiving hospital that the patient is on CPAP so they have the appropriate equipment upon your arrival.

# VI. NOTES

- A. CPAP therapy needs to be continuous and should not be removed unless the patient cannot tolerate the mask, begins to vomit or has deterioration of level of consciousness or respiratory status.
- B. Do not remove at the hospital until hospital staff are ready to transfer the patient to their therapy device.
- C. Monitor for gastric distension that could result in vomiting.
- D. Due to changes in preload and afterload it is important to obtain a full set of vital signs every five minutes during treatment.

1/12; 11/2018, 10/2020

## TOURNIQUET APPLICATION (EMR/EMT/PHRN/Paramedic)

PURPOSE: The goal of tourniquet application is to control potentially exsanguinating
hemorrhage. Use of tourniquets does not require on-line medical direction; however, there may
be situations in which medical direction consultation is advised.

#### II. INDICATIONS:

- A. To control potentially fatal hemorrhage from wounds or traumatic amputations when significant extremity bleeding cannot be stopped using *direct pressure*.
- B. Tourniquets may also be indicated in tactical or safety situations, those involving prolonged extrication, remote locations, and multiple casualties.
- C. Tourniquets may be considered when treating patients who have had prolonged compression of an entrapped extremity in order to decrease the life-threatening release of potassium and acids from the ischemic limb.

# III. CONTRAINDICATIONS

- A. Venous, bony and small vessel bleeding
- B. Tourniquet application is generally unnecessary when wound bleeding is adequately controlled using direct pressure.
- C. Non-extremity hemorrhage

## IV. PROCEDURE

- A. The CAT tourniquet (or equivalent) is preferred.
- B. Blood pressure cuffs can be used if additional tourniquets are needed.
- C. Apply device approximately 3 inches proximal to wound. If the wound is on a joint, or just distal to the joint, apply the tourniquet above the joint
- D. Tourniquet may be applied "high and tight" on the limb if a situation exists that prevents a full assessment of the injured extremity, or in cases of mass casualty treatment (make sure to document the reason the *high and tight* placement was selected).
- E. Tighten until bleeding stops (venous oozing is acceptable) and/or distal pulse is absent.
- F. If one tourniquet is not sufficient a second should be applied just proximal to the first.
- G. Do not cover the tourniquet with a dressing.
- H. Once a tourniquet has been applied, do not remove or loosen it unless ordered by medical direction.
- I. Note time of tourniquet application and communicate this to the receiving care providers.
- J. Dress wounds per general wound care procedure
- K. Document application time, location, and patient response on the Patient Care Report Form (PCR)

7/30/2015; re: 5/16; 11/2018, 10/2020, 11/2023

#### LESS LETHAL WEAPONS PROTOCOL

- I. PURPOSE: As law enforcement agencies look for alternative means of subduing dangerous subjects and bringing individuals into custody, they have begun using a set of devices known as "less lethal" weapons.
  - A. These include but are not limited to:
    - 1. Teargas / Oleoresin capsicum sprays (i.e. pepper sprays)
    - Tasers
    - 3. Pneumatic fired projectiles
  - B. All levels of providers in the system should do the following when encountering these patients:
    - Ensure that the scene has been secured by law enforcement personnel and that the scene is safe to enter.
    - Ensure no cross contamination occurs to providers or equipment.
    - Ensure that the patient is subdued and is no longer a threat to EMS personnel.
- I. Teargas / Oleoresin Capsicum (Pepper-Spray) Exposure
  - A. BLS
    - 1. Care should be focused on assessing the airway and breathing
    - 2. Render initial care in accordance with MP-1 Universal Patient Care Protocol.
    - 3. Oxygen: Apply pulse oximeter. If SpO2 >/= 94% and no signs/ symptoms of respiratory distress, no oxygen is needed. If SpO2 < 94%, apply oxygen.
    - 4. Flush eyes (if affected) with sterile water to get rid of gross contamination and to aid in recovery.
    - 5. Assess for any secondary causes of patient behavior which led to law enforcement subduing the patient. These secondary causes may include:
      - a) Hypoglycemia
      - *b) Medical disorder*
      - c) Alcohol intoxication
      - d) Drug abuse
      - *e*) Psychiatric disorder
    - 6. Follow QAEMS Behavioral Protocol MP-13 if needed.
    - 7. If the patient has an altered mental status, then the patient must be assumed incompetent to refuse care. Contact Medical Control.
    - 8. Initiate transport (or ALS intercept) as soon as possible.
    - 9. Contact receiving hospital as soon as possible or Medical Control if necessary.

## B. ALS CARE

- 1. ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.
- 2. ALS Care includes all components of BLS Care as above.
- 3. Consider the need for Albuterol if evidence of bronchoconstriction.

# C. Critical Thinking Elements

- 1. Chemical defense sprays such as pepper spray leave residue that may be contacted and transferred to EMS providers. Care must be taken to ensure cross contamination does not occur. Avoid touching your face, eyes or any mucous membrane.
- 2. Due to the oil base of oleoresin capsicum, if exposure to responders, washing

- with baby shampoo may be the most effective way to remove.
- 3. Patients who have been subdued may be agitated and combative.
- 4. Contaminated clothing should be removed and sealed in a plastic bag to prevent further irritation and to reduce cross contamination.

## II. Taser-Related Injuries

A taser is an electrical device that is capable of shooting out two small barbed probes that are designed to pierce a subject's skin for the purpose of delivering a subduing pulse of electricity that causes the subject to lose voluntary muscular control. Anecdotal and theoretical consequences of taser use include cardiac arrhythmias and seizures (especially if the subject is under the influence of alcohol and/or illegal drugs).

#### A. BLS Care

- 1. EMS Providers care should be focused on assessing the airway, breathing and circulation.
- 2. Ensure that law enforcement has removed the cartridge from the taser gun.
- 3. Oxygen: should be guided by SpO2. Apply oxygen if needed at lowest concentration to maintain SpO2 94%. (May be lower if COPD)
- 4. Remove the taser probes. Removing sooner after use causes less discomfort to the patient as sensation is reduced. If the probes are in a sensitive area such as the face, eye, neck, genitalia, or a female's breast, leave the probes in place and bandage.
- 5. Probe removal
  - *a)* Break the wire 5-10 inches away from the probe.
  - b) Place non-dominant hand approximately 5 inches away but on patient.
  - c) Firmly grasp barb with dominant hand thumb and forefinger.
  - d) Pull up at 90-degree angle to the impact location. If unable to remove in a quick pull, discontinue efforts and transport.
  - *e)* Ensure the perpendicular barb is removed intact.
  - f) Place removed barb upside down in used cartridge and return to law enforcement.
  - g) Assess for bleeding and clean the wound with alcohol wipe.
- 6. Conduct thorough patient assessment and prepare the patient for or provide transport.
- 7. Assess for any secondary causes of patient behavior which lead to law enforcement subduing the patient. These secondary causes include.
  - *a)* Hypoglycemia
  - *b*) Medical condition
  - c) Alcohol intoxication
  - d) Drug abuse
  - e) Hypoglycemia or other medical disorder
  - *f*) Psychiatric *disorder*
- 8. Follow QAEMS Behavioral Protocol MP-13 if needed.
- 9. If the patient has an altered mental status, then the patient must be assumed incompetent to refuse care. Contact Medical Control if patient requests refusal.
- 10. Initiate ALS intercept if needed and transport as soon as possible.
- 11. Contact receiving hospital as soon as possible or Medical Control if necessary.

#### B. ALS Care

- 1. ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.
- 2. ALS Care includes all components of BLS Care as above.

- C. Critical Thinking Elements Related to Taser
  - If law enforcement has removed the probes, treat the probes as biohazards. Exercise caution to prevent accidental needle stick-like injuries.
  - 2. Be alert for potential of patient to fall, forcing probes in further.
  - 3. Patients who have been subdued with less lethal weapons are commonly agitated and may be combative. If the patient is not yet subdued and/or is violent, do not initiate contact. Safety of the EMS crew is of utmost importance.
  - 4. Many of these patients fit into a syndrome known as excited delirium that has been associated with adverse medical outcomes, including sudden death, especially when restraints are utilized. Careful monitoring should be exercised when dealing with these patients.
- III. Pneumatic Fired Projectile also known as kinetic weapons are fired from guns and launchers to inflict pain but avoid major internal damage.
  - A. Care for any patient who has received impact from a pneumatic fired projectile should include careful assessment and ongoing monitoring for injury to underlying organs and tissues.
  - B. Treat identified and suspected injuries based on appropriate trauma protocols.

#### INTRANASAL MEDICATION ADMINISTRATION (EMR/EMT/Paramedic/PHRN)

#### I. Indications

A. Provides a safe, effective alternative to parenteral delivery of some medications.

#### II. Contraindications

- A. Nasal trauma
- B. Recent nasal or sinus surgery
- C. Epistaxis
- D. Significant nasal discharge or congestion

#### III. Approved medications for intranasal route

- A. Naloxone (Narcan) (EMR/EMT/Paramedic/PHRN)
- B. Glucagon (EMT/Paramedic/PHRN)

## IV. Equipment

- A. Medication
- B. 1- or 3-mL syringe
- C. Needle to draw up medication if needed
- D. Mucosal Atomization Device (MAD)

#### V. Procedure

- A. Select the desired medication and determine dose.
- B. Attach needle to syringe to draw up the desired volume of medication.
- C. Remove needle and place in sharps container.
- D. Attach the Mucosal Atomization Device (MAD) to the syringe.
- E. Support the back of the patient's head with one hand if needed.
- F. Insert the MAD device into the nostril.
- G. Rapidly administer the medication (maximum of 1 mL per nostril more than 1 mL will result in runoff and loss of medication)
- H. Monitor patient for effectiveness of medication.

## VI. Critical Thinking Elements

- A. Divide the total volume equally between each nostril if total volume to be delivered if over 1 mL.
- B. Allow fifteen minutes between subsequent intranasal doses.
- C. Hypotension may decrease absorption.
- D. Patients who have abused inhaled stimulants such as cocaine may have decreased effectiveness of intranasal medications.

# METERED DOSE INHALER (MDI) WITH SPACER (PARAMEDIC, PHRN, EMT)

- I. Indications: provides a safe, effective alternative to an albuterol nebulizer in the patient with evidence of bronchoconstriction.
- II. Contraindications:
  - A. Allergy to the medication
- III. Approved medication for MDI route
  - A. Albuterol
- IV. Equipment
  - A. Albuterol metered dose inhaler
  - B. Spacer device with one-way valve

#### V. Procedure

- A. Wear appropriate PPE.
- B. Check for allergies.
- C. Gather equipment
- D. Remove the MDI cap and shake the MDI canister before use. If the device is being used for the first time, prime it by depressing the top of the canister briefly.
- E. Assemble the MDI to the spacer device by inserting the mouthpiece of the MDI into the end of the spacer.
- F. Instruct the patient to breathe in, and then breathe out fully.
- G. Place the spacer mouthpiece between the patient's lips and have patient close their lips around the spacer mouthpiece.
- H. Instruct the patient to breathe in deeply as you press down on the MDI canisterto deliver a single puff of the medication into the spacer.
- I. Instruct patient to hold their breath for ten seconds to get maximum effect of the drug.
- J. Instruct patient to exhale and then repeat the procedure for a total of four puffs of medication.
- K. Reassess breathing and lung sounds. Monitor SpO2 and end-tidal CO2.

# VI. Critical thinking elements

- A. If the patient is unable to hold their breath for ten seconds, instruct the patient to use the tidaling method where they breathe slowly and steadily in and out 4-5 times for each puff of medication.
- B. May repeat four additional puffs in 20 minutes if needed.

- VII. Common canister use: for times of medication shortage
  - A. The albuterol MDI can be used for multiple patients as long as a new spacer with a one-way valve is used for each patient. This point is critical, the spacer device becomes the property of the patient and goes with them to the hospital. The MDI itself can be cleaned and re-used for multiple patients.
  - B. The MDI mouthpiece must be cleaned after patient use with a disinfectant known to work against Covid-19, and specific dwell times for the disinfectant adhered to.
  - C. Store the MDI after cleaning in a Ziplock bag with date and initials of the person who cleaned it.

#### **EMERGENCY USE OF CENTRAL VENOUS ACCESS DEVICES (CVADs)**

I. Purpose: Previously established central lines and other access ports may be utilized during an emergency in the event that a peripheral IV line cannot be established.

Emergency situations include:

- 1. Cardiac arrest
- 2. Major trauma
- 3. Life-threatening situation requiring immediate need for medication or fluid therapy
- II. Level of provider to perform this advanced skill:
  - A Paramedic
  - B. Prehospital RN
- III. Important information
  - A. Heparinized lines
    - 1. Some CVADs utilize a heparin flush to maintain line patency.
    - 2. Heparin is not compatible with many drugs; therefore, it is important to flush the line with normal saline before and after medication administration.
    - 3. Dialysis catheters or other access devices that have been heparinized should be aspirated to remove the 3 cc of Heparin prior to flushing the line. In a dire emergency, if you cannot aspirate, you may proceed with flushing the line.
    - 4. In the prehospital setting we will not "re-lock" the line with Heparin after access. Therefore, a continuous Normal Saline IV will be established using the CVAD to maintain patency.

#### B. Risks

- 1. There is a risk of air embolism when a central IV system is open to the air. To help eliminate this risk:
  - a. Use a needle to access through the injection port cap (or utilize needless access system if available) for medication administration.
  - b. Clamp the line whenever you remove the injection port cap to attach or disconnect a syringe or IV fluids.
- 2. Risk of Infection:
  - a. Good aseptic technique must be utilized to help prevent risk of infection.
  - b. Preferred method would be to utilize sterile technique when possible.
- C. Use a 5 12 mL syringe when aspirating from or flushing the line. Smaller syringes have greater pressure and could force a clot through the line or even rupture theline.
- D. Following is a table outlining the various types of access devices and related information:

# CENTRAL VENOUS CATHETER – QUICK REFERENCE CHART

CATHETER	DESCRIPTION	MED ADM LINE FLUSHING	MISCELLANEOUS
Multiple lumen catheter	<ul> <li>A silicone catheter inserted percutaneously into the subclavian or internal jugular vein.</li> </ul>	<ul> <li>Flush with 3 mL NS before and after infusing medications</li> <li>OR resume continuous fluids.</li> </ul>	All lumens can be used to deliver medications or IV fluids.
Single lumen catheter	<ul> <li>2-5 inches in length, inserted into the subclavian or internal jugular vein.</li> </ul>	<ul> <li>Flush with 3 mL NS before and after infusing medications</li> <li>OR resume continuous fluids.</li> </ul>	
Tunneled CVAD Hickman catheter	<ul> <li>A surgically inserted catheter which is tunneled under subcutaneous tissue into the central venous system.</li> <li>Can be single or double lumen.</li> <li>Has dacron cuff.</li> </ul>	Flush with 3 mL NS before and after medications OR resume continuous fluids.	
Broviac catheter	<ul><li>Similar to Hickman</li><li>Frequently used in children</li></ul>	<ul> <li>Flush with 3 mL NS before and after medications</li> <li>OR resume continuous fluids.</li> </ul>	
Groshong catheter	<ul> <li>Similar to Hickman</li> <li>Tip of catheter has a pressure sensitive valve.</li> </ul>	<ul> <li>Flush with 10 mL NS before and after medications</li> <li>OR resume continuous fluids.</li> </ul>	<ul> <li>Flush briskly to maintain valve integrity</li> </ul>

Implanted Ports  Such as Port A Cath  or  Infus A Port	The device is placed surgically under subcutaneous tissue with a tunneled catheter that extends into the central venous system.	<ul> <li>Flush with 10 mL NS before medications.</li> <li>Check for blood return before instilling fluids/medications .</li> <li>Flush with 20 mL NS after medications</li> <li>Or resume continuous fluids.</li> </ul>	Must use a "Gripper" needle and extension set or another type of "non- coring" needle specified for the port.
Peripheral Central Catheter  P.I.C.C. catheters	<ul> <li>Small silicone catheter inserted percutaneously into the basilic or cephalic vein in the antecubital space</li> <li>Advanced until it rests in the central venous system.</li> </ul>	<ul> <li>Flush with 10 mL NS before and after medications</li> <li>Or resume continuous fluids.</li> </ul>	<ul> <li>Use 10-12 mL syringes</li> <li>Do not use vacutainer</li> <li>s</li> </ul>
Ash Catheter  Ash Catheter tunneled  Quinton catheter temporary	<ul> <li>The Ash catheter – same as Broviac; 2 tailed straight.</li> <li>Quinton is a non-tunneled, non-cuffed 2 tailed curved catheter inserted into the central venous system. Always sutured in place.</li> </ul>	<ul> <li>Aspirate 3 mL blood to remove heparin</li> <li>Flush with 10 mL NS before and after medications</li> <li>Or resume continuous fluids.</li> <li>Maintain the fluids at a KVO rate so as not to overload the dialysis patient with fluid.</li> </ul>	In an emergency, if you cannot aspirate the 3 mL of blood, it is OK to go ahead and flush.

# IV. Documentation

A. Document procedure on PCR form as with any other procedure. Include type of CVAD, reason for access, time and what you administered through the line.

4/03; Re:2/06, 6/06; 12/20 Reviewed 9/09

# QUINCY AREA EMS SYSTEM COMMUNICATION PROTOCOLS

Revised 3/2025

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

## QUINCY AREA EMS SYSTEM COMMUNICATIONS

Central Medical Dispatching Pattern	C-1
EMD Dispatch Cards for Dual Response	Appendix C(a)
EMD Dispatch Cards for Automatic Helicopter Launch	Appendix C(b)
Dispatch Protocol for Incoming Ambulances Needing ALS Assistance	C-2
Recorded Phone Line	C-3
Radio Protocol	
Radio Transmission	
Routine Transfer Radio Protocol	
Radio and Time Checks	
Emergency Communications Tapes and Record Keeping	
Emergency Department Radio Log	
Emergency Medical Dispatch	

#### CENTRAL MEDICAL DISPATCHING PATTERN

#### I. General Information

- A. All responding units and First Responders will be dispatched according to patient need so as to provide the most appropriate level of care in the most efficient manner.
- B. Ambulances will be dispatched to all calls within their response area.
- C. If a unit is out of service, dispatch should be notified immediately so that in the event of a call, the closest appropriate unit will be dispatched. Dispatch should be notified when the unit is back in service.
- D. Each ambulance service will make arrangements with its dispatching agency to notify a caller of the estimated time of arrival for an emergency vehicle if requested by the caller.

#### II. Dual Response

- A. Goal: The overall goal of dual response is to provide advanced life support to those patients needing advanced care.
- B. ALS should be dispatched simultaneously with the closest BLS ambulance, if utilized, for emergencies meeting the following criteria for dual response:
  - 1. The call has been identified as appropriate for dual response on the EMS dispatch cards as determined by the EMS Medical Director. (See Appendix Ca)
  - 2. If an ALS ambulance (ground or air) is not in the normal dispatch criteria and an ambulance is requested from outside their normal dispatch area, the dispatch agency will make every effort to contact that service for dispatch.

#### C. Cancellation of Dual Response

A second ambulance dispatched to the scene of an emergency may honor a request to cancel when:

- 1. A request to cancel is received from an ambulance at the scene that is licensed and staffed at the same or higher level, or
- 2. A request to cancel is received from an ambulance crew or non-transport provider at a lower license level after an initial assessment is completed and is it recognized there is no need to transport.

#### D. ALS Assist

The BLS crew may contact dispatch and request an ALS unit to respond to their location or to intercept with them if, in their judgment, the patient/situation would benefit from ALS support.

#### III. Helicopter Dispatch Criteria

- A. Goal: Reduction in time to definitive care.
- B. Automatic Launch Criteria: the helicopter will be dispatched simultaneously with the ambulance(s) when the call meets both of the following criteria:
  - 1. The call is identified as appropriate for helicopter response on the EMD dispatch cards as determined by the EMS Medical Director. (See Appendix C(b))
  - 2. The call location is outside the circled Quincy area on the map. (Adams County dispatch agency will be provided with a map indicating this area.)
- C. Ground Crew Launch Request: The responding ground crew may contact dispatch to request launch of the helicopter when, in their judgment, the patient will benefit from the shorter transport time to definitive care.

D.

D. The EMR/BLS/ALS unit may cancel the aircraft by calling in a full patient report to Medical Control, including ETA to receiving facility and requesting that the helicopter be cancelled.

#### **EMD DISPATCH CARDS FOR DUAL RESPONSE**

- 1. Allergic Reaction/Hives/MedicationReaction/Stings
  - Difficulty breathing/respiratory distress/notalert
- 2. Back pain
  - Not alert
- 3. Breathing Problems
  - Difficulty breathing/respiratory distress/not alert/changing color
- 4. Burns/Explosion
  - Multiple victims/difficulty breathing/notalert
- 5. Carbon monoxide/Inhalation/Hazardous Materials
  - Multiple victims/Difficulty breathing/Not alert/Hazardous materials
- 6. Cardiac/Respiratory Arrest
  - Suspected or obvious
- 7. Chest pain
  - Abnormal breathing/Not alert/Changing color
- 8. Choking
  - Abnormal breathing/Not alert
- 9. Convulsions/Seizures
  - Continuous/Not breathing/Associated with pregnancy, trauma, diabetic or cardiac
- 10. Diabetic
  - Not alert/Abnormal breathing
- 11. Drowning
  - Abnormal breathing/Not alert/Neck injury/Diving or scuba
- 12. Electrocution
  - Not alert/Associated with long fall/abnormal breathing
- 13. Falls/Back injury
  - Not alert/Dangerous injury/Long fall/Abnormal breathing
- 14. Headache
  - Not alert/Speech problems/Paralysis or numbness/Abnormal breathing
- 15. Heart problem
  - Not alert/Cardiac history/Firing of implanted defibrillator
- 16. Hemorrhage/Laceration
  - Dangerous bleeding/Not alert/Respiratory distress
- 17. Industrial/Machinery
  - Multiple victims/Entrapped
- 18. Overdose/Ingestion/Poisoning
  - Not alert/Abnormal breathing/Ingested antidepressants/cocaine/lye or alkali substances
- 19. Psychiatric/Suicide attempt
  - Not alert/Hanging/Strangulation/Suffocation
- 20. Sick person
  - Not alert
- 21. Stab/Gunshot wound
  - Multiple victims/Not alert/Central wounds/Multiple wounds

- 22. Stroke
  - Not alert/Abnormal breathing
- 23. Traffic accidents
  - Multiple victims/Entrapped/Ejected/Severe respiratory distress/Not alert
- 24. Traumatic injuries
  - Dangerous injury/Severe hemorrhage/Not alert
- 25. Unconscious/fainting
  - Not alert/Severe respiratory distress
- 26. Unknown Problem (Man down)
  - Life status questionable
- 27. Any additional situations as determined by the EMS Dispatch Cards/Program as determined by the EMS Medical Director.

Reviewed: 1/06; 9/08, 01/01, 11/20

Revised 8/12

#### EMD DISPATCH CARDS FOR AUTOMATIC HELICOPTER LAUNCH

NOTE: Dispatch agency will contact closest available aircraft.

- 1. Burns/Explosions
  - Difficulty breathing/respiratory distress/large burn/Multiple victims
- 2. Drowning/Diving
  - Unconscious/Not breathing/Underwater/Abnormal breathing/Not alert/Suspected neck injury/Diving or scuba accident
- 3. Electrocution
  - Abnormal breathing/Not breathing/Not alert/Long fall/Life status questionable
- 4. Falls/Back Injuries
  - Abnormal breathing/Not alert/Serious hemorrhage/Long fall
- 5. Hemorrhage/Lacerations
  - Dangerous hemorrhage/Not alert/Severe respiratory distress
- 6. Industrial/Machinery
  - Multiple victims/Entrapped/Life status questionable
- 7. Stab/Gunshot wound
  - Not alert/Multiple wounds/Central wound/Multiple victims
- 8. Traffic Accidents
  - Multiple victims/Trapped/Ejected/Not alert/Severe respiratory distress
- 9. Traumatic Injuries
  - Dangerous injuries/Not alert/Severe respiratory distress
- 10. Any additional situations as determined by the EMS Dispatch Cards/Program as determined by the EMS Medical Director.

1/01; re: 1/09; 8/12 Reviewed: 1/06; 9/08, 11/20, 1/2024

#### DISPATCH PROTOCOL FOR INCOMING AMBULANCES NEEDING ALS ASSISTANCE

- I. When inbound units need advanced life support assistance (Ground or Air):
  - A. ALS unit should be dispatched by the receiving hospital when:
    - 1. the transporting ambulance requests

assistance OR

- 2. after receiving the patient report from the BLS unit, the receiving hospital determines the need to send ALS assistance.
- B. Prior to dispatching ALS or Air assistance, the receiving hospital should weigh the benefits of the ALS assistance to the patient against the ETA to the hospital and subsequent delay in transport that would occur.
- C. The ETA should be greater than 15 minutes.
  - Blessing Hospital will notify the local dispatch agency to arrange for dispatch. If out of Adams County, Adams County 911 Center will contact the appropriate dispatch agency.
- D. As related to Missouri state line: It is the policy of the Adams County Ambulance Service to limit their response into Missouri to the 24/61 interchange at Taylor, Missouri. This limit may be exceeded upon order of the EMS physician at Medical Control.

6/8

re: 7/86, 7/88, 5/91, 8/91, 8/95, 11/97. 9/99, 9/08, 8/12,

11/20

(reviewed 8/01, 1/06)

#### EMS RECORDED PHONE LINE

- I. When receiving the prehospital patient report via phone, the ECRN should:
  - A. Complete the QAEMS Radio Log Form as the report is given.
  - B. Document any orders from medical control on the Radio Log Form and time order given.
  - C. An ER Physician signature is required when orders are given.
- II. In order for the physician to monitor the report, the speaker function can be used.
- III. Inbound radio reports will be recorded *and recordings maintained for a period no less than 365 days*.

#### RADIO PROTOCOL

<u>OBJECTIVE:</u> To comply with the Federal Communication Commission rules and eliminate radio

traffic on MERCI radio

- I. All radio communications should be as brief and concise as possible. Eliminate unnecessary words.
- II. The following 10 "codes" may be used for communications during patient

report: 10-33 Run Emergent (HOT) 10-40 Run Non-Emergent (COLD) 10-56 Intoxicated

10-56 Intoxicated 10-79 Dead body

10-96 Psychiatric patient

These were included for use when the patient's family is in close proximity and a verbal description would not be appropriate. All other communications should be clearly understood by everyone.

- III. The following patient information shall be relayed to the contact hospital:
  - A. patient assessment
  - B. patient history
  - C. vital signs including pain using a 1-10 scale (10 being worst) or other approved scale.
  - D. treatment provided prior to patient contact (i.e. EMR) and after patient contact.
  - E. ETA

After patient report, Medical Control will determine the treatment and disposition of the patient.

IV. The name of the patient will not be transmitted via radio or cell phone reports.

#### RADIO TRANSMISSION

#### POLICY:

All members of the QAEMS System should be properly trained on the use of their communication equipment and able to perform basic trouble shooting.

#### PROCEDURE:

- I. All voice radio transmissions will be limited to pertinent medical information.
- II. All units will identify themselves at initiation and termination of the communication.
- III. The following are approved methods of establishing contact
  - A. VHF 155.340 (MERCI)
  - B. Dedicated telephone line: Blessing Hospital (217) 224-7743

    Illini Hospital (217) 285-6038
- IV. Transmission of EKG

Rhythm strip or 12 Lead EKG may be transmitted to the dedicated fax machine or via internet.

Blessing Hospital (217) 223-9780) Illini Hospital (217) 285-6035 Lifenet ZOLL Rescue-Net

- V. Before terminating communications with Medical Control, prehospital personnel must notify Medical Control of a method by which they can be re-contacted.
  - A. MERCI
  - B. Cell phone number (a current list of cell phone numbers for prehospital providers will be kept at the radio station.)
- VI. In the event of communication failure, the crew will operate under system standing medical orders.
- VII. A copy of the system SMO shall be kept in each response vehicle.

#### **ROUTINE TRANSFER RADIO PROTOCOL**

On patients who are routine transfers (direct admits and/or "coach calls") into the hospital, the emergency department <u>MUST</u> be notified on the radio prior to arrival.

At the time of communication with the emergency department personnel, the following information <u>MUST</u> be relayed:

- I. Routine Transfer Direct Admit and/or "Invalid Coach Call"
  - A. Why patient being transferred (example: illness if known, lab work, nuclear medicine.)
  - B. Patient's physician
  - C. Room number if in-hospital patient
  - D. ETA

After the above information is transmitted, Medical Control will acknowledge the communication.

II. Direct Admit Warranting ALS Procedures:

If a patient is a direct admit and upon the paramedic arrival the paramedic feels the patient is in need of ALS, the procedure is as follows:

- A. Treat appropriately
- B. Transmit patient assessment.
- C. Request orders as needed.

NOTE: If the transporting team determines the patient should be evaluated by the emergency department physician, the crew member will notify the Emergency Department. The ED will notify the original receiving department of delay in patient arrival for emergency assessment/treatment as appropriate.

#### **RADIO AND TIME CHECKS**

Purpose:

To ensure that communications equipment is functional and that redundant measures are in place should one aspect of the communications system be non-functional.

- I. EMS provider agency daily communications equipment checks:
  - A. Each agency will conduct daily communications equipment checks. This should at a minimum include a test of MERCI radio.
  - B. Each agency will maintain a daily log of the test and keep the log on file. Logs will be made available upon request.
  - C. Any equipment malfunctions should be reported to agency supervisory personnel and an event report sent to the EMS Department.
- II. Hospital radio / time checks
  - A. Each hospital in the Quincy Area EMS System will conduct daily checks of MERCI radio by contacting the dispatch agency in their area. For hospitals providing Medical Control, the clock used for Medical Control times should also be synchronized with dispatch.
  - B. Each hospital will maintain a daily log of the test and keep the log on file.
  - C. Any equipment malfunctions should be reported to the appropriate department at the hospital for repair and an event report sent to the EMS Department.

## EMERGENCY DEPARTMENT DAILY MERCI RADIO CHECK LOG

DAY	Radio Check?	System/Network Clock set with Dispatch?	Computer Clock match ECG Machine	Computer Clock match ECG Machine #5	Computer Clock match ECG Machine	Computer Clock match ECG Machine	Eye Wash Station	Charge Nurse / ECRN Signature
1.								
2.								
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28.							-	
29.								
30.							-	
31.								

**Blessing Hospital**: At the end of each month forward to the EMS Department through interdepartmental mail. **Other QAEMS System Hospitals**: Maintain this or other record used for daily MERCI radio/time checks in your own files. Must be able to produce the record for IDPH EMS site surveys.

#### **EMERGENCY COMMUNICATIONS TAPES AND RECORD KEEPING**

- I. Patient report calls to the Resource Hospital or Associate Hospital via Merci, or the dedicated EMS phone line, are recorded utilizing the digital voice logger recording system.
- II. <u>Special Considerations:</u>
  - A. The ER Radio Log form will be completed for each ambulance report.
  - B. The digital recording will be retained by the Resource Hospital or Associate Hospital for a minimum of three (3) years.

6/84 re: 10/86, 11/90, 11/97, 5/98, 8/01, 1/06, 11/20

(reviewed: 8/95, 9/08, 8/12)

#### **EMERGENCY DEPARTMENT RADIO LOG**

The Emergency Department Radio Log is to be used for all radio calls coming into the Emergency Department and should be completed by the ECRN or EMS Physician answering the radio.

- I. Ambulance: Write the identifying call letters of the ambulance calling report (Example 3-A-15).
- *II.* <u>Date:</u> The date when the call was received.
- *III.* Time Called In: Using the 24-hour clock, designate the time the call was received.
- IV. Form #: The number comes from the Prehospital Care Report. (Also called incident number may not be available at the time of the radio report)
- V. <u>MERCI/PHONE:</u> Circle one indicating if report was received via MERCI radio or dedicated phone line.
- VI. Age: Known age or estimated age of patient.
- VII. Sex: Circle M (male) or F (female)
- VIII. Pvt. MD: Patient's personal physician.
- *IX.* ETA: The estimated time of arrival to the receiving hospital.
- X. <u>Complaint:</u> Mechanism of injury or nature of illness including patient's chief complaint or if the patient is unconscious, a brief statement by the paramedic relaying the main problem.
- XI. Mark the appropriate box if an Alert/Activation was advised (STEMI, Stroke, Trauma)
- XII. Medical History: Pertinent past medical history.
- XIII. <u>Medications:</u> Medications the patient is currently taking.
- XIV. Allergies: Any known allergies of the patient.
- XV. <u>Physical Assessment section:</u> Using a check system, mark physical assessment information relayed in the report; additional patient assessment information can be documented under PATIENT'S SIGNS AND SYMPTOMS.
  - A. <u>Skin Condition:</u> WNL, dry, cool, moist, pale, cyanotic or other specification.
  - B. <u>Pain:</u> Record pain on 1-10 scale. (If patient unable, may use mild, moderate or severe.)
  - C. Bleeding: None, minor, moderate or severe bleeding noted.
  - D. <u>Abdomen:</u> Soft, distended, tender or rigid (firm).
  - E. AVPU Scale: Alert, opens eyes to voice, opens eyes to pain or unresponsive to stimuli.
  - F. Mentation: Oriented to person/place/time, disoriented, combative or slow to respond.
  - G. Chest Sounds: Left/Right fields are clear, diminished, rales, rhonchi, wheezes or absent.
  - H. Pulses: Pulses are present, quality, regular, irregular, weak, bounding.
  - I. Pupils: The initial condition of the patient's pupils, (equality, reaction to light).

- XVI. Vital Signs Section: Record the vital signs and time
  - A. Blood pressure, pulse, respiration.
  - B. SpO2: reading should be recorded. If patient is not on O2, circle RA for room air. If patient is currently on oxygen, circle O2.
- XVII. <u>Interventions section:</u> Using a check system, indicate which interventions were performed including successful and unsuccessful interventions (i.e. airway, intravenous access).

#### XVIII. EKG Rhythm:

- A. Use check boxes to mark EKG rhythm of the patient. NSR, Sinus Tach, Sinus Brady, Paced, A. Fib, PVCs, 1, 2 or 3<sup>rd</sup> degree block. (If rhythm other than those listed document under Patient's Signs and Symptoms.
- B. 12 lead EKG
  - 1. Check if 12 lead received in ER (should arrive by Lifenet or fax).
  - 2. Record name of physician who reviewed 12 lead.
  - 3. Attach 12-lead/EKG strip to back of radio log.
- C. Code Blue: Initial heart rhythm of V.Fib, V. Tach, Asystole, PEA or other (list).

#### XIX. Treatment / Orders / Protocols section

- A. Any changes in the patient's status should be recorded along with the time.
- B. Treatments, medications, and IV's ordered should be noted along with the times that they were ordered.
- C. When a treatment, medication, or an IV has been administered by the paramedic, they may radio back that the order was carried out. The time should be noted on the radiolog.
  - If morphine was given by pre-hospital personnel according to system protocol, enter amount and time administered on the line provided. (No time for ordered should be entered.)
  - 2. If morphine is ordered per Emergency Department physician, enter time ordered and amount ordered on line provided.
- D. On all orders given over the radio, the order must be repeated back to the ECRN or EMS physician by the paramedic before being carried out. The time should be noted on the radio log.
- E. When Basic Life Support measures have been administered by either EMT's or paramedics (i.e. oxygen, splints, dressings, etc.) this information should be relayed via radio to the ECRN or EMS physician and noted on the radio log.
- XX. Destination: check the appropriate box.

#### XXI. <u>Disposition:</u>

- A. Trauma declared: time the ER Physician declares the trauma based on the patient report.
- B. Refusal accepted by ER Physician: If an oriented adult (or emancipated minor) states they do not wish to be treated or transported to the hospital, the pre-hospital crew should call in a patient report, including vitals, and advise medical control of the patient's wishes not to be treated. This information must be given to the emergency department physician, who will either accept the patient's request to refuse treatment or advise crew of the patient's need to be seen by a physician.

C.	Diverted to: List the name of facility if patient was diverted from original destination and the reason for the diversion.

XXII. ECRN Signature: The ECRN who recorded the patient report should sign the radio log.

#### XXIII. ED Physician Name/Signature:

A. Use the check boxes to indicate the name of the Emergency Department Physician who was given the patient report and/or issued orders for medications/interventions (including refusals) or change in patient destination. If physician name is not listed with a check box, write it in.

- B. The ED physician signs the RADIO LOG on the line provided.
- XXIV. Review Requested: If a pre-hospital chart audit is requested for any reason, mark this box and follow the instructions listed on the back of the radio report for REVIEW REQUESTED. Be specific and add as much detail as possible.
- XXV. <u>Trend Reported:</u> Any ambulance calls indicating a trend of illness or similar complaints shall be reported to medical control and EMS. (Instructions for reporting are listed on back of radio report log.)
- XXVI. Attachment of EKG/12 LEAD: The EKG or 12 Lead performed in the field should be attached to the back of the form.

#### XXVII. NARCOTIC ADMINISTRATION & WASTE LOG

- A. If narcotics were administered in the field and some amount remains in the vial/carpujet, the remainder should be disposed of and documented on the back of the RADIOLOG.
- B. Document: date, time, name of medication, ordering physician if applicable- amount given, amount wasted, signature of paramedic or PHRN who administered the med and signature of person of the witnessed the remainder of the medication being wasted in an acceptable manner (i.e. rinsed down sink).
- *XXVIII.* <u>Maintaining Radio Logs:</u> The Radio Log will be kept in a binder in the Emergency Department until it is forwarded to Blessing EMS Department.

6/8

4 re: 10/86, 8/95, 11/97, 5/98, 8/01, 1/06, 10/06, 07/08, 8/12, 12/20

## QUINCY AREA EMS SYSTEM EMERGENCY DEPARTMENT RADIO LOG

AMBULAN	CE:		DATE:		TIME C	ALLED IN:		FORM #:	
MERCI / PI	HONE	AGE:		SEX: M I	F PVT.MI	):		ETA:	MIN.
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							_	STROKE A	ctivation
							_	TRAUMA A	Activation
ALLERGIE									
SKIN	CONDITI	ON	BLEEDI	NG	AVPU SCA	LE C	HEST SOUND	8 1	PUPILS
☐ WNL	pale pale		none noted		alert	LT	RT	LT RT	
cool hot	cyano		minor moderate	Ļ	verbal	$\vdash$	clear diminished		reactive slow
Пот	mottle	=	severe		pain unresponsive	H	rales		dilated
dry dry		_	_	_	- 1		rhonchi		constricted
moist		A	ABDOMEN	M	ENTATION		wheezes		non-reactive
PAIN		L T	soft/WNL distended	<u> </u>	oriented disoriented	PUL.	absent	PULSES	cont
1-10 Scale	:	ļ	tender	<u> </u>	] combative	TOL	radial pul		
	Mod,/Severe	) [	rigid		slow to respor	nd 🔲	pedal pul		
									irregular
TIME	B/P	VITAL SIG	GNS R	SpO2			INTERVENTIO	/	
THVIE	D/1	1	N N	RA		NC/NRB	IV atten		
				O2		l airway al airway	ET atter		
				RA		ist BVM	ET suc		
				02		tion	combitu		Aspirin
				RA O2	ET	CO2	CPAP		blood glucose
	1	EKG RHYT	······································		TIME	TRI	EATMENT OR	DERS/PROTO	COLS
□NSR			1st degree	hila ala	ORDERED				COLS
Sinus I	_	A. Fib	2nd degree				given per EMS v		
Sinus I		PVCs	☐ 3rd degree					2nd dose	_ mg at
	_						oses ordered per		otal mg
		ec'd Revie				mg			otai ing
"Snow to	EKP, then a	ittaen strip/	EKG on revers	e side.		Fentanyl IV g	given per EMS w	ritten protocol:	
CODE BI	LUE							2nd dose	mcg at
U. Fib		V. Tach	☐ Asy	stole		-Additional de	oses ordered per	r ERP:	
☐ PEA		CPR \	Other			mcg IV	V every	_ minutes for a t	otal mcg
						D. 777	·	***	
	PATIENT'S	S SIGNS AN	ND SYMPTOM	1S				written protocol:	
						1st dose	mg at	2nd dose	_ mg at
		13							
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DECEDIA	TION					DISPOSITIO	N.T.		
DESTINA						DISPOSITIO	N: . DECLARED @	<u> </u>	
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ED PHYSICI	•	•			-	r Hough			
	Blessing Hospital  D: 10214028  Brewer Solaro Stoops Thibodeau Wollaston Other  Review Requested (See back of form) Trend Reported (See back of form)								

Retrieved 2/10/2022. Official copy located at https://blessing-forms.policystat.com/

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#### QUINCY AREA EMS SYSTEM EMERGENCY DEPARTMENT RADIO LOG

#### ATTACH EKG STRIP/12 LEAD

	NARCOTIC ADMINISTRATION & WASTE LOG						
DATE	TIME	MED NAME	ORDERING PHYSICIAN	AMOUNT GIVEN	AMOUNT WASTED	PARAMEDIC / PHRN SIGNATURE	WITNESS SIGNATURE

#### **EVOLVING TREND/POTENTIAL CRISIS**

The Resource Hospital shall document any notification received by providers regarding a potential or evolving trend or crisis:

- 1. Contact the EMS System Coordinator
- 2. Forward this notification to the EMS Department by Fax: 223-2087
- 3. If more than 1 notification of same trend, contact the EMS Medical Director

IF PRE-HOSPITAL REVIEW REQUESTED:
1. Copy the Radio Log
2. Send to EMS Department, ATTN: EMS System Coordinator.
Please provide reason a review is requested or issue to be reviewed.
Trease provide reason a review is requested or issue to be reviewed.

**Blessing Hospital** 

Comments: \_\_

ID: 10214028 Page 2 of 2 01/2022

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE EMERGENCY MEDICAL DISPATCH

#### I. Purpose:

- A. Provide quality patient care and emergency medical service to the citizens of the Quincy Area EMS System
- B. Develop a uniform level of response for the EMS System
- C. Provide a means for continuous quality improvement and feedback
- D. Provide for the safest and most appropriate level of response to the patient.

#### II. Policy:

- A. Persons calling for emergency assistance shall never be required to speak with more than two persons to request emergency medical assistance.
- B. Emergency Medical Units shall be dispatched by Illinois Licensed Emergency Medical Dispatchers in accordance to the standards developed by the Medical Director utilizing Emergency Medical Dispatch Protocols.
- C. Emergency medical units shall be dispatched hot (10-33) or cold (10-40) as determined by the Dispatch Center utilizing the EMD protocols.
- D. A call may be upgraded to a hot response (10-33) at the medical crew's discretion. An event report shall be completed and sent to the EMS Office if the medical crew upgrades the call.
- E. All ALS ambulances shall be enroute within 02:59 minutes after being dispatched (Goal: 90% or greater). The medical crew shall acknowledge the call within 30 seconds.
- F. All "alpha" and "bravo" level calls determined not emergent shall be dispatched as cold (10-40) response. Examples: back pain, minor hemorrhage, earache, constipation, etc.
- G. Ambulance crews may request additional assistance (i.e. manpower, extreme response time, forcible entry, etc.) on non-emergency medical responder calls.
- H. If contacted by a telematics service provider (i.e. OnStar) that utilizes a system for Automatic Crash Notification (CAN), Dispatch shall use the appropriate EMD cardset protocols dictated by the situation, most likely Card 29 "Traffic/Transportation Accidents." If ProQA is available to the EMD, Dispatch will use the CAN protocol available within the EMD software as the situation warrants.
- I. Any level of providers may request additional assistance/resource by contacting the local dispatch agency.

#### III. Procedures:

- A. Emergency medical units dispatched as a cold (10-40) response may be upgraded to a hot response (10-33) when:
  - 1. Dispatch Center determines that the patient's condition has changed and informs of upgrade to a hot (10-33) response.
  - 2. Medical crew's discretion

- B. Emergency medical units dispatched as a hot (10-33) response may be downgraded to a cold (10-40) response when:
  - 1. Dispatch Center receives information from medical crews or original caller (EMR, EMT, EMT-P) on scene that downgrade is appropriate.
  - **2.** Medical Crew's discretion after receiving additional information.
- C. An ambulance may divert from a cold (10-40) call to a higher (10-33) priority IF the ambulance is the closest available unit to the higher priority call. (Examples of high priority calls: chest pain, respiratory distress, CVA, etc.)
  - 1. The diverting ambulance shall notify the Dispatch Center that they are diverting to the higher priority call.
  - 2. The diverting ambulance shall ensure that the Dispatch Center dispatches an ambulance or EMR to the original call.
- D. Units shall call swap between hot responses (10-33) calls so that the closer ambulance handles the closer call. If a call swap occurs, the Dispatch Center must be notified of the call swap.
- E. The EMS Medical Director or designee shall review the following types of calls for compliance:
  - 1. Any cold (10-40) call that was transported the hospital using hot (10-33) response.
  - **2.** Any cold (10-40) call in which an emergency unit diverted to a higher priority call.
  - **3.** Any call in which an event report is completed and returned.
- F. An ambulance dispatched to the scene of an emergency may honor a request to cancel under the following circumstances:
  - 1. A request to cancel is received from an ambulance at the scene that is licensed and staffed at the same or higher level, or
  - 2. A request to cancel is received from an ambulance crew or non-transport provider at a lower license level after an initial assessment is completed and is it recognized there is no need to transport.
  - **3.** A request to cancel is received from the patient, patient's family, or original caller through the dispatcher.
  - 4. In all instances in which an ambulance honors a request to cancel, a Patient Care Report must be completed including documentation of who and under what circumstances the request for cancellation was made.
  - **5.** This policy does not apply to air ambulance utilization. (See Policy O-28 for the procedure to cancel the helicopter)

12/03; re: 2/04, 5/08, 2/10, 11/20 (Reviewed: 1/06, 9/08, 8/12)

# QUINCY AREA EMS SYSTEM CONTINUING EDUCATION AND TRAINING PROTOCOLS

#### Revised 12/2024

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

Scott Hough, MD EMS Medical Director Christopher R Solaro, MD, PHD Associate Medical Director

### QUINCY AREA EMS SYSTEM CONTINUING EDUCATION AND TRAINING

Paramedic/PHRN/ECRN Continuing Medical Education	ET-1
EMT/ Emergency Medical Responder/ Emergency Medical Dispatcher Continuing Medical Education C	ET-2
QAEMS Program Continuing Education & Evaluation Form	`-3a F
Cardiac Cath Lab Observation	ET-4
Evaluation Cardiac Cath Lab ObservationCE	ET-4F
Requirements for EMS Clinical at Blessing Hospital	ET-5
Dress and Grooming Guide for Clinical	ET-5b
Blessing Hospital Paramedic Program	ET-6
QAEMS EMT Course	ET-7
QAEMS Prehospital RN (PHRN) Course	ET-8
Emergency Communications Registered Nurse Course	ET-9
QAEMS Emergency Medical Responder (EMR) Course	ET-10

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE PARAMEDIC, PHRN, ECRN CONTINUING MEDICAL EDUCATION

#### I. General Information

- A. Required hours for renewal
  - 1. Paramedic 100 hours / four years
  - 2. Prehospital RN (PHRN) 100 hours / four years
  - 3. Emergency Communications RN (ECRN) 48 hours / four years
- B. System participants are responsible for tracking and maintaining copies of continuing education. A copy of this documentation should be submitted to Blessing EMS Department at the time of relicensure.
- C. No more than twenty percent (20%) of the total hours required for relicensure may be obtained in any one subject area or as listed below. Repetition of a specific class within a 12-month period will not be accepted for credit.
- D. At least fifty percent (50%) of the total hours required for relicensure should be earned through System taught or approved courses.
- E. Topics should be license level appropriate.
  - 1. 75% of total hours must be at ALS level.
  - 2. 25% of total hours may be BLS level, i.e. CPR, landing zones, operations, etc.

#### II. IDPH Suggested Core Content for Paramedic and PHRN

Core Content	Illinois Recommended Hours / 4 years
Preparatory (Wellbeing, legal, ethical, pharmacology, pathophysiology)	8 hours
Airway management and ventilation	12 hours
Patient assessment	8 hours
Trauma	12 hours*
Cardiology	16 hours*
Medical	20 hours
Special considerations (neonate, pediatrics, gynecology, OB)	16 hours*
Geriatrics	4 hours
Operations	4 hours
TOTAL	100 HRS

<sup>\*</sup>Note that maintaining ACLS, PALS or PEPP and PHTLS or ITLS meets these recommendations. QAEMS requires 16 hours in pediatric related topics/ courses in a four-year period.

If you are maintaining National Registry Certification in addition to your required Illinois license, you are responsible for knowing those requirements and tracking your education.

#### III. Approved continuing education opportunities:

ACTIVITY	DOCUMENTATION REQUIRED	HOURS ASSIGNED	COMMENT	
Initial education: ACLS, AMLS, ITLS, PALS, PEPP ALS, PHTLS	Certificate or card and course schedule	Hr./Hr. up to 16 hours for each course	Cont. ed hrs. assigned per the standard for the course & schedule	
Renewal education: ACLS, AMLS, ITLS, PALS, PEPP ALS, PHTLS	Certificate or card and course schedule	Hr./Hr. up to 8 hours for each course	Cont. ed hrs. assigned per the standard for the course & schedule	
Instructor courses: ACLS, PEPP, PALS, PHTLS, ITLS	Certificate or card and course schedule	Hr./Hr.	Cont. ed hrs. assigned per the standard for the course & schedule	
Initial courses: CPR instructor, Emergency Vehicle Operator's Course, Emergency Medical Dispatch Course	Certificate And course schedule	Hr. / Hr. up to Max 12 hours		
NAEMT Instructor Course	Certificate and course schedule	Hr./Hr.	Cont. ed hrs. assigned per the standard for the course & schedule	
Locally offered CE inservices assigned a site code by IDPH	QAEMS Certificate	Hr./Hr.	May not exceed > 20% in any one subject	
Audit of entry level course (Paramedic)	QAEMS Certificate	Hr./Hr.	May not exceed > 20% in any one subject	
Seminars / Conferences Approved by CECBEMS, other accrediting agency or state issued site code	Certificate of attendance Schedule or conference brochure	Hr./Hr.	May not exceed > 20% in any one subject	
Clinical preceptor or evaluator	Signed letter from training officer or course program director indicating total hours	Hr./Hr.	May not exceed > 20% of total hours	
Commercial CE: electronic videotapes/CDs; journal articles with publication dates of 5 years or less. Approved by CECBEMS, other accrediting agency or state issued site code	Certificate	Hr./Hr.	May not exceed > 20% in any one subject	

ACTIVITY	DOCUMENTATION REQUIRED	HOURS ASSIGNED	COMMENT
On line options/internet: Includes webinars and online offerings with subject matter related to EMS. Approved by CECBEMS, other accrediting agency, governmental agency such as FEMA or state issued site code	Certificate	Hr./Hr.	May not exceed > 20% in any one subject
College courses: A&P, assessment, physiology, pathophysiology, biology, chemistry, microbiology, pharmacology, psychology, sociology, nursing courses, firefighter courses	Catalog description of course Evidence of successful course completion with grade of C or better (college transcript)	1 college credit = 8 CEU	May not exceed 20% of total hours for any one subject area; Considered on a case by case basis
Emergency Preparedness drills and exercises	Letter of participation including total hours from exercise director	Hr. / Hr. Max 12 hours total	Must have an active participating role
Teaching EMS related courses / CE course must be approved by CECBEMS, other accrediting agency or have a state issued site code	Course schedule Sign off by EMS System Coordinator	Hr./Hr.	Educators may not get credit for teaching the same topic/lecture multiple times. Up to 50% total hours – considered on a case by case basis.
ECRN Course	QAEMS Certificate	Hr./Hr.	Requires prior approval of course lead instructor; May not exceed 20% of total hours for any one subject area – covers multiple subject areas.
TNS Course	QAEMS Certificate	Hr./Hr.	Requires prior approval of TNS Course Coordinator; May not exceed 20% of total hours for any one subject area – covers multiple subject areas.

## EMT, EMERGENCY MEDICAL RESPONDER & EMERGENCY MEDICAL DISPATCHER CONTINUING MEDICAL EDUCATION

#### I. General Information:

- A. Required hours for renewal
  - 1. EMT 60 hours / four years
  - 2. Emergency Medical Responder (First Responder) 24 hours / four years
  - 3. Emergency Medical Dispatcher (EMD) 48 hours / four years
- B. System participants are responsible for tracking and maintaining copies of continuing education. A copy of this documentation should be submitted to Blessing EMS Department at the time of relicensure.
- C. No more than twenty percent (20%) of the total hours required for relicensure may be obtained in any one subject area or as listed below. Repetition of a specific class within a 12-month period will not be accepted for credit.
- D. At least fifty percent (50%) of the total hours required for relicensure should be earned through System taught or approved courses.
- II. Approved continuing education opportunities. Topics should be license level appropriate:

ACTIVITY	DOCUMENTATION REQUIRED	HOURS ASSIGNED	COMMENT
Initial education: CPR, ACLS, AMLS, ITLS, PALS, PEPP ALS, PHTLS	Certificate or card and course schedule	Hr./Hr. up to 16 hours for each course	Cont. ed hrs. assigned per the standard for the course & schedule
Renewal education: ACLS, CPR, AMLS, ITLS, PALS, PEPP ALS, PHTLS	Certificate or card and course schedule	Hr./Hr. up to 8 hours for each course	Cont. ed hrs. assigned per the standard for the course & schedule
Instructor courses: ACLS, PEPP, PALS, PHTLS, ITLS	Certificate or card and course schedule	Hr./Hr.	Cont. ed hrs. assigned per the standard for the course & schedule
Initial courses: CPR instructor, Emergency Vehicle Operator's Course, Emergency Medical Dispatch Course	Certificate Course schedule	Hr. / Hr. up to Max 12 hours	
ACTIVITY	DOCUMENTATION REQUIRED	HOURS ASSIGNED	COMMENT

NAEMT Instructor Course	Certificate and course schedule	Hr./Hr.	Cont. ed hrs. assigned per the standard for the course & schedule
Locally offered CE inservices and courses assigned a site code by IDPH	QAEMS Certificate	Hr./Hr.	May not exceed > 20% of total hours in any one subject area.
Audit of entry level course (EMD, EMT, EMR)	QAEMS Certificate	Hr./Hr.	May not exceed > 20% of total hours in any one subject area.
Seminars / Conferences Approved by CECBEMS, other accrediting agency or state issued site code	Certificate of attendance Schedule or conference brochure	Hr./Hr.	May not exceed > 20% of total hours in any one subject area.
Commercial CE: electronic videotapes/CDs; journal articles with publication dates of 5 years or less. Approved by CECBEMS, other accrediting agency or state issued site code	Certificate	Hr./Hr.	May not exceed > 20% of total hours in any one subject area.
On line options/internet: Includes webinars and online offerings with subject matter related to EMS. Approved by CECBEMS, other accrediting agency, governmental agency such as FEMA or state issued site code	Certificate	Hr./Hr.	May not exceed > 20% of total hours in any one subject area.
College courses: A&P, assessment, physiology, pathophysiology, biology, chemistry, microbiology, pharmacology, psychology, sociology, nursing courses, firefighter courses	Catalog description of course Evidence of successful course completion with grade of C or better (college transcript)	1 college credit = 8 CEU	May not exceed 20% of total hours in any one subject area;  Considered on a case by case basis
Emergency Preparedness drills and exercises	Letter of participation including total hours from exercise director	Hr. / Hr. Max 12 hours total	Must have an active participating role
Teaching EMS related courses / CE course must be approved by CECBEMS, other accrediting agency or have a state issued site code	Course schedule Sign off by EMS System Coordinator	Hr./Hr.	Educators may not get credit for teaching the same topic/lecture multiple times. Up to 50% total hours – considered on a case by case basis.

DATE:	TIME:	PROGRAM	#HOURS						
AGENCY								_SITE CODE:	
	RATE THE F	FOLLOWING AREAS					PROGE	RAM COMMENTS:	
	A TINIO		Excellent	Good	Fair	Poor			
PROGRAM F	RATING								
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To what extent	did presentation	meet your expectations							
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		CONTINUING I							
NAME:			CER'	TIFIC	CATIC	)N#_			
AGENCY: _									
PROVIDER LE	EVEL: FR/I	FRD EMT/B EM	AT/P		ECR	N _	_ PHRN	RNOTH	IER
DATE:			HOU	RS:		A	LS	BLS	
LOCATION: _			IDPH	I SITI	E COI	DE NU	UMBER: _		
SPEAKER:									
TOPIC/SUBJEC	CT MATTER:								
INSTRUCTOR	SPONSOR SIGN	NATURE							

re: 11/97, 4/00, 11/02, 1/03. 9/16, 4/17 (reviewed: 8/95, 8/01, 3/06, 11/10, 10/13, 10/19)

Chris Solaro, MD. Associate EMS Medical Director

PROGRAM RATING	Excellent	Good	Fair	Poor	
Overall Rating					
Audio/Visual Presentations					
SPEAKER NAME:					Speaker Comments:
TOPIC:					
Knowledge					
Rapport					
Delivery					
To what extent did presentation meet your expectations					
SPEAKER NAME:					Speaker Comments:
TOPIC:					
Knowledge					
Rapport					
Delivery					
To what extent did presentation meet your expectations					

## **QAEMS**

appreciates your participation in the programs that you attend. Any new ideas or suggestions should be noted on the evaluation form.

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE CARDIAC CATH LAB OBSERVATION

- I. Purpose: Blessing Hospital offers the opportunity for EMS providers to observe procedures in the cardiac catheterization lab.
- II. Educational objectives
  - A. Identify the types of procedures performed in the cardiac cath lab.
  - B. Understand how a blockage in a coronary artery affects the patient.
  - C. Identify why timely intervention is necessary.
- III. Process
  - A. Contact Blessing Hospital Human Resources (HR) Department regarding job shadow in the cardiac cath lab.
  - B. Obtain packet from Blessing HR with requirements, complete all forms in the packet then submit the forms to Blessing HR along with a copy of immunization records. All items must be submitted at one time. Immunization record must include:
    - 1. Tdap
    - 2. MMR X 2 doses
    - 3. Hepatitis B series
    - 4. TB test within the past 90 days (can be 1 step test)
  - C. Blessing HR will notify Blessing EMS once your paperwork has been submitted and reviewed.
  - D. Blessing EMS Department will assist the provider to schedule the observation experience.
  - E. Complete an evaluation of the experience after the observation and submit evaluation to Blessing EMS Department.

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE EVALUATION CARDIAC CATH LAB OBSERVATION

To what extent did this observation help you meet key objectives.	COMPLETELY AGREE 4	SOMEWHAT AGREE 3	SOMEWHAT DISAGREE 2	COMPLETELY DISAGREE 1			
This clinical observation helped me to understand the types of procedures performed in the cardiac cath lab.							
This clinical observation helped me to understand the significance of a blocked coronary artery.							
This clinical observation helped me to understand why timely intervention is important.							
Was there anyone in the cardiac cath lab that you would like to recognize for being especially helpful?							
Other comments:							
Please retain this section for your continu	ing education	records.					
QUINCY AREA EMS SYSTEM CONTINUING EDUCATION REPORT							
NAME:	CERTIF	ICATION #					
AGENCY:				_			
PROVIDER LEVEL: FR/FRD EMT _	EMT/P ]	ECRN PHR	RN RN	OTHER			
DATE:	TIME: _		_ TOTAL HOUR	RS:			
CLINICAL OBSERVATION: Blessing Hospital Ca	urdiac Cath Lab						
SIGNATURE EMS OBSERVER:							
SIGNATURE CARDIAC CATH LAB STAFF:							

- I. PURPOSE: To ensure the safety and wellbeing of patients who receive care from EMS students or other licensed EMS providers who are fulfilling clinical requirements at Blessing Hospital and/or at other clinical sites associated with Blessing EMS programs or the Quincy Area EMS System.
- II. SCOPE: Applies to all students of Blessing Hospital EMS related programs and courses, students from other EMS programs and courses who wish to have a clinical experience at Blessing Hospital and licensed EMS providers who are meeting continuing education or System requirements.
- III. REQUIREMENTS (Blessing employees will have met these requirements verify with HR)
  - A. Proof of TB test within one year
  - B. Proof of immunizations: MMR X 2 doses if born after 1957, one dose if born before 1857; Hepatitis B series; Tetanus within ten years; flu shot
  - C. Criminal background check (do not proceed with this step until form is provided by Blessing HR)
  - D. Urine drug screen (do not proceed with this step until advised by Blessing EMS Education Coordinator)

#### IV. PAPERWORK PACKETS

- A. Blessing Human Resources (HR) Packet contains documents required by Blessing HR Department (Blessing employees will need to complete the Educational/Clinical Rotation Application only verify with HR)
- B. Blessing EMS Packet contains documents required by Blessing EMS Department
  - 1. QAEMS student application
  - 2. QAEMS CET 5 Requirements for EMS Clinical policy
  - 3. QAEMS Student Dress and Grooming policy
  - 4. QAEMS Release of Information to Clinical Sites form
  - 5. QAEMS Education Records Release form
  - 6. QAEMS Waiver of Liability (ambulance)
  - 7. QAEMS Letter of Sponsorship (ambulance paramedic students only)
  - 8. QAEMS Student Health Assessment and Physical form (paramedic students only)
  - 9. QAEMS Acknowledgement of Safety Procedures
  - 10. QAEMS Personal Accountability Acknowledgement form

#### V. PROCESS

- A. Instructors, students and Blessing EMS Department staff follow the flowchart pertinent to the EMS program, course or EMS clinical requirement. (see pages 2, 3 and 4)
- B. HR packet must be complete and submitted with proof of immunizations to Blessing HR Department by due date. Failure to do so may result in inability to complete clinical rotations. HR will not accept a partially completed packet.
- C. EMS Packets must be completed and returned to your instructor by due date.
- D. Approval to schedule clinical will be given once all requirements have been met.

## CLINICAL REQUIREMENT PROCESS BLESSING EMS STUDENT

Blessing EMS Education Coordinator sends student roster to Blessing Human Resources Dept.

Blessing HR provides current required paperwork packet to the EMS Education Coordinator and collaborates on a date to submit paperwork.

Blessing EMS Education Coordinator copies the HR packet & provides copies to the course instructor or students with due date. EMS students will also be given a separate packet of paperwork for the EMS Dept.

\*EMS students who are Blessing employees will need to check with HR to determine what HR requirements must be met.

#### HR PACKET

Student takes <u>ALL</u> completed documents, copies of immunization record to Blessing HR

Department by the due date.

HR reviews packet
Is packet complete?
NO-don't accept
packet
YES

#### BLESSING HUMAN RESOURCES DEPARTMENT

- Gives student form to take to Big River Investigations for background check.
- Gives student ID badge and parking sticker

STUDENT completes background check requirement

#### BLESSING HUMAN RESOURCES DEPARTMENT

- Reviews background check report
- Notifies EMS Education Coordinator via email of students from roster who met and did not meet requirements.

#### Blessing EMS Education Coordinator

- Updates clinical requirement database for students who met HR requirements.
- Removes students from roster who did not meet HR requirements

#### **EMS PACKET**

Student brings ALL completed documents, required copies specific to course to the EMS course instructor by due date.

EMS instructor reviews packet.
Is packet complete?

NO- don't accept packet

#### BLESSING EMS EDUCATION COORDINATOR

YES

- Sends student roster to Employer & Sports Clinic for urine drug screens
- Gives drug screen info sheet to student and instructs students regarding steps that will occur if positive test results.

STUDENT takes photo ID and fee to Employer & Sports Clinic 927 Broadway suite 101 Monday – Friday 8:00 AM – 4:00PM Provides urine drug screen sample

Employer & Sports Clinic staff provides EMS Education Coordinator with urine drug screen

EMS Education Coordinator updates clinical requirement database & notifies student to schedule clinical

## CLINICAL REQUIREMENT PROCESS QAEMS EMS STUDENT – NON-BLESSING STUDENT

#### **BLESSING HOSPITAL EMS EDUCATION COORDINATOR**

- Identifies courses that require clinical when training application is submitted by course instructor.
- Verifies with course instructor that a clinical affiliation agreement is on file with Blessing Human Resources Dept. If unknown provides instructor with HR contact information.
- Provides EMS packets and HR packets for each student to the instructor and verifies the instructor understands the process.
- Requests course instructor to send course roster to EMS Department by 10<sup>th</sup> day of class and forwards the roster to HR.

#### **COURSE INSTRUCTOR**

Provides the HR and EMS packets to students and advise students of need to ensure packet is complete prior to submission and due dates with consequence of drop from program if not completed by due date.

#### HR PACKET and BLESSING EMS PACKET HR PACKET **EMS PACKET** Student takes ALL completed documents, copies Student brings ALL completed documents, of immunization record to Blessing HR required copies specific to course to course Department by the due date. instructor by due date. **EMS** instructor HR reviews packet reviews packet. Is packet complete? Is packet complete? NO – do not NO accept packet YES YES **BLESSING EMS EDUCATION COORDINATOR BLESSING HUMAN RESOURCES DEPARTMENT** Sends student roster to Employer & Sports Gives student form to take to Big River Clinic for urine drug screens Investigations for background check. Gives drug screen info sheet to student and Gives student ID badge and parking sticker instructs students regarding steps that will occur if positive test results. STUDENT completes background check requirement, returns form to Blessing HR STUDENT takes photo ID and fee to Employer & Sports Clinic 927 Broadway suite 101 Monday – Friday 8:00 AM – 4:00PM **BLESSING HUMAN RESOURCES DEPARTMENT** Provides urine drug screen sample Reviews background check report **Notifies EMS Education Coordinator of students** from roster who met and did not meet requirements. **Employer & Sports Clinic staff provides EMS** Education Coordinator with urine drug screen

#### Blessing EMS Education Coordinator

- Updates clinical requirement database for students who met HR requirements.
- Advises instructor to remove students from roster who did not meet HR requirements

EMS Education Coordinator updates clinical requirement database & notifies student to schedule clinical

### **BLESSING EMS COURSES**

**EMT Clinical Binder** - provided to student by the instructor early in the course. Instructor reviews items in binder and clinical packets, due dates.

- Syllabus for course
- Clinical forms
- Student handbook (if separate from syllabus)

**Paramedic Clinical Binder** - provided to student by the instructor week 1 of class. Instructor reviews handbook and clinical manual with students.

- Syllabus for didactic and clinical course
- Clinical schedule
- Clinical forms for semester rotation (each semester new forms will be provided week 1 of the semester
- Student handbook
- Hospital clinical manual
- Field clinical manual (provided before field clinical begins)

### **URINE DRUG SCREEN**

- The drug screen must be completed at BPS 927 Broadway Suite 101. Drug screen cannot be completed > 30 days prior to first planned clinical.
- The Medical Review Officer will contact the individual to review non-negative results. If the individual misses the notification phone call, it is important to follow instructions to return the call. Failure to do so will result in not being approved for clinical.
- The student will have five days after notification of a non-negative result to explain or contest the results.
- If the explanation or challenge is not satisfactory as defined by the MRO, the Blessing EMS Education Coordinator will be notified resulting in denial of clinical and dismissal from the course/program.
- Note: random drug testing may be conducted during the course or program. If selected for random testing the student or candidate will be instructed regarding testing.
- Note: Students from EMS programs outside of Blessing Hospital or licensed EMS providers planning a clinical rotation at
  Blessing must provide a negative five panel drug screen prior to the start of clinical. The drug screen must have been
  performed within 30 days of the planned first clinical. Blessing will accept verified results if an individual had drug testing done
  at their place of employment and is in a random drug screen pool.

### **DISQUALIFYING CRIMINAL BACKGROUND CHECK**

- Blessing Hospital reserves the right to deny a student the opportunity to complete clinical at Blessing. Blessing HR will make the determination based on the type of conviction.
- Per IDPH EMS division, students have no recourse to a waiver that will allow them to perform clinical as this is at the discretion of the clinical facility.
- If Blessing approves the student for clinical, the student may still need to go through a waiver process for licensing depending on the type of conviction. Students can check with IDPH EMS division if questions.

# QUINCY AREA EMS SYSTEM BLESSING HOSPITAL EMS STUDENT DRESS AND GROOMINGCODE

I. Purpose: To project an image that is positive, professional and business-like and maintain student safety while in the hospital or field clinical setting.

### II. General guidance

- A. The practice of good body, hair and oral hygiene is expected.
- B. Hair will be clean and styled in a manner that is professional. Hair should be of a natural type color no blue, pink, purple, green etc. No styles such as Mohawk. Long hair must be pulled back to prevent contamination.
- C. Beards and mustaches must be neatly trimmed.
- D. Tattoos that are offensive in nature or have profanity must be covered.
- E. No strong or excessive scents- perfumes, colognes, aftershave or makeup is discouraged.
- F. Natural fingernails short to medium length no longer than 1/4<sup>th</sup> inch long. Polished nails should be free of cracks or chips. NO artificial nail enhancements including artificial nails, tips, wraps, overlays, UV gels, Shellac. (This is related to infection control)
- G. Jewelry should be kept to a minimum for safety. Blessing is not responsible for loss or damage of jewelry.
  - 1. Watch with a second hand
  - 2. Ring or wedding band set
  - 3. Earrings no hoops or dangles, no larger than ½ inch diameter.
  - 4. One simple neck chain can have a small charm, pendant or medical alert insignia. Keep chains inside the shirt for safety.
  - 5. Ear gauges must be solid and not exceed 1/4<sup>th</sup> inch in diameter.
  - 6. Body piercings other than earrings should be removed, covered or skincolored retainer inserted.

### *III*. Dress:

- A. **Paramedic student:** Only the approved uniform pant and shirt are acceptable.
- B. **EMT / Emergency Medical Responder student:** Dark colored slacks, shirt with a collar. No jeans, t-shirts or shorts.
- C. Pants should touch the top of the shoe and not drag on the floor.
- D. Shirts should be tucked in and of a length that does not allow the abdomen to show.
- E. Undergarments and socks will be worn.
- F. Sturdy, skid-resistant black or dark brown shoes or boots are preferable for field clinical. Clean athletic style shoes are more comfortable for long hospital clinical rotations and may be any color. No open toe or clog style shoes.
- G. Outerwear for field clinical appropriate for the weather, able to be cleaned, free of advertising.
- IV. Student ID badge: the badge that is provided by Blessing Human Resources department must be worn during clinical. The badge should be worn at chest level and should be displayed face out.

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE EVALUATION CARDIAC CATH LAB OBSERVATION

To what extent did this observation help you	COMPLETELY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE 2	COMPLETELY DISAGREE	
meet key objectives.	4	3	DIOMONEE E	1	
This clinical observation helped me to					
understand the types of procedures performed in the cardiac cath lab.					
in the cardiac cath lab.					
This clinical observation helped me to					
understand the significance of a blocked					
coronary artery.					
This clinical observation helped me to					
understand why timely intervention is					
important.					
Was there anyone in the cardiac cath lab that you would like to recognize for being especially helpful?					
Other comments:					
Please retain this section for your continu	ing education	records.			
Please retain this section for your continuing education records.					
QUINCY AREA EMS SYSTEM					
CONTINUING EDUCATION REPORT					
NAME:	CERTIFICA	TION #			
NAIVIE.	CENTIFICA	110N#			
AGENCY:				_	
PROVIDER LEVEL:FR/FRDEMT _	EMT/P E	ECRN PHRI	NRN	OTHER	
<del></del> , : <del></del>	<del></del>		<del></del>	<del></del> -	
DATE:	TIME:		_TOTAL HOURS: _		
CLINICAL OBSERVATION: Blessing Hospital Cardiac Ca	ath Lab				
ezimenz observiment biessing mospital cardiae et	ZEII LUN				

SIGNATURE EMS OBSERVER:

SIGNATURE CARDIAC CATH LAB STAFF:

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

### **BLESSING HOSPITAL PARAMEDIC PROGRAM**

I. Program goal: To prepare competent entry-level paramedics who are skilled in the cognitive (knowledge), psychomotor (skills), and affective (behavioral) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical technician, and/or Emergency Medical Responder levels.

### *II.* Prerequisites:

- A. Eighteen years of age before beginning the program.
- B. High school diploma or equivalency (verification by John Wood Community College)
- C. Current Illinois EMT license
- D. Six months experience as an EMT (preferred)
- III. Application to program a complete application includes all of the following items. It should be submitted as one packet prior to the assigned paperwork deadline. Partial applications will not be accepted.
  - A. Application form complete front and back
  - B. Proof that you are at least *eighteen* years of age a driver's license or state issued ID are acceptable
  - D. Copy of Illinois EMT license (If you have an out of state license, we will assist with reciprocity. This can take 6 weeks or longer)
  - E. Copy of current AHA CPR for Healthcare Providers or equivalent
  - F. Two letters of recommendation one should be a reference from your immediate supervisor if currently working in EMS, the second can be an instructor or other person knowledgeable about your EMT abilities.

### IV. Pre-entrance Testing

- A. Candidates will complete the *pre-entrance* testing process. Testing dates will be announced each year by February 15th.
- B. The *pre-entrance* exam will consist of the following components which will all be completed on the test day:
  - 1. Panel interview
  - 2. Fisdap *pre-entrance* exam (a fee is associated with this) –online exam evaluates EMT general knowledge, knowledge of anatomy and physiology, reading comprehension and math. Required score of ≥70%.
  - 3. EMT level psychomotor competency

### V. Admission Selection

- A. Admission selection is based on the number of openings available, *pre-entrance* testing scores, prior experience. Class size is limited to sixteen due to extensive practical skills and clinical availability. Blessing Hospital does not discriminate in enrollment on the basis of color, sex, age, gender, religion, national origin, ancestry or sexual orientation.
- B. Candidates accepted into the program with less than six months experience will be required to successfully complete a clinical rotation on Adams County Ambulance.
- C. Once selection decisions have been made, the candidate will be notified by letter. This letter is proof to John Wood Community College of acceptance and will allow the student to enroll in the first two paramedic courses.

### VI. Curriculum

Paramedic Program Core Courses *plus Capstone* can be completed in thirteen—fourteen months. All courses are based on the IDPH EMS Rules and National EMS Education Standards.

- A. There are four non-traditional semesters, each consisting of a core didactic/lab course and a corresponding clinical course, followed by the final course which is the Capstone Field Internship.
- B. Students may choose to pursue either the Paramedicine Certificate (39 credit hours) or the Paramedicine Associate degree through John Wood Community College (64 credit hours.)

### VII. Program completion

- A. Successful program completion requires that the student successfully complete each core paramedic didactic/lab course with a grade of ≥77% and successfully complete all core clinical courses with a grade of "pass".
  - 1. Each core course syllabus lists the required course objectives. ALL course objectives must be met for a student to move to the subsequent semester. Completion of terminal objectives required for program completion.
  - 2. Incomplete: Circumstances could occur which would not allow the student to complete all requirements of a course on time. Approval of extension will be by the Program Director in conjunction with the Medical Director for the program.
- VIII. Leave of Absence: A leave of absence may be taken from the paramedic program when specific circumstances occur that prevent the student from continuing in the program. Valid reasons to be considered for a leave of absence include major illness, high risk pregnancy or pregnancy with complications, family obligation, military deployment.
  - A. In order for a student to request a leave of absence, they must be in good standing in the program, have a passing grade of  $\geq$  C, be up to date on clinical and cannot be on probation or suspension.
  - B. The student will notify the Program Director and make a written request detailing the reason for the leave. A meeting will be scheduled with the Program Director and program Medical Director to review the request and status in the program. The student will be notified in writing of the decision to grant or deny the request. Student name badge and other items must be turned in at the time of the meeting.
  - C. If approved, the student must reenter the program the next year at the beginning of the semester following the last successfully completed semester. The following must be completed to re-enter the program:
    - 1. Prior to August 1st the student notifies the Program Director in writing of their intent to return to the paramedic program.
    - 2. The Program Director will schedule an appointment to meet with the student to discuss their return and will provide schedules of classes and skill labs that must be attended. Additional course work and skills may be assigned to ensure that the student will be on track for successful re-entry.
    - 3. The student will not be required to repeat the pre-entrance testing. The student's file will be reviewed to ensure that licenses, CPR are current, and required Blessing EMS paperwork has been signed.
    - 4. The student will be required to make an appointment with Blessing Hospital Human Resources Department to verify information in their original clinical requirements packet and to provide any additional required information.
    - 5. A urine drug screen will be required within 30 days of return to clinical.

### VIII. Dismissal from the program:

- A. A paramedic student may be dismissed from the program for the following reasons:
  - 1. Inability to achieve a grade of 77% (C) or greater in each paramedic core didactic/skill course.
  - 2. Inability to achieve a grade of Pass in each of the paramedic core clinical courses.
  - 3. Excessive absences of greater than two per core paramedic course.
  - 4. Violations of professional conduct / behavioral standards
  - 5. Inability to achieve a score of 3 or greater on affective evaluations for each semester.
  - 6. Breach of patient confidentiality / HIPAA violation
  - 7. Falsification of any document related to the program.
  - 8. Failure to adhere to QAEMS System policies and procedures.
  - 9. Progressive disciplinary action.
- B. The final decision for student dismissal will be made by the Program Director in conjunction with the Medical Director.
- C. Application to the program after dismissal or failure to leave in good standing.
  - The candidate's past records including exam scores, midterm and final evaluations, behavioral evaluations, disciplinary actions and other items will be reviewed by the Program Director prior to setting up an individual meeting with the candidate.
  - 2. The candidate must meet with the Program Director and program Medical Director and be prepared to discuss the issues related to their previous dismissal or failure to complete the program including how circumstances have changed that would allow for a successful outcome.
  - 3. Both the Program Director and program Medical Director must approve to allow the candidate to apply for program entry. The candidate will join the pool of candidates being considered for enrollment and will follow the application process from the beginning.

### IX. Record Keeping

- A. Portions of the student record including *curriculum*, attendance *sign in sheets*, grades, *psychomotor competencies* and evaluations will be maintained for a period of seven years and shall be made available to the EMS system or IDPH upon request.
- B. College transcripts are available through John Wood Community College.

4/02 re: 1/03, 6/03, 6/04, 8/04, 3/06, 11/07 re: 6/08, 4/09, 7/10,4/12, 4-17, 10/19

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

### EMERGENCY MEDICAL TECHNICIAN (EMT) COURSE

- I. PURPOSE: This course is intended to prepare the student to function as a competent entry-level EMT in the prehospital setting.
- II. COURSE OVERVIEW: The course will be conducted according to National EMS Education Standards, including any required components of IDPH or the QAEMS System.
  - 1. Course Delivery & Length
    - 1. Instructors may use a variety of formats to deliver content including but not limited to:
      - Independent student preparation
      - Synchronous or asynchronous instruction
      - Face- to-face instruction
      - Pre- or co-requisites
    - 2. Courses should include a minimum of 132 clock hours of didactic and laboratory instruction.
    - 3. Desired course learning outcomes should be based on competency, not just hours. Students should receive instruction, practice, and validation of all skills within the National EMS scope of practice and Illinois scope of practice for EMT.
  - 2. Course Completion Requirements

Successful completion of course requirements (terminal competencies) allow the student to take the examination for certification (NREMT). All course requirements must be completed by the submitted course end date set by the primary lead instructor.

### Hospital/Clinical Experience

- 1. 24 hours hospital clinical (QAEMS System approved Emergency Department or alternate healthcare facility). The clinical site must have enough patient contacts which provide the student with sufficient experience for them to gain an understanding for the continuum of care.
- 2. If a clinical site is selected outside of the Quincy Area EMS System it must have both EMS lead Instructor and EMS System Coordinator approval.
- 3. \*The student must document a minimum of ten patient contacts on an approved paper or electronic form.

### Field Experience

- 4. 24 hours field experience at a system approved transport EMS agency. The service must have an adequate volume of calls to provide the student with adequate pre-hospital experience.
- 5. The student should participate in and document patient contacts in a field experience.

### III. Student Assessment

1. Cognitive Examination.

Lead Instructors will have two options for the administration of this exam. The dates and retakes of this exam must be <u>clearly identified</u> on the course

<sup>\*</sup> Patient contacts can occur during hospital clinical or field experience.

schedule. The option must be decided prior to the course start date.

### Option 1

Write a program specific examination. This exam must be high-stakes and be summative for content covered within the entire program. Instructors may choose their high-stakes "cut point". This option requires the lead instructor to perform a high-stakes exam analysis and make this exam analysis available to QAEMS and IDPH upon request. Option 2

Ask QAEMS to administer a final EMT course examination. This exam will consist of 150 questions and will be measured for reliability according to KR-20 standards and monitored for predictive validity with NREMT results. The "cut point" for the QAEMS EMT Final will be 70%. Students will be provided two attempts at the QAEMS administered final exam.

### 2. Psychomotor examination.

Instructors may develop this to their desire but must meet the minimum BLS psychomotor standards set by the NREMT to include the following skills. The psychomotor exam may be scheduled over a maximum of two class periods and must be clearly identified on the course schedule.

- o Patient Assessment/Management- Medical
- o Patient Assessment/Management- Trauma
- o BVM Ventilation- Apneic Adult
- Oxygen Administration by Non-Rebreather Mask
- Cardiac Arrest Management/AED
- Spinal Immobilization (Supine Patient)
- o Random Skill Verification of one of the following
  - Bleeding Control & Shock Management
  - Joint Immobilization
  - Long-Bone Immobilization
  - Spinal Immobilization (Seated Patient)

### 3. Cumulative Final Grade

Students must finish EMT programs with a final grade of 77% or greater

### IV. Pre-requisites or Co-Requisites

- 1. NREMT has no age minimum to challenge the certification exam. States will have age limitations on gaining licensure (IL-18)
- 2. Current AHA CPR Healthcare Provider completion card or its equivalent is required before beginning clinical rotations. This course may be offered during the course.

# V. COURSE OBJECTIVES: Are based on Illinois EMS Rules and Regulations and National EMS Education Standards.

- 1. Is able to apply fundamental knowledge of the EMS system, safety/ well-being of the EMT, medical/legal and ethical issues in the provision of emergency care.
- 2. Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS.
- 3. Uses foundational anatomical and medical terms and abbreviations in written and oral communications with colleagues and other health care professionals.
- 4. Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.
- 5. Applies fundamental knowledge of life span development to patient assessment and management.
- 6. Uses simple knowledge of the principles of illness and injury prevention in emergency care.
- 7. Applies fundamental knowledge of the medications that the EMT may assist/administer to a patient during an emergency.

Page 2 of 4

- 8. Applies knowledge (fundamental depth, foundational breadth) of general anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
- 9. Applies scene information and patient assessment findings (scene size-up, primary and secondary assessment, patient history, and reassessment) to guide emergency management.
- 10. Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill or acutely injured patient
- 11. Applies fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, and post resuscitation management.
- 12. Applies a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs.
- 13. Demonstrates knowledge of operational roles and responsibilities to ensure safe patient, public, and personal safety.

### IV. DISMISSAL FROM THE COURSE

- A. Reasons for course dismissal include but are not limited to:
  - 1. Violations of professional behavior expectations and standards.
  - 2. Breach of patient confidentiality.
  - 3. Falsification of any paperwork related to the course.
  - 4. Sexual or other forms of harassment.
  - 5. Destruction of hospital or college property.
  - 6. Excessive absences greater than 2 absences.

### V. APPLICATION PROCESS

- 1. An EMS Education program shall only be conducted by an agency or an institution under the direction of the EMS system with an appropriately credentialed EMS Lead Instructor to facilitate the course.
- 2. The EMS Lead Instructor is responsible for the submission to the EMS system 75 days in advance of the start of the class the following
  - IDPH Training Application
  - Course Syllabus- See EMT Course Application Checklist
  - Course Schedule

Note: The course may only begin after the EMS Lead Instructor receives the IDPH Training Application back with IDPH approved numeric site code.

### VI. COURSE EVALUATION

- A. Instructional, organizational and administrative effectiveness will be measured through student evaluation of the course and pass rates. This information shall be made available to the System and IDPH upon request.
- B. EMT programs will be responsible for developing a student feedback evaluation of the program and this will be made available to QAEMS upon request.
- C. The desired pass rate per program is set by IDPH at 70% for the certification exam.
  - 1. A program that does not meet a 70% success rate from their final roster to the certification exam will be reviewed by QAEMS.
  - 2. QAEMS will review the high stakes exam analysis from the program and may make recommendations to student assessment methodologies for future cohorts.
  - 3. The Lead Instructor for the program will be responsible for creation of an action plan to improve course outcomes that will be reviewed by the EMS System Coordinator prior to the approval of their next cohort.
  - 4. After two concurrent cohorts fall below the desired 70% NREMT success rate, the Lead Instructor for the program will repeat the steps listed in 2 & 3 prior to approval of the next cohort. The next cohort's students will be required to

Page 3 of 4

- complete the QAEMS Cognitive Examination prior to being approved to challenge the NREMT. QAEMS staff must also proctor the cohort's Psychomotor Exam.
- 5. A success rate of less than 70% within two attempts on the QAEMS Cognitive Exam Final will result in the Lead Instructor for the program not being eligible to lead a license-based EMS education program until they successfully complete the NAEMSE Level 1 course which includes forty hours of EMS Lead Instructor based education.

### VII. COURSE RECORD KEEPING

- A. The Lead Instructor for the course will be responsible for submitting the course Starting Roster, 10-Day Roster, and Final Roster to the QAEMS office. These forms will be standardized and will be made available to lead instructors.
- B. Lead instructor for the course shall maintain course and student records for a minimum of seven years. Includes attendance sign in sheets, course curriculum, schedules with dates/hours/instructors, grades, psychomotor exam performance, clinical completion, and course evaluations.
- C. These records shall be made available to QAEMS and IDPH upon request.

Page 4 of 4

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

### PREHOSPITAL RN TRAINING COURSE

- I. Prerequisites:
  - A. Registered Nurse, licensed in Illinois.
  - B. Current AHA ACLS
  - C. Current PHTLS or ITLS
  - D. Current AHA BLS for Healthcare Providers or alternative that covers didactic and psychomotor skills that meets or exceeds AHA guidelines.
- II. Training & Competency Requirements (Per IDPH JCAR Chapter I; Subchapter f; Part 515 section 515.730)
  - A. Minimum forty hours classroom and psychomotor education and measurement of competency equivalent to the entry level Paramedic program; and practical education, including but not limited to, advanced airway techniques, ambulance operations, extrication, telecommunications, and pre-hospital cardiac and trauma care of both the adult and pediatric population.
  - B. Didactic Requirements
    - 1. Roles and Responsibilities
    - 2. EMS Systems
    - 3. Medical/Legal Considerations
    - 4. EMS Communications
    - 5. Basic and advanced airway techniques
    - 6. Ambulance operations
    - 7. Rescue / extrication
    - 8. Cardiac assessment and management
    - 9. Trauma assessment and management
    - 10. Pediatric assessment and management
  - C. Psychomotor Skills
    - 1. Basic competencies requires instructor validation
      - a) Spinal immobilization (Seated)
      - b) Spinal immobilization (supine)
      - c) Joint splinting
      - d) Long bone splinting
      - e) Traction splinting
      - f) Hemorrhage control
      - g) Intranasal medication administration (MAD)
      - h) Inhaled medication administration (nebulizer)
      - i) Glucometer
      - j) 12 Lead ECG placement
    - 2. Advanced competencies requires instructor validation
      - a) Direct orotracheal intubation (adult)
      - b) Direct orotracheal intubation (pediatric)
      - c) Supraglottic airway device (adult)
      - d) Needle cricothyrotomy
      - e) Open cricothyrotomy
      - f) Trauma intubation (adult)
      - g) CPAP / PEEP |

- h) Pleural decompression
- i) Defibrillation
- j) Synchronized cardioversion
- k) Transcutaneous pacing
- 1) Normal delivery with newborn care
- m) Abnormal delivery with newborn care
- n) Neonatal resuscitation

### D. Clinical Requirements

- 1. Surgery / anesthesia 6 intubations; half can be completed using high fidelity simulation
- 2. Completes a minimum of ten ALS runs supervised by a licensed physician, or an approved PHRN or Paramedic, as authorized by the EMS Medical Director.
- 3. Extrication class with an approved rescue squad/Fire Department.
- III. Course Completion Requirements all didactic, psychomotor skills and clinical must be completed within ninety days of course end.
  - A. Final exam score of 70% or greater
  - B. Psychomotor skills validated
- IV. To obtain Illinois license candidate will be signed off for testing after all course requirements have been met. The candidate must successfully pass the State of Illinois paramedic licensure examination as the PHRN cognitive competency examination.
- V. Course records
  - A. Lead instructor for the course shall maintain course and student records for a minimum of seven years. Includes attendance sign in sheets, course schedule with dates, hours and instructors, grades, psychomotor skill performance, clinical completion, and course evaluations.
  - B. These records shall be made available to the system or IDPH upon request.

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

### **EMERGENCY COMMUNICATIONS REGISTERED NURSE COURSE**

### I. PURPOSE

To prepare the emergency centers registered professional nurse to function as an Emergency Communications Registered Nurse (ECRN) in the Quincy Area Emergency Medical Services System. As an ECRN, the nurse will be expected to relay appropriate treatment and medical orders to prehospital personnel via the telemetry (UHF), Merci (VHF) radios, and cell phone utilizing standing medical orders and EMS physician direction.

### II. COURSE OBJECTIVES

- A. To educate and familiarize registered professional nurses with prehospital personnel.
- B. To introduce the nurse to the EMS System policies, procedures, and standing medical orders.
- C. To present nurses with the most current principals in accepted medical practice as related to prehospital care.

### III. EDUCATOR/STAFF RESPONSIBILITIES

- A. ECRN course will be offered by the Resource Hospital and may be offered by the Associate Hospital in coordination with the Resource Hospital.
- B. Each course will be coordinated by an EMS lead instructor. The course may be taught by a registered professional nurse approved by the EMS Medical Director.
- C. The lead instructor shall perform duties which will include but not limited to the following:
  - 1. Schedule the course and accept nurses who meet the pre-requisite requirements.
  - 2. Obtain and confirm qualified faculty.
  - 3. Prepare and have duplicated all written materials for registrants.
  - 4. Facilitate lectures not personally conducted.
  - 5. Tabulate results of faculty and course evaluations and assist in planning program modifications based on student feedback.
- D. The EMS System Coordinator shall perform duties which will include but may not be limited to the following:
  - 1. Ensuring that the ECRN course is conducted in accordance with statewide ECRN rules and regulations.
  - 2. Maintain ECRN records including student transcripts, certification justification, continuing education hours, and recertification data.
  - 3. Disseminate all test results in a timely manner.
- E. Each course shall be approved by the EMS Medical Director and shall work in coordination with the Lead Instructor and EMS Coordinator to verify that all established goals and objectives are achieved by the completion of the course.

### IV. PRE-REQUISITE FOR COURSE

- A. Current licensure as registered nurse in Illinois.
- B. Have completed
  - Emergency Department's Employee Orientation Program, or
  - 2. Minimum of 12 weeks of Nurse Residency Program, or
  - 3. Have written approval from the Emergency Department Director and EMS Medical Director which recognizes past work-related experience and demonstrates readiness to take the ECRN class.
- C. Current CPR Certification
- D. Sponsorship by a hospital participating in the Quincy Area EMSSystem.
- E. Criminal background check and drug testing per Blessing Hospital policy

### V. COMPLETION REQUIREMENTS

- A. Successful completion of the forty (40) hour ECRN Course which includes:
  - 1. Successful completion of twenty-four (24) hour didactic and skills instruction
  - 2. Successful completion of eight (8) hour AHA ACLS class.
  - 3. Successful completion of eight (8) hours radio experience under the direct supervision of ECRN.
  - 4. Completion of eight (8) hours field observation on an ALS unit.
  - 5. Completion of the Quincy Area EMS System written exam with a score of 80% or higher.
  - 6. Successful completion of the practical exam.
  - 7. Start Triage pass with 80%
- B. All requirements must be met within 90 days of schedule course completion.
- C. When all criteria are met, the EMS Medical Director will be contacted and is responsible for ECRN certification authorization.

### VI. RECORD KEEPING

A. Lead instructor for each approved program shall maintain class and student records for seven years and shall be made available to the system or IDPH upon request.

12/97; re: 8/01, 1/02, 9/04, 2/06, 11/07

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

### **EMERGENCY COMMUNICATIONS REGISTERED NURSE COURSE**

### I. PURPOSE

To prepare the Emergency Department registered professional nurse to function as an Emergency Communications Registered Nurse (ECRN) in the Quincy Area Emergency Medical Services System. As an ECRN, the nurse will be expected to relay appropriate treatment and medical orders to prehospital personnel via the Merci (VHF) radios, and cell phone utilizing standing medical orders and EMS physician direction.

### II. COURSE OBJECTIVES

- A. To educate and familiarize registered professional nurses with prehospital personnel and different levels of care provided within the EMS System.
- B. To introduce the nurse to the EMS System policies, procedures, and standing medical orders.
- C. To present nurses with the most current principals in accepted medical practice as related to prehospital care.

### III. EDUCATOR/STAFF RESPONSIBILITIES

- A. ECRN course will be offered by the Resource Hospital and may be offered by the Associate Hospital in coordination with the Resource Hospital.
- B. Each course will be coordinated by an EMS lead instructor. The course may be taught by a registered professional nurse approved by the EMS Medical Director.
- C. The lead instructor shall perform duties which will include but not limited to the following:
  - 1. Schedule the course and accept nurses who meet the pre-requisite requirements.
  - 2. Obtain and confirm qualified faculty.
  - 3. Prepare and have duplicated all written materials for registrants.
  - 4. Facilitate lectures not personally conducted.
  - 5. Tabulate results of faculty and course evaluations and assist in planning program modifications based on student feedback.
- D. The EMS System Coordinator shall perform duties which will include but may notbe limited to the following:
  - 1. Ensuring that the ECRN course is conducted in accordance with statewide ECRN rules and regulations.
  - 2. Maintain ECRN records including student transcripts, certification justification, continuing education hours, and recertification data.
  - 3. Disseminate all test results in a timely manner.
- E. Each course shall be approved by the EMS Medical Director and shall work in coordination with the Lead Instructor and EMS Coordinator to verify that all established goals and objectives are achieved by the completion of the course.

### IV. PRE-REQUISITE FOR COURSE

- A. Current licensure as registered nurse in Illinois.
- B. Have completed
  - 1. Emergency Department's Employee Orientation Program, or
  - 2. Minimum of 12 weeks of Nurse Residency Program, or
  - 3. Have written approval from the Emergency Department Director and EMS Medical Director which recognizes past work-related experience and demonstrates readiness to take the ECRN class.
- C. Current CPR Certification
- D. Sponsorship by a hospital participating in the Quincy Area EMSSystem.
- E. Criminal background check and drug testing per Blessing Hospital policy

### V. COMPLETION REQUIREMENTS

- A. Successful completion of the forty (40) hour ECRN Course which includes:
  - 1. Successful completion of twenty-four (24) hour didactic and skills instruction.
  - 2. Current ACLS certification.
  - 3. Successful completion of eight (8) hours radio experience under the direct supervision of ECRN.
  - 4. Completion of eight (8) hours field observation on an ALS unit.
  - 5. Completion of the Quincy Area EMS System written exam with a score of 80% or higher.
  - 6. Successful completion of the practical exam.
  - 7. Start Triage exam pass with 80%
- B. All requirements must be met within 90 days of schedule course completion.
- C. When all criteria are met, the EMS Medical Director will be contacted and is responsible for ECRN certification authorization.

### VI. RECORD KEEPING

A. Lead instructor for each approved program shall maintain class and student records for seven years and shall be made available to the system or IDPH upon request.

# BLESSING HOSPITAL EMERGENCY COMMUNICATIONS REGISTERED NURSE COURSE

### **COURSE CONTENT**

### 4 Hours MODULE I

- Overview and History of the Emergency Medical Services
- Orientation to the Quincy Area Emergency Medical Services System
- Roles and Responsibilities
- Medical-legal Considerations

### 4 Hours MODULE II

- Early Recognition and Field Management of
  - \* Respiratory Emergencies Skills: Ventilation Techniques and Airway Adjuncts
  - \* Cardiac Emergencies
  - \* Neurological Emergencies

### 4 Hours MODULE III

- Early Recognition and Field Management of:
  - \* Shock
  - \* Other Medical Emergencies
    - Renal Dialysis Patients
    - Environmental
    - Communicable Diseases
    - Geriatrics
    - Pediatrics

### 4 Hours MODULE IV

- Early Recognition and Field Management of the Trauma Patient
  - \* Head and Neck Trauma

Skills: Spinal Immobilization

- \* Body Cavity Trauma
- \* Burns/Soft Tissue Trauma
- \* Musculoskeletal Injuries

Skills: Splinting and Traction Splinting

Use of Pneumatic Counter Pressure Device (PCPD

### 4 Hours MODULE V

- Early Recognition and Field Management of:
  - \* OB/Gyn Emergencies
  - \* Behavioral Emergencies
  - \* Minor and Major Disasters
- Communications/Radio Protocol
- Quality Improvement/Evaluations

### 4 Hours MODULE VI

- Skills Evaluation/Simulated Call Situations
  - \* Cardiac
  - \* Medical
  - \* Trauma
- Written Evaluation

### 8 Hours MODULE VII

 Communications Preceptorship at Blessing Hospital or Illini Community Hospital

### 8 Hours MODULE VIII

• Ambulance Preceptorship with Adams County Ambulance Service or Pike County Ambulance Service

Reviewed 8/01; 11/07

Revised: 9/04, 3/06, 2/10, 10/19

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

### EMERGENCY MEDICAL RESPONDER (EMR) COURSE

- I. PURPOSE: This curriculum is intended to prepare the student to function as a competent Emergency Medical Responder in the prehospital setting until an ambulance or helicopter arrives.
- II. COURSE OVERVIEW:
  - A. The course shall minimally include 52 hours of didactic education and meet all requirements of the National EMS Education Standards.
- III. COURSE COMPLETION REQUIREMENTS: All requirements must be completed within ninety days of the end of the course.
  - A. Cognitive
    - 1. Maintain overall course grade of 70% or greater. Final exam score of 70% or greater. (Exam will be administered by the QAEMS office. Students must pass the exam within three attempts, but only the first exam can affect the overall GPA of the student.)
  - B. Psychomotor: Safely and effectively performs all psychomotor skills within the National EMS Scope of Practice AND Illinois Scope of Practice for EMR
    - 1. Airway
      - a) Basic airway maneuvers including head tilt/ chin life, jaw thrust, FBAO relief manual maneuvers.
      - b) Oropharyngeal airway, nasopharyngeal airway
      - c) Positive pressure ventilation with BVM
      - d) Suction of upper airway
    - 2. Oxygenation
      - a) Nasal cannula
      - b) Non-rebreather mask
    - 3. Assessment
      - a) Vital signs
    - 4. Pharmacologic interventions
      - a) Unit dose auto injectors epinephrine
    - 5. Medical/ cardiac care
      - a) Manual CPR
      - b) AED
      - c) Assisted normal OB delivery
    - 6. Trauma care
      - a) Manual stabilization c-spine
      - b) Stabilization of extremity fractures
      - c) Bleeding control
      - d) Emergency moves
      - e) Eye irrigation
- IV. COURSE DISMISSAL: The EMR student may be dismissed from the course if:
  - A. More than two absences.
  - B. Inability to maintain minimum 70% course average.
  - C. Violations of professional conduct.
  - D. Breach of patient confidentiality.

### V. APPROVAL FOR ILLINOIS EMR LICENSE

- A. Must be at least 18 years of age, completed and passed all components of the education program, passed the final examination and paid the licensure fee or requested the initial licensure fee be waived as per IDPH standards.
- B. Must have a current CPR for Healthcare Providers card that covers didactic and psychomotor skills that meet or exceed American Heart Associate guidelines.

### VI. COURSE RECORD KEEPING

- A. Lead instructor for the course shall maintain course and student records for a minimum of seven years. Includes attendance sign in sheets, course schedule with dates, hours and instructors, grades, psychomotor skill performance, clinical completion, and course evaluations.
- B. These records shall be made available to the system or IDPH upon request.

12/97, Re: 2/06, 11/07, 1/11, 10/2019 (reviewed 8/01)

### **EMS LEAD INSTRUCTOR APPLICATION**

NAME:				
ADDRESS	D.O.B:			
CITY:	STATE:ZIP			
ORGANIZATION:				
HOME PHONE:	WORK PHONE:			
( ) EMT-B ( ) EMT-BD ( ) EMT-I	( ) EMT- P ( ) RN ( ) MD			
RETURN THE APPLICATION WITH DOCUMENTATION OF PRE-REQUISTES TO:				
BLESSING HOSPITAL EMS OFFICE PO 7005 QUINCY, IL 62305-7005				

### **PRE-REQUISITES**

- 1. A current license as an EMT-B, EMT-BD, EMT-I, EMT-P, RN, or PHYSICIAN
- 2. A minimum of four (4) years' experience in pre-hospital emergency care.
- 3. At least two (2) years of documented teaching experience in the classroom setting, BTLS, PHTLS, CPR, PALS, etc.
- 4. Submission of a letter of recommendation from the EMS Medical Director or ambulance service administrator (president, director, or chairman).
- 5. Submission of an informal resume listing pre-hospital experience and teaching experience.

### **COMPLETION REQUIREMENTS**

- 1. Attendance at all classes (100%).
- 2. Satisfactorily present three mini lectures.
- 3. Pass the state written examination with an 80%.
- 4. Receive a certificate of completion from the EMS Medical Director

# QUINCY AREA EMS SYSTEM CRITICAL CARE TRANSPORT EXPANDED SCOPE

## 4/2023

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

Scott Hough, MD EMS Medical Director Christopher R Solaro, MD, PHD Associate Medical Director

# QUINCY AREA EMS SYSTEM CRITICAL CARE TRANSPORT – EXPANDED SCOPE

Purpose and Definitions	CCT-1
Staffing, Licensure, Experience, Certifications	CCT-2
Education	CCT-3
Right to Deny Transport	
Quality Assurance Plan	CCT-5
Vehicle Standards / Required Equipment and Supplies	CCT-6
Transport of a Patient with A Chest Tube	
Interfacility Ventilator Use	
Medications Approved for Interfacility Transport	ССТ-9
Transfer of Patients Receiving IV Levophed	CCT-10
Transfer of Patients Who Require Sedation for Post Intubation Management/	Mechanical VentilationCCT-11
Transfer of Patients with Arterial Lines	CCT-12
Drug Box Restock Form	CCT-13

### **QUINCY AREA EMS SYSTEM**

### CRITICAL CARE TRANSPORT – EXPANDED SCOPE

### **PURPOSE & DEFINITIONS**

- I. Purpose: Critical Care Transport provides a level of care for patients aged 16 and above that includes skills and procedures during inter-facility transport that goes beyond the normal paramedic scope of practice. Tier I Critical Care Transport includes the use of infusion pumps for maintenance of specified medication infusions, use of transport ventilators and monitoring of chest tubes/ chest tube drainage systems during interfacility transport.
- II. Definitions (As defined by section 515.860 of the 77 Illinois Administrative Code 515)
  - A. <u>Critical Care Transport</u>: The pre-hospital or inter-hospital transportation of a critically injured or ill patient by a vehicle service provider, including the provision of medically necessary supplies and services, at a level of service beyond the scope of the Paramedic when medically indicated for a patient, as determined by a physician licensed to practice medicine in all of its branches, an advanced practice nurse, or a physician's assistant, in compliance with Section 3.155(b) and (c) of the EMS Act, critical care transport may be provided by:
    - 1. Illinois Department of Public Health approved critical care transport providers, not owned or operated by a hospital, utilizing Paramedics with additional training, nurses, or other qualified health professionals, Or
    - 2. Hospitals, when utilizing any vehicle service provider or any hospital-owned or operated vehicle service provider. Nothing in the Act requires a hospital to use, or to be, an Illinois Department of Public Health approved critical care transport provider when transporting patients, including those critically injured or ill. Nothing in the EMS Act shall restrict or prohibit a hospital from providing, or arranging for, the medically appropriate transport of any patient, as determined by a physician licensed to practice medicine in all of its branches, an advanced practice nurse, or a physician's assistant. (Section 3.10(f-5) of the Act)
    - 3. All critical care transport providers must function within a department-approved EMS System. Nothing in this Part shall restrict a hospital's ability to furnish personnel, equipment, and medical supplies to any vehicle service provider, including a critical care transport provider. (Section 3.10(g-5) of the Act)
  - B. <u>Expanded scope of practice</u> includes the accepted national paramedic curriculum plus additional training, education, experience, and equipment as approved by the Illinois Department of Public Health pursuant to Section 3.55 of the Act. Critical Care Transport Tier 1 is considered "expanded scope of practice."

3/2018; 12/2021; 4/2023

### **QUINCY AREA EMS SYSTEM**

### **CRITICAL CARE TRANSPORT – EXPANDED SCOPE**

### **QUALIFICATIONS**

- I. Vehicle staffing: requires a minimum of two staff per inter-facility transport vehicle.
  - A. One Illinois licensed Paramedic expanded scope of practice credentialed individual or PHRN, who shall always remain with the patient. Must have a minimum of one year of experience functioning in the field at the ALS level.

AND;

- B. One Illinois licensed EMT, Paramedic, or PHRN to function as driver.
- II. Certifications: staff must maintain the following certifications in active status.
  - A. Paramedic/PHRN
    - 1. AHA healthcare provider BLS or equivalent
    - 2. AHA Advanced Cardiac Life Support (ACLS)
    - 3. AHA Pediatric Advanced Life Support (PALS) or Pediatric Education for Prehospital Providers (PEPP)
    - 4. Pre-Hospital Trauma Life Support (PHTLS) or International Trauma Life Support (ITLS)

CCT-3

### **QUINCY AREA EMS SYSTEM**

### CRITICAL CARE TRANSPORT - EXPANDED SCOPE

### **EDUCATION**

- PURPOSE: All staff who will be providing expanded scope care to patients must satisfactorily complete an approved initial training program before being added to the CCT roster. Staff must also complete an approved continuing education program annually to remain on the CCT roster.
- II. INITIAL EDUCATION / TRAINING: required for all staff providing expanded scope care to patients.
  - A. The education plan can be agency or system-developed and must be approved by the EMS System Coordinator and EMS Medical Director prior to implementation and on an annual basis. (Utilize IDPH training application form)
  - B. The education must include cognitive and psychomotor objectives as well as how competency validation will occur for the procedures, equipment and medications. At a minimum it must include:
    - 1. Airway management
    - 2. Transport ventilator
    - 3. IV pumps
    - 4. Chest tubes and chest tube drainage systems
    - Maintenance of specified medication infusions.
  - C. A roster and copies of competency validation are to be submitted to Blessing EMS department within ten days of education completion.
  - D. The EMS System Coordinator will notify the CCT agency of staff approval to function in the expanded scope role after the roster and competencies have been reviewed.
- III. CONTINUING EDUCATION REQUIREMENTS: required of all approved expanded scope providers on an annual basis.
  - A. The education plan can be agency or system-developed and must be approved by the EMS System Coordinator and EMS Medical Director prior to implementation and on an annual basis. (Utilize IDPH training application form)
  - B. The education must include cognitive and psychomotor objectives as well as how competency validation will occur for the procedures, equipment and medications. At a minimum it must include:
    - 1. Airway management
    - 2. Transport ventilator
    - 3. IV pumps
    - 4. Chest tubes and chest tube drainage systems
    - 5. Maintenance of specified medication infusions

- C. A roster and copies of competency validation are to be submitted to Blessing EMS department within ten days of education completion.
- D. The EMS System Coordinator will notify the CCT agency of ongoing staff approval to function in the expanded scope role after the roster and competencies have been reviewed.
- E. CCT staff who do not successfully complete annual continuing education and competency validations will be removed from the CCT roster.
- IV. Note that crew members must also maintain all relicensing requirements as required by the Quincy Area EMS system and State of Illinois.
- V. Educators responsible for teaching the core elements of the CCT course, including use of a ventilator, IV pump, and chest tube, must be System approved professionals with substantial and recent experience using the equipment they will teach about.
- VI. System members who wish to function as a CCT at multiple QAEMS member agencies must, in addition to completing a system-approved CCT program, successfully pass skills validation on the CCT specific equipment at each respective agency. Each respective agency must then provide documentation of the skill validation to QAEMS for verification.

### **QUINCY AREA EMS SYSTEM**

### **CRITICAL CARE TRANSPORT – EXPANDED SCOPE**

### **RIGHT TO DENY TRANSPORT**

- I. A system-approved Critical Care Transport agency has the right to deny transport under the following conditions:
  - A If providing the critical care transport will impede the ability for the agency to provide emergency ALS response within their response area due to staffing or available equipment.
  - B. If transfers are already pending that take precedence over a transfer request. (Agency is limited in the available transfer units/staff/equipment)
  - C. If it is deemed that the patient is not stable for ground transport after assessment of the patient and consult with Medical Control.
  - D. If the safety of the crew and patient is at significant risk, i.e. weather, road conditions, violent patient.

CCT 5

### **QUINCY AREA EMS SYSTEM**

### **CRITICAL CARE TRANSPORT – EXPANDED SCOPE**

### **QUALITY ASSURANCE**

I. PURPOSE: All agencies within the QAEMS System who have been approved for Critical Care Transport will develop and maintain a written Quality Assurance (QA) plan overseen and approved by the EMS Medical Director and monitored by the EMS System Coordinator.

### II. QA Plan Elements

- A. The agency shall provide quarterly QA reports to Blessing EMS Department for the first twelve months of operation.
- B. The EMS Medical Director shall establish the frequency of quality reports after the first year if the System has not identified any deficiencies or adverse outcomes.
- C. The QA Program will allow Blessing EMS Department access to Patient Care Report forms for the purpose of QA.
- D. The QA Plan shall evaluate all expanded scope activity for medical appropriateness and thoroughness of documentation. The review shall include:
  - 1. Review of transferring physician orders and evidence of compliance with those orders.
  - Documentation of vital signs and frequency and evidence that abnormal vital signs or trends suggesting an unstable patient were appropriately detected and managed.
  - 3. Documentation of any side effects / complications, including hypotension, extreme bradycardia or tachycardia, increasing chest pain, arrhythmias, altered mental status and/or changes in neurological examination, and evidence that interventions were appropriate for those events.
  - 4. Documentation of any unanticipated discontinuation of an IV catheter or rate adjustments of infusions along with rationale and outcome.
  - 5. Review of Medical Control contact for further direction.
  - 6. Documentation that any unusual occurrences were promptly communicated after the inter-facility transfer to Blessing EMS Department via Event Report.
  - 7. An analysis of any event or care inconsistent with standards.
- E. The EMS System Coordinator and EMS Medical Director will assess QA reports and help determine corrective actions.

### **QUINCY AREA EMS SYSTEM**

### **CRITICAL CARE TRANSPORT – EXPANDED SCOPE**

### **VEHICLE STANDARDS AND MEDICAL EQUIPMENT**

- PURPOSE: Any vehicle utilized for Critical Care Transport must be Illinois licensed in compliance with Section 515.830 Ambulance Licensing Requirements of the 77 Illinois Administrative Code 515.
- II. REQUIRED EQUIPMENT
  - A. All equipment found in QAEMS policy E3 Ambulance Supplies-ALS, and
  - B. Transport ventilator
  - C. IV pumps (or signed agreement with transporting facilities to utilize their IV pumps)
  - D. Required medications found in QAEMS policy CCT 13 CCT Drug Box Supply List
  - E. Any vehicle used for expanded scope of practice transport shall be equipped with an onboard alternating current (AC) supply capable of operating and maintaining the AC current needs of the required medical devices used in providing care during the transport of a patient.

Note: The addition of any equipment not listed in QAEMS policy E3 Ambulance Supplies-ALS or in this policy requires the written approval of the EMS Medical Director.

CCT 7

### **QUINCY AREA EMS SYSTEM**

### CRITICAL CARE TRANSPORT - EXPANDED SCOPE

### TRANSPORT OF PATIENT WITH A CHEST TUBE

- I. Indications:
  - A. Interfacility critical care transport of a patient aged 16 or older with a chest tube.
  - B. Chest tube must be in place greater than 24 hours prior to transport.
  - C. Patient transfer must be from a licensed facility to another licensed facility.
- II. Contraindications to transporting:
  - A. Under the age of 16
  - B. Heimlich valve in place
- III. Procedure:
  - A. Assessment related to the chest tube.
    - 1. Confirm that the chest tube is firmly anchored at the insertion site, all connections are free of kinks, tubing connections are secured and dressing at the chest tube insertion site is dry.
    - 2. Assess lung sounds to confirm presence bilaterally and assess overall breathing status.
    - 3. Assess the amount, color, and consistency of the fluid in the collection chamber. Mark the level initially and monitor during transport.
    - 4. Reassess all connections and tubing with each patient move to ensure there are no kinks or loops in the tubing and that it remains secured.
  - B. Chest tube drainage system
    - 1. The closed drainage system should always remain upright and below the level of the chest tube insertion site.
    - 2. Ensure the tubing from the chest tube is connected to the device.
    - 3. If the transfer order indicates a need for suction, connect tubing from the wall suction to the suction port on the system and set suction per transfer orders.
    - 4. Gentle fluctuation of the water level in the water seal chamber corresponding to the patient's respirations is normal and indicates that the unit is functioning properly.
    - 5. Continuous or intermittent bubbling in the water seal chamber may indicate a leak in the system. Check for any possible external leaks and ensure all connections are secure.
    - 6. Do not milk, strip, or clamp the tubing.

- 1. Tube becomes disconnected from the drainage system
  - a) Immediately reconnect the tube
  - b) Monitor patient for any respiratory distress
- 2. Dislodged chest tube
  - a) Cover the insertion site with a sterile occlusive dressing.
  - b) Monitor closely for signs and symptoms of tension pneumothorax.
  - c) If tension pneumothorax develops, release one side of the occlusive dressing. If unsuccessful, consider needle decompression.
  - d) Notify Medical Control with plan to divert to the closest hospital if needed.
- D. Documentation should include patient assessment, the amount, color, and consistency of drainage during the transfer and any complications.
- IV. QA/QI: All instances of transport of a patient with a chest tube shall be entered into the QA process.

CCT 8

### **QUINCY AREA EMS SYSTEM**

### CRITICAL CARE TRANSPORT - EXPANDED SCOPE

### TRANSPORT VENTILATOR USE

### I. Indication:

- A. Advanced airway in place greater than 24 hours prior to EMS transport via endotracheal intubation or established tracheostomy.
- B. Mechanical ventilation of the intubated patient during critical care interfacility transfer.
- C. Patient must be aged 16 years or older.

### II. Precautions:

- A. Positive End Expiratory Pressure (PEEP) of greater than 5 cmH2O may decrease blood pressure.
- B. Positive Pressure Ventilation may exacerbate pneumothorax.
- III. General ventilator settings and information:
  - A. Ventilator setting guidelines (follow transfer orders)
    - 1. Tidal Volume (TV) should be at 6-8ml/kg (ideal body weight) up to a maximum of 800ml. Utilize an adult circuit for (TV) greater than 350ml. Utilize a pediatric circuit for (TV) less than 350ml.
    - 2. Ventilatory Rate (VR) should be initiated at a rate of 10-16 breaths per minute and titrated to ETCO2 and pulse oximetry levels. Selection varies on ventilators to accommodate a wide range of patient ages and conditions.
    - 3. FiO2 (percentage of oxygen delivered) 21-100%
    - 4. Positive End Expiratory Pressure (PEEP) should be initiated at 5cmH2O (Physiological PEEP). Initial setting of PEEP may be increased in cases of ARDS, pulmonary edema, submersion injuries, or other obstructive conditions.
    - 5. Select Mode: dependent upon available ventilator settings

### IV. End-tidal CO2 levels:

- A. ETCO2 levels should be maintained at 35-45mmHg for the general medical or trauma patient.
- B. ETCO2 levels should be maintained at 35-40mmHg for the head injured patient
- C. ETCO2 less than 35 mmHg = hyperventilation / hypocapnia
- D. ETCO2 greater than 45 mmHg = hypoventilation / hypercapnia
- E. Maintain waveform capnography throughout transport

### V. Procedure:

- A. Patient assessment should include a consult with the RN caring for the patient, vital signs, cardiac monitor, pulse oximetry, lung sounds, and determination of whether the patient has any spontaneous respiratory effort or is 100% vent dependent.
- B. Assess the endotracheal tube or tracheal tube to assure they are properly secured.
- C. Acquire the patient's current ventilator settings from the RN or Respiratory Therapist caring for the patient. Try to match these settings to the transport ventilator (**do this before patient is switched to transport ventilator**). If unable to match the settings and there is a significant discrepancy, contact the sending physician for assistance.
- D. Ensure adequate analgesia and sedation. Continued analgesia and sedation methods during transport must be within the paramedic scope of practice.
- E. Evaluate venous access sites to ensure patency prior to transfer.
- F. Have a bag-valve mask device and suction readily available.
- G. Switch patient over to the transport ventilator and end tidal CO2 monitor and observe for any distress. It may take a few minutes for the patient to become accustomed to the new ventilator. If necessary, ventilate with a bag-valve mask device for several minutes.
- H. Closely monitor pulse ox, capnography, signs of labored respirations, and chest rise for any signs of hypoxia/distress. Remove patient from ventilator and assist respirations with the bag-valve mask device if there are ANY concerns or problems with ventilation after patient was switched to transport ventilator.
- I. Once patient has been switched to the transport ventilator and is tolerating this well, then move patient over to the EMS stretcher for transport.
- J. The patient shall remain on continuous waveform capnography for the entirety of the transport.
- K. If alarm on ventilator sounds, immediately check patient. Possible reasons for alarm:
  - 1. Low Battery/power source:
    - a) sounds when electrical supply to the ventilator is inadequate or the gas inlet pressure is low. It is corrected by restoring the proper power supply.
  - 2. Low-pressure alarm:
    - a) Leak or disconnection (reconnect or tighten connections)
    - b) Cuffed tube may be leaking.
    - c) Check O2 supply
  - 3. High-pressure alarm:
    - a) Ventilator uses too much pressure to deliver the tidal volume
    - b) Bronchospasm
    - c) Secretions in airway that increased the resistance/pressure in airway (suction airway)
    - d) Kinks in ET tube (unkink tube)
    - e) Biting on ET tube

- f) Coughing
- g) Gagging
- h) Breathing asynchronously or bucking the vent
- i) Alveolar over-distention
- j) Improper ventilator settings (High or low tidal volumes, excessive rate causing stacking and auto PEEP) (Consult medical control for change)
- k) Water in the ventilator tubing (disconnect the tubing, empty water, reconnect tubing)
- I) Pneumothorax (notify destination hospital)
- m) Patient anxiety (see sedation protocol or contact medical control)
- 4. If unable to identify the cause of the ventilator alarm and/or patient's condition deteriorates, disconnect from ventilator, and assist respirations via the bag-valve mask device.
- L. During transport vital signs should be repeated every 5-15 minutes with reassessment of vent settings, capnography, pulse ox, as well as assessing patient for lung sounds, chest rise and fall, condensation in the tube, etc.
- M. Document vent settings used, vital signs, pulse ox, any changes in the patient's condition during transport.
- N. Contact medical control during any of the above steps for assistance as needed.
- VI. QA/QI: All instances where a mechanical ventilator is used shall be entered into the QA process.

### **QUINCY AREA EMS SYSTEM**

### **CRITICAL CARE TRANSPORT – EXPANDED SCOPE**

### MEDICATIONS APPROVED FOR INTERFACILITY TRANSPORT

- I. PURPOSE: Identifies medications that have been approved only for interfacility ALS or CCT transport.
  - A. This includes all medications in the QAEMS policy Additional Approved Medications/Equipment A-1. For specific information regarding each of these medications refer to the Additional protocol section.
    - i. Amiodarone maintenance infusion
    - ii. Diltiazem maintenance infusion
    - iii. Glycoprotein IIb/IIIa Receptor Inhibitor (Aggrastat, Integrilin, Reopro) maintenance infusion
    - iv. Heparin maintenance infusion
    - v. IV crystalloid solutions, may contain up to 20 mEq potassium
    - vi. Nitroglycerin infusion
  - B. The following medication infusions are approved for interfacility transport by approved CCT tier 1 trained staff.
    - i. Norepinephrine (Levophed) infusion

Note: All approved maintenance infusions must be monitored closely on an IV pump.

### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

#### TRANSFER OF PATIENTS RECEIVING IV LEVOPHED (NOREPINEPHRINE)

#### I. Scope

A. ONLY paramedics and prehospital RN's who have completed CCT training and are working for a CCT-approved agency may transfer a patient with an infusion of Levophed (Levophed must have been initiated at the transferring facility).

#### II. Drug Action/Indications.

- A. Drug Action: Norepinephrine is a peripheral vasoconstrictor (alpha-adrenergic action) and an inotropic stimulator of the heart and dilator of coronary arteries (beta-adrenergic action) which increases cardiac output and heart rate, decreases renal perfusion, and causes an increase in blood pressure.
- B. Indication: Norepinephrine (Levophed) is used to treat life-threatening low blood pressure. It is favored as the first-line vasopressor for septic shock.

#### III. Side effects

- A. Bradycardia
- B. Hypertension
- C. Arrhythmias
- D. Extravasation-may cause tissue necrosis.

#### IV. Procedure:

- A. Obtain patient report from the RN caring for the patient at the transferring facility with special attention to the following:
  - 1. Patient condition including recent vital signs.
  - 2. All drugs currently being infused must know rate and dose of infusion for each.
  - 3. Transfer orders the order should specifically indicate the continuous infusion rate.
  - 4. Inspect the IV site; it is very important that the IV line is patent and there is no leaking into adjacent tissue. Levophed causes necrosis to tissue if infiltration
  - 5. Using the infusion rate and the length of the trip, calculate how much Levophed you will need to maintain the drip for the entire transfer. The sending facility must send an adequate amount.
  - 6. No bolus or titration of the drip is allowed without medical control consult.
- B. The Levophed infusion must be maintained on an IV pump at all times during transport.
- C. Check the infusion frequently to ensure that it is infusing at the correct rate.
- D. Check the IV site frequently to make sure there are no signs of infiltration.
- E. If the patient experiences sudden severe hypertension, bradycardia, arrhythmias, infiltration or allergic reaction, discontinue the Levophed infusion and contact medical control or the receiving facility.

### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

# TRANSFER OF PATIENTS WHO REQUIRE SEDATION POST INTUBATION / MECHANICAL VENTILATION

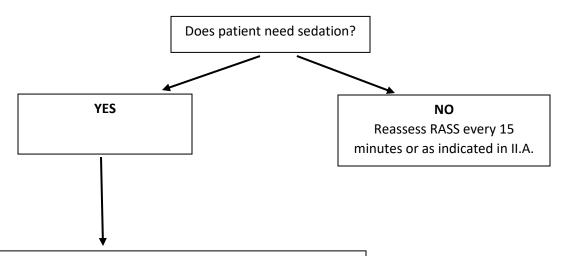
- I. SCOPE: Paramedics and Prehospital RNs who have completed CCT training and are working for a CCT-approved agency on an interfacility transfer.
- II. GENERAL INFORMATION: The goal is to monitor and safely provide adequate sedation for the patient who has been intubated and is mechanically ventilated by treating pain and anxiety.
  - A. Before treating for pain or sedation:
    - 1. Confirm endotracheal tube placement.
    - 2. Initiate and continue to monitor ETCO2, SpO2, and NIBP values.
    - 3. Establish and maintain patent venous access.
    - 4. Determine and document target level of sedation.
    - 5. Assess and document RASS before and after each medication is given, with any change in patient condition and / or every 15 minutes.
- III. THE RICHMOND AGITATION SEDATION SCALE (RASS): can be used for any sedated patient but is most often used in mechanically ventilated patients in order to avoid over and under sedation. The Goal of the RASS on an intubated patient is -3 to -4.

RICHMOND AGITATION SEDATION SCALE (RASS)		
SCORE	TERM	DESCRIPTION
+4	Combative	Overly combative, violent, immediate danger to staff
+3	Very agitated	Pulls on or removes tubes, catheters, is aggressive
+2	Agitated	Frequent non-purposeful movement, fights ventilator
+1	Restless	Anxious, movements not aggressive
0	Alert and calm	
-1	Drowsy	Not fully alert, sustains more than 10 seconds awake with eye opening to verbal command
-2	Light sedation	Awakens briefly (less than 10 seconds) with eye contact to verbal command
-3	Moderate sedation	Movement, eye opening but no eye contact in response to verbal command
-4	Deep sedation	No response to voice, but any movement to physical stimulation
-5	Unarousable sedation	No response to voice or physical stimulation

#### **OBSERVE PATIENT**

- 1. Alert, restless, agitated (0 to +4)
- 2. Not alert state patient's name, ask patient to "open your eyes and look at me"
- a. Patient awakes w/ eyes open & makes eye contact (-1)
- b. Patient awakens with eyes open but contact not sustained (-2)
- c. Patient has movement in response to voice but does not make eye contact (-3)
- 3. No response to verbal. Physically stimulated patient
  - a. Patient has movement (-4)
  - b. Patient has no response (-5)

#### IV. **PROCEDURE**



#### **POST INTUBATION MANAGEMENT MEDICATIONS**

\*Assess and chart RASS before every medication and at least every 15 mins thereafter.

Ketamine: (Adult) 1 mg/kg IV/IO May repeat every 15 minutes as needed. (Ketamine could be a good choice for patients with soft blood pressures)

THEN (if needed to obtain desired RASS)

<u>Fentanyl</u>: (adult) 1 mcg/kg IV/IO. May repeat every 15 minutes as needed to maximum single dose 100 mcg.

OR IF PATIENT IS HEMODYNAMICALLY STABLE, MAY USE:

Fentanyl: (adult) 1 mcg/kg IV/IO. May repeat every 15 minutes as needed to maximum single dose 100 mcg. OR

Morphine: (adult) 0.1 mg/kg IV/IO. Max single dose 10 mg. May

repeat every 15 minutes as needed.

THEN (if needed to obtain desired RASS)

Midazolam: (adult) 0.05 mg/kg IV/IO. Max single dose 5 mg. May repeat every 15 minutes as needed.

### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

#### TRANSFER OF PATIENTS WITH ARTERIAL LINES

- I. Indication
  - A. Interfacility critical care transport of a patient with an established arterial line.
- II. Prior to moving a patient to the ambulance stretcher, the following must be completed:
  - A. The paramedic will check and verify that all connections are tight.
  - B. The paramedic will assess circulation in the extremity and document the color, pulse intensity, capillary refill, and sensation.
  - C. The paramedic will inspect the puncture site, noting any swelling or bruising.
  - D. The paramedic will examine the pressure bag to assure it is working properly.
- III. During the transfer, the paramedic will:
  - A. Check all connections every 30 minutes and document the findings
  - B. Check circulation in the extremity as in II.B. every 30 minutes and document the findings
  - C. Check the puncture site every 30 minutes and document.
  - D. Maintain 300 mmHg of pressure at all times in the pressure bag for adults. (For pediatrics, request pressure limit from RN or physician.)
- IV. If blood backs up into the line:
  - A. Check the position of all stopcocks.
  - B. Check all connections.
  - C. Check the bag pressure to assure 300 mmHg of pressure (adults).
  - D. Flush the catheter by pulling firmly on the red art line tail (see photo next page) until the line is cleared.
  - E. Do not allow the valve to remain open causing the patient to receive too much fluid.
  - F. Do not flush with a syringe.
  - G. Do not allow blood to back up to transducer dome. If it does, notify the receiving hospital upon arrival.
- V. Should an assessment reveal a loss or weakening of pulse distal to the site or a loss of warmth, sensation or mobility below the site, notify the receiving hospital immediately.
- VI. Apply direct pressure to the site should the catheter become dislodged or if you note a hematoma forming.
- VII. Should an air embolism be suspected due to an empty IV container, air in the tubing or loose connections as evidenced by a decrease in blood pressure, weakness, rapid pulse, or cyanosis of the affected extremity:
  - A. Check the line for leaks.
  - B. Notify the receiving hospital or medical control immediately.
  - C. Check vital signs.
  - D. Administer O2 as ordered.
  - E. Provide care as ordered.

#### TRANSFER OF PATIENTS WITH ARTERIAL LINES (CONTINUED)

- VIII. If air bubbles appear in the line:
  - A. Check for leaks and loose connections in the line
  - B. Flush air through an open stopcock
- IX. Notify the receiving hospital of any complications encountered during transport



To flush an arterial line if blood backs up in the line, pull firmly on the red arterial line tail and release. May need to repeat.

# QUINCY AREA EMS SYSTEM CRITICAL CARE TIER 1 DRUG RESTOCK FORM

Date:	EN	/IS CCT1 Box #		
Agency:				
Patient Name: Date of Birth:				
Patient Addres	ss:			
Paramedic Na	Paramedic Name (PRINT): Paramedic Signature:			
Restock -	- medications used on patient - medications expired - medications damaged ( <b>Even</b>	t Report Required) Comments:		
Restock – discrepancy in box (Event Report Required) Comments:				
Quantity Needed	Box 2	Medications BOX KETAMINE 500 MG/10ML FENTANYL 100mcg/2ml MIDAZOLAM 10MG / 2 ML		
Pharmacy Tech (Print):		Pharmacy Tech Signature:		
Pharmacist Name (Print):		Pharmacist Signature:		

# QUINCY AREA EMS SYSTEM EQUIPMENT PROTOCOLS

Revised 2/2025

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

# QUINCY AREA EMS SYSTEM EQUIPMENT PROTOCOLS

Current Equipment Listings	. E-1
BLS Ambulance Inspection Form	. E-2
ALS Ambulance Supplies	. E-3
Non-transport Agency BLS Equipment	. E-4
Emergency Medical Responder Equipment List	. E-5
Alternate Response Vehicle ALS Supplies	. E-6
Reserve Ambulance	. E-7

### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

#### **CURRENT EQUIPMENT LISTINGS**

Advanced life support transport vehicles will carry all equipment that basic life support personnel currently carry with addition of the approved drug list, approved advanced airway management equipment, defibrillation equipment, and telemetry transmission equipment as approved by the Illinois Department of Public Health Office of Preparedness and Response. (Refer to Policy E-2 and E-3.)

- I. Basic life support transport vehicles will carry equipment according to the listing approved by the Quincy Area Emergency Medical Services System and the Illinois Department of Public Health Office of Preparedness and Response. (Refer to Policy E-2.)
- II. Non-transport vehicles (BLS) will carry equipment as listed and approved by the Illinois Department of Public Health Office of Preparedness and Response and by the Quincy Area Emergency Medical Services System. (Refer to Policy E-4.)
- III. Non-transport (ALS) will carry equipment as listed and approved by the Illinois Department of Public Health Office of Preparedness and Response and by the Quincy Area Emergency Medical Services System. (Refer to Policy E2 and E-3.)
- IV. ALS Alternate Response Vehicles (non-transport) will carry equipment as listed and approved by the Illinois Department of Public Health Office of Preparedness and Response and by the Quincy Area Emergency Medical Services System. (Refer to Policy E-6 ARV.)
- V. BLS alternative response vehicle (non-transport) will carry equipment as listed and approved by Illinois Department of Public Health and QAEMS (refer to Policy E-4)
- VI. First Responders will have equipment immediately available to them as listed and approved by Illinois Department of Public Health and QAEMS System. (Refer to Policy E-5.)
- VII. Reserve ambulance will meet same requirements as all other ambulance with the exception of medical supplies and durable medical equipment.
- VIII. EMS agencies shall make every effort to protect EMS vehicle contents (supplies, equipment, and medications) from climate extremes.
  - NOTE: The U.S. Pharmacopeial convention issues standards for the safe storage of human medications and the range of  $50^{\circ}$  to  $86^{\circ}$  is established as the parameter for EMS medication storage.

# QUINCY AREA EMS SYSTEM AMBULANCE SUPPLIES BLS

<u>Patien</u>	t Transport Equipment
	Wheeled multi-level cot with 3 sets of straps+ over shoulder straps 3-Point fastener for cot (no tears/rips in pad) Cot fits securely in fastener Secondary stretcher with 3 sets of straps (long spine board)
Main	On-Board oxygen Equipment
	(Main (on-board) oxygen cylinder not empty Adult size non-rebreather oxygen mask (minimum 2) and total of 4. Child size oxygen mask (minimum 1) and total of 2. Infant size oxygen mask (minimum 1) and total of 2. Adult size nasal cannulas (minimum 3) and total of 4. Child size nasal cannulas (minimum 3) and total of 4
<u>Portal</u>	ble Oxygen Equipment
	Portable oxygen cylinder: (minimum size 'D'), not empty Dial flow meter/regulator for 15 lpm Full spare portable oxygen cylinder (minimum size 'D') Quick-release, crash-stable mounting racket for portable oxygen cylinders Adult size non-rebreather oxygen mask (minimum 2) Child size oxygen mask (minimum 1) Infant size oxygen mask (minimum 1) Adult size nasal cannulas (minimum 2) Child size nasal cannulas (minimum 1)
Suction	on and Airway Equipment
	Onboard suction capable of obtaining 300 mmHg suction within 4 seconds of clamping tube Vacuum level can be adjusted Collection bottle holds 1000 ml Two packages suction tubing capable of reaching second patient being transported on squad bench Portable battery operated suction capable of obtaining 300 mmHg suction within 4 seconds of clamping tubing
	Capable of charging from vehicle 12-volt DC/115-volt AC OR
	Operated from internal rechargeable batteryOperates for 20 continuous minutes (perform if battery sounds weak) OR
	Manually operated suction device (IDPH approved)

Suct	ion and Airway Equipment (Continued)
	Sterile, single-use suction catheters, two each size: 6, 8, 10, 12, 14, 16, 18-french with thumb suction control port (one set with on-board suction; one set with portable suction)  Semi-rigid pharyngeal suction tips, with thumb suction control port, three (3)  Airway, oropharyngeal – adult, child and infant sizes 00-5  Airway, nasopharyngeal, sizes 12-34 French  Lubricant for nasopharyngeal airways  i-Gel Supraglottic Airways sizes 1; 1.5; 2; 2.5; 3; 4; 5.
Resu	scitation Equipment
	Adult size squeeze bag-valve-mask ventilation unit with transparent adult mask (minimum one) Child size squeeze bag-valve-mask ventilation unit with child, infant and newborn ( <i>neonate</i> ) transparent masks (minimum one) CPR mask with safety valve to prevent backflow of expired air and secretions (minimum one) Automated External Defibrillator (AED) with Adult and Pediatric Capability - Adult AED Pads - Pediatric AED Pads
<u>Extr</u>	rication/Immobilization/Splinting Equipment)
	Long spine board (72"X16" minimum) with 3 sets of torso straps  Short spine board (32"X16" minimum) with two (9 foot) torso straps, one child strap and one head strap  OR  Vest type wrap around extrication device (KED, ZED)  Infant size rigid cervical collar (minimum one)  Child size rigid cervical collar (minimum one)  Small adult size rigid cervical collar (minimum one)  Medium adult size rigid cervical collar (minimum one)  Large adult size rigid cervical collar (minimum one)  OR  Rigid cervical collar adjustable to adult sizes (minimum one)  Rigid cervical collar adjustable to pediatric sizes (minimum one)  Traction splint, adult  Traction splint, pediatric  Extremity splints, adult, 2 long  Extremity splints, adult, 2 short  Extremity splints, pediatric, 2 long  Extremity splints, pediatric, 2 short  Commercial pelvic binder (optional)  Restraints, 2 pair (arm and leg) for 4-point restraint  Wrecking bar (24" minimum)  Goggles
Asse	essment Equipment
	Pulse oximeter with adult and pediatric capability/probes Blood pressure cuff, large adult Blood pressure cuff, adult Blood pressure cuff, child

	Blood pressure cuff, infant	
		E-2.3
Assess	Gauge(s) for blood pressure cuffs appropriately calibrated Stethoscopes, two (2) Flashlight, for patient assessment, minimum one (1) Adequate lighting to allow patient assessment	E-2.3
	Electric clock with sweep second hand	
<u>Medic</u>	<u>cal Supplies</u>	
	Trauma dressings (12"X30"), Six (6) Gauze pads (4"X4"), sterile, Twenty (20) Gauze, soft, self-adjusting (4"X5 yards), ten (10) rolls Vaseline gauze (3"X8"), Two (2) Adhesive tape, two (2) rolls Triangle bandages or slings, five (5) Bandage shears (minimum 1) Burn sheets (clean, individually wrapped), Two (2) Cold packs (3) Obstetrical kit, sterile (minimum 1) pre-packaged with instruments and bulb syringe) Thermal absorbent blanket and head cover OR aluminum foil OR appropriate heat reflective materi (one per OB kit. OB kit contents must be sterile Sterile solution (normal saline) in plastic bottles or bags, 2000cc Drinking water, 1 quart (may substitute 1000cc sterile water) Epinephrine, adult (Auto-injector or medication/syringe/needle for IM injection) Epinephrine, pediatric (Auto-injector or medication/syringe/needle for IM injection) Pediatric equipment/drug dosage sizing tape, current Broselow tape	ial
them.	OR  Pediatric equipment/drug age/weight chart  Pediatric trauma score reference  Emesis basin or bag (minimum 1)  Bedpan (One)  Urinal (One)  Child and infant car seats OR convertible car seat (Note: standard car seats now have expiration date Consider a product similar to "Pedimate"  Hot Pack (2)  CAT Tourniquet (1)	tes on
<u>Person</u>	nal Protective Equipment (PPE)	
	Impermeable biohazard-labeled isolation bag, minimum 1 Nonporous disposable gloves Face masks, minimum 1 per crew member Eye protection (face shields or safety glasses/protective eyewear), minimum 1 per crew member Gowns 1 per crew member	

T :	
Linen	
Щ	Pillows, minimum 2
	Sheets, minimum 2
	Blankets, minimum 2
Ħ	Pillowcases, minimum 2
Ш	1 mo weases, minimum 2
Comi	nunication
	Ambulance emergency run reports with data required by IDPH (minimum 10)
Ш	OR
님	Electronic documentation with paper backup
$\Box$	Illinois Poison Center Number
	IDPH Center Complaint hotline number (must be posted where visible to patient)
	Ambulance-to-hospital radio tested and working (MERCI)
_	
<u>Addit</u>	<u>ional</u>
	Glucometer with strips
Ħ	10 Smart Tags for triage
H	Oral glucose
H	<u> </u>
닏	Scoop stretcher (optional)
	Pneumatic Anti Shock garment (PASG) (adult and pediatric) optional
	Aspirin 81 mg tablets (may use multidose package)
	Albuterol 2.5 mg/3 ml with nebulizer devices and oxygen supply tubing
	Glucagon 1 mg or 1 unit dose / 1 mL (optional)
Ħ	Naloxone 2 mg/2 Ml
H	Mucosal Atomization device (MAD) and 1 or 3 ml syringes; needle to draw up medication if needed
H	
	Continuous Positive Airway Pressure (CPAP) kit (optional)
Ш	ECG monitor with 12 lead ECG capability, cables, electrodes, prep razor (optional)
	Spacer with one-way valve for metered dose inhaler
G 6 .	
<u>Safet</u>	y/General Vehicle
	Patient area is clean
	Equipment in patient area is secured/crash-stable
	(1) Flashlight minimum 1
一	Fire extinguishers (5 pound ABD, two (2), with current service tag
Ħ	Emergency warning lights operational
H	Siren operational
片	
	Flood lights operational
	Current IDOT – issued Safety Inspection sticker on windshield
	No visually apparent issues which would compromise the safety of the patient, the ambulance personnel
	or the public
	Vehicle contents should be protected from climate extremes
Ħ	Written agreement on file with fire departments for extrication.
님	
님	Written agreement on file with local tire repair/wrecker service for emergency tire repair/replacement
	Current Illinois license plates

# QUINCY AREA EMS SYSTEM AMBULANCE SUPPLIES - ALS

### (Transport and Non-Transport)

### Airway

Ш	(1) Adult and pediatric laryngoscope handle with spare batteries/bulbs
	(Assorted) Laryngoscope blades (Straight/Miller: #0,1, 2; Curved: #3)
	(2 Each) Cuffed endotracheal tubes sizes 6.0, 6.5, 7.0, 7.5
	(2 Each) Uncuffed endotracheal tubes sizes 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5
	(2 Each) Adult and pediatric stylets
	(1) Magill forceps
	(2) 10 cc syringes – no needle
$\sqcap$	(1) Esophageal intubation detector (EID) OR End tidal CO2 monitor
П	(1) Cricothyroidotomy kit (such as Kwik-Cric, Nu-Trach)
	(1) Meconium aspirator
	(1) Spare batteries/bulbs for laryngoscope
	Bougie (optional)
	Nasal Cannula for adult and child capable of measuring ETCO
	Neb treatment delivery system (2 ea.)
同	CPAP (ALS transport only)
$\Box$	i-Gel Supraglottic Airways sizes 1; 1.5; 2; 2.5; 3; 4; 5.
同	Full portable O2 tank
	Flow meter with Diss Port
	Med Mask with flow generator
	Neb adapter
	Large mask
	IV/Venipuncture/Medication Administration
	(1 Box) Alcohol swabs
H	(1) Blood glucometer with test strips
H	(6000 ml) 0.9% Sodium Chloride IV solution (500 or 1000 ml bags)
H	(2) Dextrose 10% solution (250 mL bags)
H	(3) IV primary tubing
H	(2) IV Microdrip tubing (Available in drug boxes
H	(4) Tourniquets
H	(2) Saline lock kits (optional)
H	(4 Each) IV Cannula – over the needle catheters (16, 18, 20, 22, 24 gauges)
H	(2) Intraosseous Needles
H	(Assortment) Syringes (3ml, 5-6ml, 10-12ml, 20ml)
H	(Assortment) Needles (19 gauge-1", 22-23 gauge 1", 22-23 gauge 1 ½", 25 gauge 5/8")
H	(1) Arm Board
Ħ	EZIO with child, adult, obese needles (1 ea)
H	(2) Spacer with one-way valve for metered dose inhaler
1 1	

### **Cardiac Equipment**

	<ol> <li>(1) Cardiac monitor capable of monitoring in at least three leads, defibrillation, synchronized cardioversion and transcutaneous pacing. 12 lead ECG optional. (Effective 1/1/12, all cardiac monitors must have 12 Lead capability and be able to transmit 12-Leads to Blessing Hospital and all ALS ambulances must have ETCO monitoring capabilities for intubated and non-intubated patient.</li> <li>(2) Monitoring electrode cables (may substitute one set for Quick Combo)</li> <li>(1) Defib gel, defib pads, Fastpatch pads, Quick Combo pads (adult and peds)</li> <li>(2) Monitor paper</li> <li>(3 Sets Each) Monitoring electrodes (pediatric, adult)</li> </ol>
$\mathbb{H}$	<ul><li>(2) Spare batteries</li><li>(1) Razor</li></ul>
	Other
	<ul> <li>(1) Doppler with gel</li> <li>(2) 14 gauge over the needle catheters, 3.25" length for needle chest decompression</li> <li>(1) System approved drug box (See Policy O-13-F)</li> <li>(ALS non-transport will carry medications as listed in Policy O-14 ARV)</li> <li>Commercial pelvic binder (optional)</li> </ul>

# QUINCY AREA EMS SYSTEM NON-TRANSPORT AGENCY BLS EQUIPMENT

	A 11
$\vdash$	Adhesive tape rolls (2)
	Airways-Oropharyngeal airways (adult, child, infant)
	Airways-Nasopharyngeal airways (size 12-34F w/lubricant)
	Bandages/arm slings/triangular (2)
	Bandages/roller, self adhering (4)
	Bandages/sterile gauze pads (4x4) (10)
	Bandages/Vaseline gauze (3"x8") (1)
	Bandages/trauma/universal dressing (2)
	Bandage scissors (1)
	Blanket (Mylar accepted (1)
	Blood pressure cuffs (adult, child, infant) w/gauges
	Burn sheet (1)
	C-collars, adjustable or (1 each)-Adult lg, med. Small; infant, child
	Cold Packs (2) and Warm packs (2)
$\Box$	Communication equipment to contact hospital
$\Box$	Defibrillator/AED – w/adult and pediatric pads
$\Box$	Flashlight and Pen light
同	Obstetrical Kit, sterile w/head cover (1)
П	Oxygen equipment-adult, child, infant masks (1 each)
_	(cylinder must be minimum 1200 with O2 tank key attached)
	Oxygen flowmeter/regulator for 15 lpm with delivery tubing
同	Personal protective items-isolation bags (1), non-porous gloves (2), face/eye
_	mask (2), gowns (2)
	Run report forms (5)
Ħ	Squeeze bag-valve-mask-adult bag with adult mask
Ħ	Squeeze bag-valve-mask-child, infant, and neonate mask
Ħ	Splinting devices (2)
П	Sterile solution (1000cc) in plastic bottles or bags
Ħ	Stethoscope (1)
Ħ	Suction Device with tubing and sterile single use suction catheters, one from
	each size range, 6-8, 10-12, 14-18
	CAT tourniquet
Ħ	Glucometer with strips
Ħ	Razor to be kept with AED
H	Oral Glucose
H	Aspirin (81mg tablets)
H	Naloxone (2mg/2ml)
H	Syringes 1 or 3 ml (2 each with needle to draw up medications)
H	Mucosal Atomization Device (2)
H	
	i-Gel Supraglottic Airways sizes 1; 1.5; 2; 2.5; 3; 4; 5.

8/01;

re: 4/04, 5/06, 8/07, 1/08, 8/11, 10/12, 4/17, 5/18, 12/20, 11/23

### QUINCY AREA EMS SYSTEM EMERGENCY MEDICAL RESPONDER EQUIPMENT LIST

I.		n, the Emergency Medical Responder will have the following equipment vailable to them:
	П	Adhesive tape rolls (2)
	Ħ	Airways-Oropharyngeal airways (adult, child, infant)
	Ħ	Airways-Nasopharyngeal airways (size 12-34F w/lubricant)
	Ħ	Bandages/arm slings/triangular (2)
	一	Bandages/roller, self adhering (4)
	一	Bandages/sterile gauze pads (4x4) (10)
	Ī	Bandages/Vaseline gauze (3"x8") (1)
	Ī	Bandages/trauma/universal dressing (2)
		Blanket
	$\Box$	Bandage scissors (1)
		Blanket (Mylar accepted (1)
		Blood pressure cuffs (adult, child, infant) w/gauges
		Burn sheet (1)
		C-collars, adjustable or (1 each)-Adult Lg., Med., Sm., Child , Infant
		Cold Packs (2) and Warm packs (2)
		Communication equipment to contact hospital
		Defibrillator/AED – w/adult and pediatric pads, prep razor
		Flashlight and Pen light
		Obstetrical Kit, sterile w/head cover (1)
		Oxygen equipment-adult, child, infant masks (1 each)
		(cylinder must be minimum 1200 with O2 tank key attached)
		Oxygen flowmeter/regulator for 15 lpm with delivery tubing
		Personal protective items-isolation bags (1), non-porous gloves (2), face/eye
		mask (2), gowns (2)
	$\vdash$	Run report forms (5)
	H	Squeeze bag-valve-mask-adult bag with adult mask
	H	Squeeze bag-valve-mask-child, infant, and neonate mask
	H	Splinting devices (2) Sterile solution (1000es) in plastic bettles or bass
	H	Sterile solution (1000cc) in plastic bottles or bags
	H	Stethoscope (1) Suction Device with tubing and sterile single use suction catheters, one from
		each size range, 6-8, 10-12, 14-18
		CAT tourniquet
		Non-porous disposable gloves
		SMART Triage Tags
		Glucometer with strips
		Aspirin 81 mg tablets – may have multi-dose package
		Naloxone 2 mg/2 ml $-(1)$
		1 or 3 ml syringes – (2) each and needle (needle only to draw up medication) (2)

Mucosal Atomization Device (2)

### QUINCY AREA EMS SYSTEM ALTERNATE RESPONSE VEHICLE SUPPLIES - ALS

	General Equipment
	(1) Ambulance to hospital radio (Merci – tests functional)
	(10) Illinois PCR run sheets
	(1 Each) Blood pressure cuff with gauge (infant, child, adult, obese)
	(2) Stethoscope
	(1) Bandage shears
	(1) Pediatric sizing/dosing chart or tape
	(1) Poison control number (posted)
	(1) Pediatric trauma score reference (On Illinois PCR run sheets)
	(1) OB kit, sterile
	(2) Sheets
	(2) Blankets
	(3) Cold packs
	(2) Penlights
	(1) Glucometer with strips (optional)
	(10) SMART Triage Tag
	(1) Cardiac monitor capable of monitoring in at least three leads, defibrillation synchronized cardioversion and transcutaneous pacing, and 12 lead EKG.
	Personal Safety/Biohazard Equipment
	(Appropriate Sizes) Nonporous disposable gloves
	(1) Red biohazard bag – impermeable
Ц	(2) Goggles or face shields
Ц	(2) Face masks to cover nose and mouth
Ц	(2) N-95 masks
	(2) Gowns
	Dressing/Bandaging Supplies
	(6) Trauma dressing
同	(20) 4" X 4" gauze pads
	(10) Roller style self adhering bandages (4" X 5yd)
同	(2) Vaseline gauze 3" X 8"
同	(2) Burn sheet (clean, individually wrapped)
同	(2) Adhesive tape rolls

	(1) Portable O <sub>2</sub> tank with 15 LPM regulator – at least "D" size/not empty
	(1) I oftable 02 tank with 13 El W legalator at least B bizernot empty
	(1) Spare portable tank full (secured)
	(2) Oxygen connection tubing
	(3 Each) Nasal cannulas (adult, child and infant)
	(2 Each) Non-rebreather masks (adult, child and infant)
	(1) CPR mask with one way valve
	(1) Adult bag-valve-mask (adult and child size masks)
	(1) Pediatric bag-valve-mask (child and infant size masks)
	(1 Set) Oral airways (infant through adult)
	(1 Each) Nasopharyngeal airways (infant, child, adult – sizes 12-30F)
	(1) Lubricant for airway equipment (Surgilube, K-Y, etc.)
	Manually operated suction device (IDPH approved)
	i-Gel Supraglottic Airways sizes 1; 1.5; 2; 2.5; 3; 4; 5.
ALI	ERNATE RESPONSE VEHICLE SUPPLIES – ALS (continued)
	Immobilization/Splinting  (1) Long spine board with 3 sets of straps and cervical immobilization device (1) Pediatric spine board with 3 sets of straps (optional) (1) Short spine board or vest type device (KED, ZED) (1 Each) Rigid cervical collars (pediatric, small, medium, large) (1 Set) Extremity splints – adult (two each, long and short) (Sam Splints) (1 Set) Extremity splints – pediatric (two each, long and short) (Sam Splints) (5) Triangular bandages with safety pins)

# QUINCY AREA EMS SYSTEM RESERVE AMBULANCE

- I. Each ambulance service may license "Reserve Ambulances" to assist with unforeseen mechanical or accident related issues with the primary ambulances.
- II. Reserve ambulances must meet all requirements of a licensed ambulance except the required inventory of medical supplies and durable medical equipment, which may be rapidly transferred from a fully functional ambulance to a reserve ambulance without the use of tools or special mechanical expertise.
- III. Prior to a Reserve ambulance being placed into duty, it must be inspected by the EMS Coordinator or designee using the appropriate policy for equipment and supplies (E-2 and/or E-3).

# QUINCY AREA EMS SYSTEM ADULT MEDICAL PROTOCOLS

Revised 2/2024

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

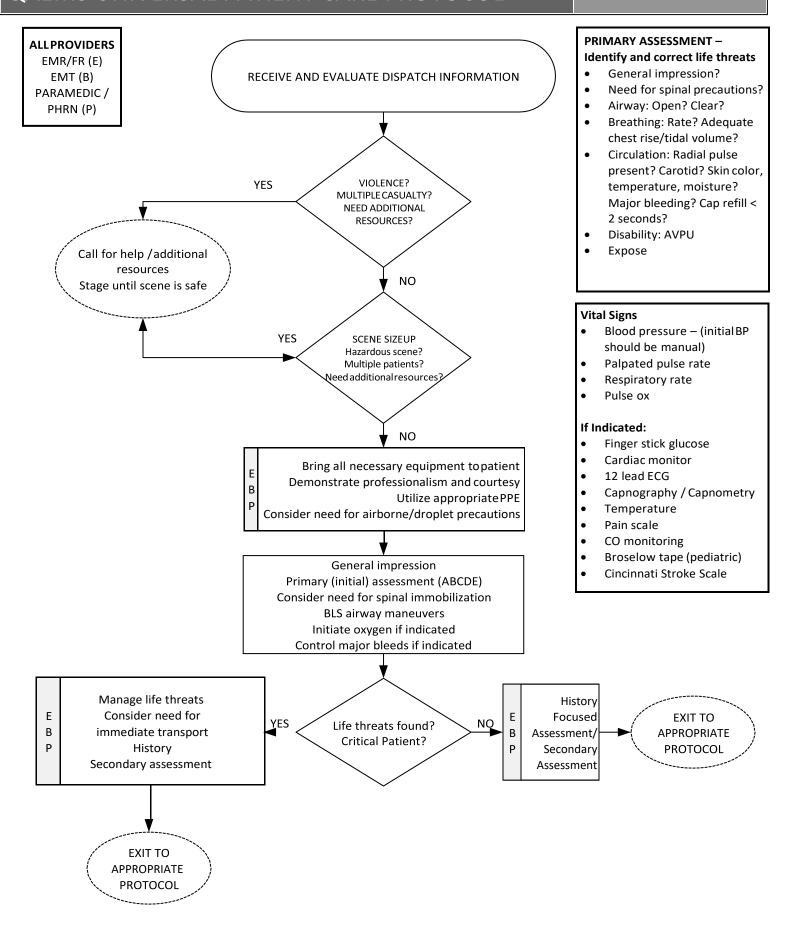
Scott Hough, MD EMS Medical Director Christopher R Solaro, MD, PHD Associate Medical Director

### QUINCY AREA EMS SYSTEM ADULT MEDICAL PROTOCOLS

Universal Patient Care	MP 1
Adult Airway protocol, Failed Airway	MP 2
Pain Management	MP 3
Chest pain	MP 4
Cardiac Arrest, AED, Cardiac Arrest Guidelines, Post Cardiac Arrest Care	MP 5
Bradycardia	MP 6
Tachycardia	MP 7
Acute Pulmonary Edema	MP 8
Adult COPD-Asthma-Dyspnea	MP 9
Alcohol Use Disorder	MP 10
Allergic Reaction & Anaphylaxis	MP 11
Altered Mental Status	MP 12
Behavioral Emergencies	MP 13
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Dialysis – Renal Failure	MP 15
Emerging Infectious Disease	MP 16
Hypertensive Crisis	MP 17
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Overdose & Toxic Exposure	MP 19
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Stroke	MP 23
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### **QAEMS UNIVERSAL PATIENT CARE PROTOCOL**



5/20; 7/21

### QAEMS UNIVERSAL PATIENT CARE PROTOCOL

#### SCENE SAFETY

- Both crew members are responsible for ongoing assessment of safety.
- Practice concepts of crew resource management – if any crew member identifies an unsafe situation or a deterioration in patient condition, they should feel comfortable to voice concerns even when partnered with crew members of a higher license level.

#### MEDICAL AUTHORITY

- The EMS Medical Director or designee has the responsibility and authority for the total management of the EMS System.
- All providers licensed under the EMS Act function under the EMS Medical Director's authority.
- A physician must be present at the radio to give orders for ALS. If the physician is providing patient care and cannot be physically present, the Emergency Communications RN (ECRN) may provide orders based on QAEMS protocol.

#### **RESPONSIBILITY OF CREW**

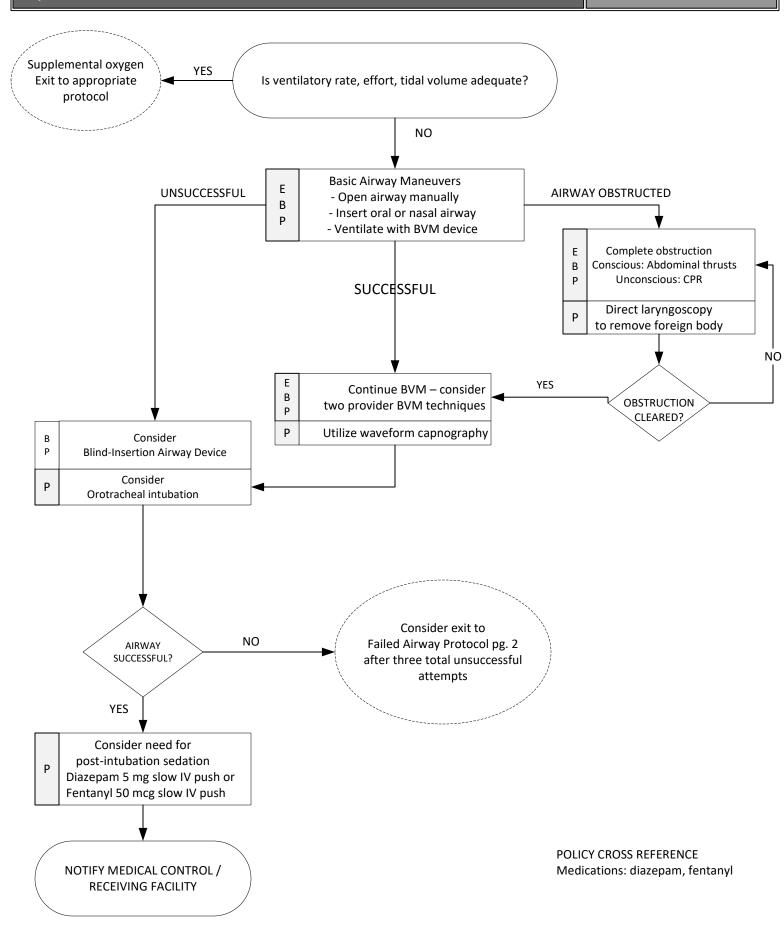
- All patient care provided must be appropriate to the provider's scope of practice, licensure level and as approved by QAEMS protocol.
- QAEMS protocolsshould be followed to assess and manage the care of the patient. Situations may be identified that preclude following a specific protocol. Medical Control should be contacted for guidance in these situations.
- Regarding crews with one paramedic and one EMT, the paramedic retains responsibility for appropriate assessment and care of the patient. This does not mean that the paramedic must always be present in the patient compartment.
- A vehicle licensed as ALS requires that at least one of the crew members be licensed at the paramedic or PHRN level.
- Patient care should be initiated at the patient if safe to do so.
- You should not delay at the scene in an attempt to complete a protocol in its entirety.

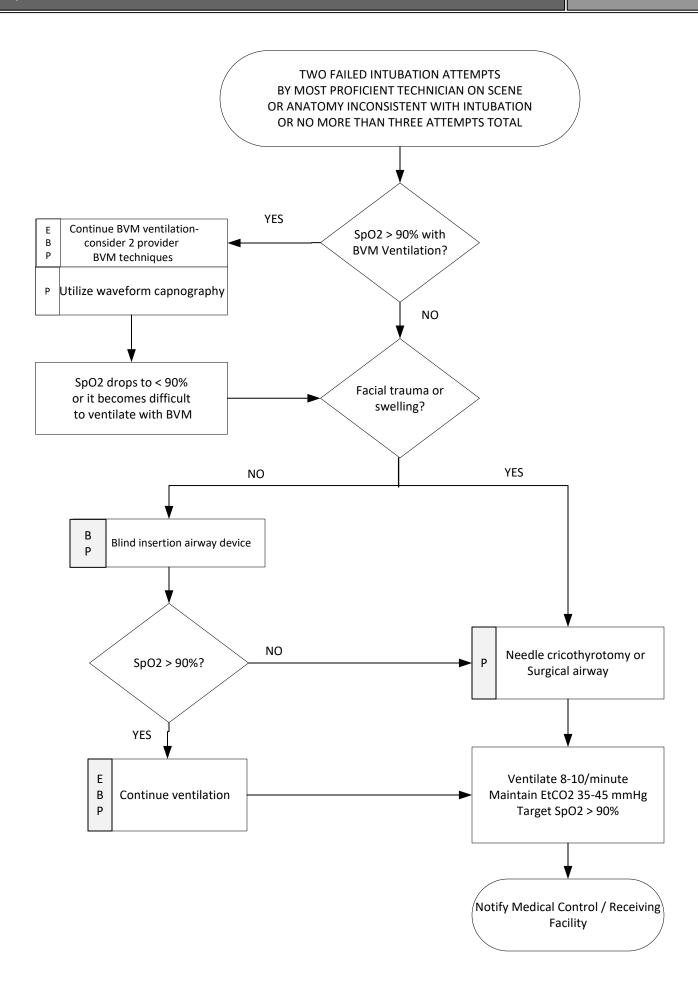
#### **GENERAL INFORMATION**

- Oxygen is a drug and should be utilized when indicated. A reasonable target oxygen saturation is >/= 94%.
- An adult is considered hypotensive when the systolic blood pressure is less than 80 mmHg.
- Diabetic, geriatric and female patients often have atypical presentations with cardiac related problems such as MI.
   General weakness, severe fatigue could be an indicator of a serious medical condition.
- Beta blockers and other cardiac drugs may prevent a reflexive tachycardia in a patient with shock.
- Any patient with altered mental status should have a finger stick glucose to rule out hypoglycemia.
- Vital signs obtain an initial full set of vitals manually before utilizing an automated cuff. For a critical patient vitals should be repeated every 5 minutes. If non-critical, every 15 minutes.

#### **TRANSPORT**

- Utilize safe driving practices and follow the driving policy for your agency.
- Timing of transport should be based on the patient's clinical condition.





### **QAEMS PAIN MANAGEMENT**

#### **HISTORY**

- Age
- Location of pain
- Duration of pain
- Past medical history
- Medications
- Any other treatment for pain

#### **PAIN ASSESSMENT**

- Onset what was patient doing when the pain began
- Provoke (does anything make the pain worse); Palliate (does anything make the pain better)
- Quality description of the pain
- Radiation -does the pain move
- Severity pain scale 0-10, Wong-Baker faces scale, FLACC scale
- Pain in relation to deep breath or movement
- Pain with palpation

#### DIFFERENTIAL

- Musculoskeletal
- Visceral (abdominal)
- Cardiac
- Pleural / respiratory
- Neurogenic
- Renal colic (kidney stone)

Patient presents with complaint of pain requiring pain management

E B P Consider non-pharmacologic pain management techniques
Distraction Patient positioning / padding Splinting extremity injuries Elevation and cold packs

Assess mental status, vital signs, SpO2, and pain scale

Cardiac monitor
Venous access

Morphine slow IVP
Adult: 2 mg, may repeat dose X 1

Pediatric dose: 0.1 mg/kg slow IVP Requires Medical Control approval OR

Fentanyl

Ρ

Adult: 50 mcg slow IVP or 100 mcg IN

Pediatric dose: 1 mcg/kg slow IVP Max 25 mcg. or 50 mcg IN
Requires Medical Control approval.

Reassessment of mental status, vital signs, SpO2, cardiac rhythm, pain scale before repeat doses and every 5-15 minutes thereafter

Monitor during transport
Contact Medical Control / Receiving Facility

#### NOTE:

- Patients with severe burns or trauma may require higher initial dose of pain medication or additional dosing.
- Morphine up to 4 mg slow IVP
- Fentanyl:
  - single max dose 50 mcg slow IVP. May repeat dose to total max dose of 100 mcg if severe pain and systolic BP remains 90 mmHg or >.
  - Don't exceed 100mcg total in 30 minutes. Contact Medical Control for additional doses
  - Over age 65, COPD or CO2 retention, use lower initial dose of 25 mcg slow IVP. Contact Medical Control for 2<sup>nd</sup> dose.
  - Intranasal (IN) Adult dose: 100 mcg; Pediatric dose: 50 mcg

### QAEMS PAIN MANAGEMENT

#### **PAIN SCALES**

- Numerical 0-10 scale allows the patient to describe intensity of pain in numbers ranging from 0 to 10, with zero being no pain, and ten being the worst they can imagine.
   This scale can be used with most adults and older children.
- Wong-Baker FACES pain scale is designed for children age three and older. It can also be helpful for adults who may be cognitively impaired or have difficulty understanding the numerical scale. It offers a visual description for those who don't have the verbal skills to explain how their symptoms make them feel.
- FLACC scale is used for infants and your children or adults
  who may be cognitively impaired. The FLACC scale
  evaluates five categories and assigns a score of 0-2 for each
  category with a total score between 0 and 10. The patient
  care team and family are usually involved in this evaluation.

#### **GENERAL**

- Pain is subjective and is defined by the person experiencing the pain.
- Pain severity, vital signs, neurologic status, SpO2, cardiac rhythm should all be assessed prior to administration of pain medications and 10 minutes after pain medication administration to determine effectiveness of medication and overall stability of the patient.
- Do not mix pain medications contact Medical Control if second dose does not control pain.

#### OPIOID REVERSAL FOR RESPIRATORY DEPRESSION

- Always monitor the patient for respiratory depression after administering pain medication.
- Adult dose Narcan: 2 mg IVP or IN initial dose; may repeat in 2-3 minutes if no response.
- Pediatric dose if under 20 kg: 0.1 mg/kg up to maximum 2 mg
- Pediatric dose if over 20 kg: 2 mg IVP or IN



#### Wong-Baker FACES® Pain Rating Scale



FLACC SCALE	Scoring			
Categories	0	1	2	
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant frown, quivering chin, clenched jaw	
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking or legs drawn up	
Activity	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arched, rigid, or jerking	
Cry	No cry (awake or asleep)	Moans or whimpers; occasional complaint	Crying steadily, screams or sobs, frequent complaints	
Consolability	Content, relaxed	Reassured by occasional touching, hugging, or being talked to; distractible	Difficult to console or comfort	

Note: Each of the five categories Face (F), Legs (L), Activity (A), Cry (C), and Consolability (C) is scored from 0-2, which results in a total score between 0 and 10.

**POLICY CROSS REFERENCE** 

Medications: Fentanyl, Morphine, Narcan

### QAEMS Chest Pain / Suspected Cardiac Event

#### HISTORY

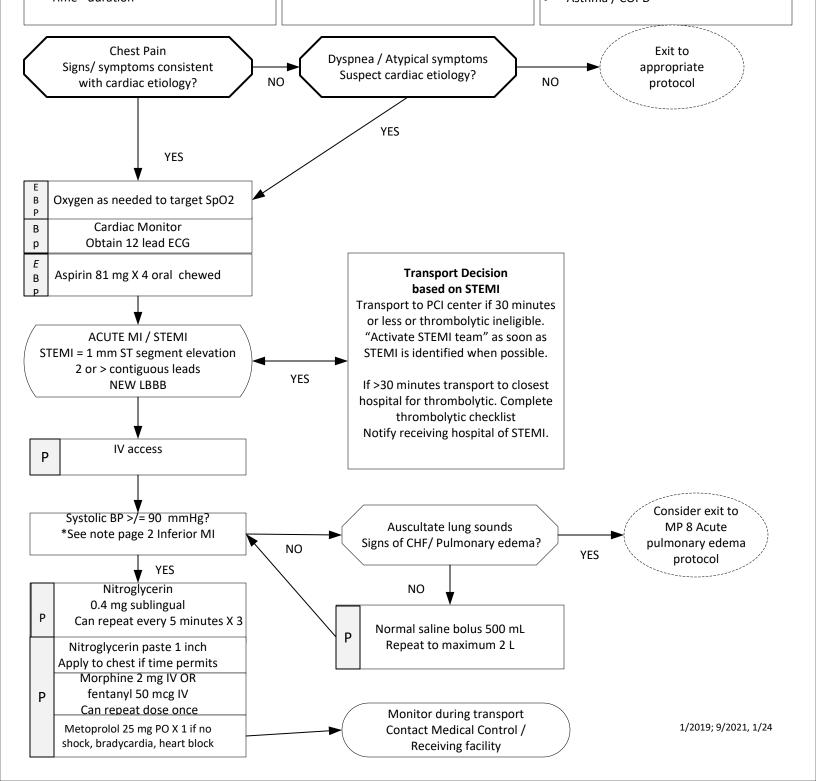
- Age
- Past medical history (MI, angina, diabetes, post-menopausal)
- Viagra, Levitra, Cialis
- Recent physical exertion
- Onset
- Palliation / provocation
- Quality (patient describe pain)
- Region / Radiation / Referred
- Severity (1-10)
- Time duration

#### SIGNS AND SYMPTOMS

- Chest pain, pressure, aching, tightness
- Location substernal, epigastric, arm, jaw, neck, shoulders
- Pallor, diaphoresis
- Shortness of breath
- Nausea, vomiting
- Weakness, dizziness
- Fatigue

#### DIFFERENTIAL

- Trauma vs medical
- Angina
- Pericarditis
- Pulmonary embolism
- Pneumothorax
- Aortic dissection or aneurysm
- GI reflux or hiatal hernia
- Esophageal spasm
- Pleuritic pain
- Cocaine overdose
- Asthma / COPD



### QAEMS Chest Pain / Suspected Cardiac Event

#### **GENERAL**

 Diabetics, geriatric patients and female patients often have atypical pain or only generalized complaints.

#### **HYPOTENSION**

- Avoid nitroglycerin in any patient who has used Viagra (sildenafil) or Levitra (vardenafil) in the past 24 hours or Cialis (tadalafil) in the past 36 hours due to potential severe hypotension.
- If inferior (II, III, AVF) MI consider fluid bolus 1 liter even if blood pressure is > 90 mmHg due to potential for hypotension.
- Consider obtaining a right sided ECG (V4R) If ST elevation is seen in any two of leads II, III and AVF. If elevation is also noted in V4R, nitroglycerin and / or opioids may cause severe hypotension requiring normal saline boluses.
- Monitor for hypotension after administration of nitroglycerin or opioids (morphine, fentanyl)

#### **EMT ADMINISTRATION OF NITROGLYCERIN**

- The EMT may assist a patient with taking nitroglycerin if it has been prescribed to the patient and is not outdated and the patient has no contraindications. Assess vital signs to assure systolic BP is >/= 90 mmHg. Requires contact with Medical Control.
- Contraindications include hypotension or patient has already taken three Nitroglycerin prior to your arrival.
- Dose: May administer 1 tablet or 1 spray under the tongue every 5 minutes to maximum of three doses.
- Precautions: Check vital signs before each dose.

An EMT can obtain a 12 lead ECG and transmit to the receiving hospital if technology exists.

#### **POLICY CROSS REFERENCE**

Medications: aspirin, fentanyl, metoprolol, morphine, nitroglycerin MP 8 Acute pulmonary edema

# QAEMS FIBRINOLYTIC THERAPY CHECKLIST

If PCI center is > 30 minutes, consider transport to the closest hospital for fibrinolytic therapy.

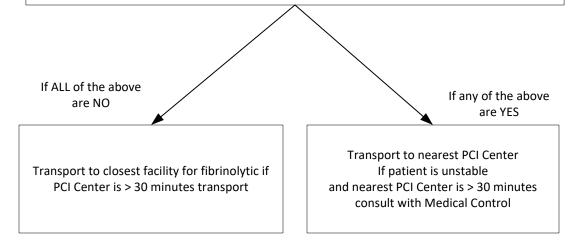
Determine if there are contraindications to fibrinolytics and notify receiving hospital.

#### **Absolute contraindications**

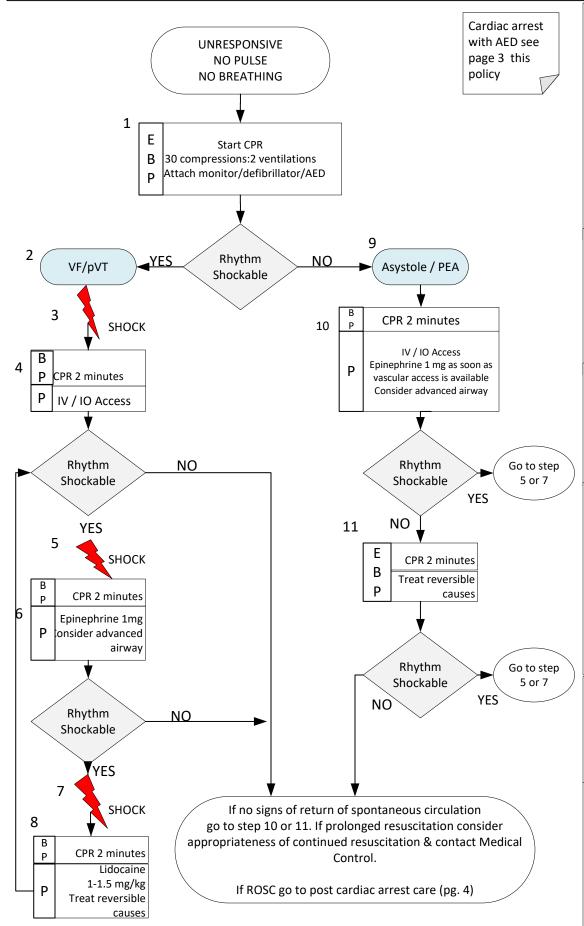
- Any prior intracranial hemorrhage
- Known structural cerebral vascular lesion (i.e. arteriovenous malformation)
- Known malignant intracranial neoplasm (tumor) primary or metastatic
- Ischemic stroke within 3 months
- Suspected aortic dissection
- Active bleeding or tendency for bleeding (excluding menstruation)
- Significant closed head or facial trauma within 3 months
- Intracranial or intraspinal surgery within 2 months
- Severe uncontrolled hypertension
- For streptokinase, prior treatment within past 6 months

#### **Relative contraindications**

- History of chronic, severe, poorly controlled hypertension
- Significant hypertension on presentation (Systolic BP > 180 mmHg or diastolic BP > 110 mmHg)
- History of prior ischemic stroke > 3 months
- Dementia
- Known intracranial pathology not covered in absolute contraindications
- Traumatic or prolonged CPR (> 10 minutes)
- Major surgery within past 3 weeks
- Recent internal bleed (within 2-4 weeks)
- Non-compressible vascular puncture
- Pregnancy
- Active peptic ulcer
- Oral anticoagulant therapy (blood thinners)



# QAEMS ADULT CARDIAC ARREST



#### **CPR QUALITY**

- Push hard (at least 2 inches) and fast (100-120/min) and allow complete chest recoil.
- Minimize interruptions in compressions.
- Avoid excessive ventilation.
- Rotate compressor every 2 minutes, sooner if fatigued.
- If no advanced airway,
  30:2 compression- ventilation ratio.
- Quantitative waveform capnography – if PETCO2 < 10 is low or decreasing reassess CPR quality.

#### **DEFIBRILLATION**

- Biphasic: Initial dose of 120-200 J or manufacturer recommendation. Second and subsequent shocks should be equivalent and higher doses may be considered.
- Monophasic: 360 J

#### **DRUG THERAPY**

- Epinephrine IV/IO dose: 1 mg every 3-5 minutes.
- Lidocaine (antiarrhythmic):
- 1-1.5 mg/kg IV or IO. Subsequent dose at half the initial dose to maximum 3 mg/kg.

#### **ADVANCED AIRWAY**

- Endotracheal intubation or supraglottic airway.
- -Use waveform capnography or capnometry to confirm & monitor placement. Use multiple means to confirm.
- Once advanced airway is placed, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions.

### RETURN OF SPONTANEOUS CIRCULATION (ROSC)

- Abrupt sustained increase in PETCO2 (typically >/= 40 mmHg) indicates ROSC.
- Return of pulse and BP.

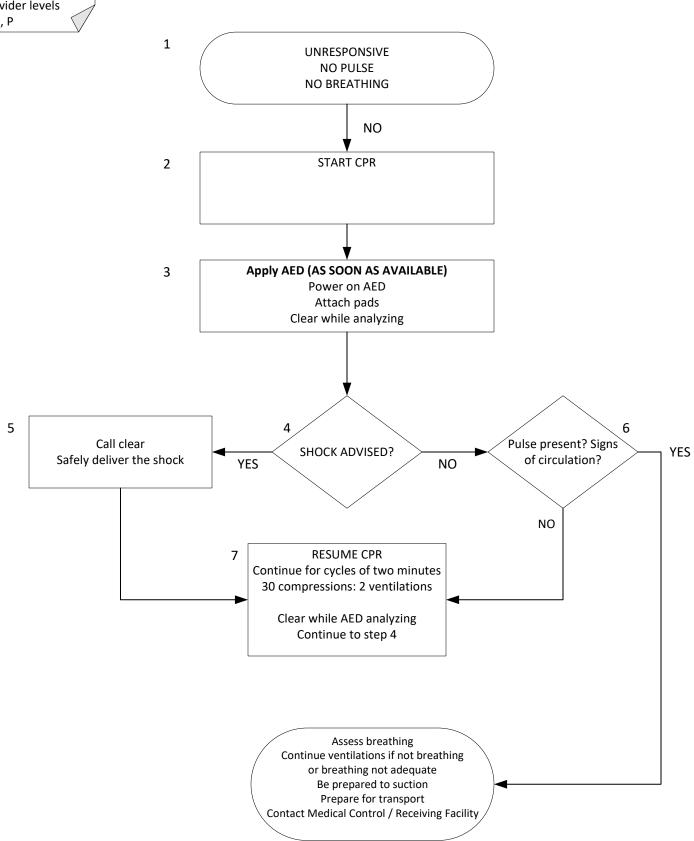
#### **REVERSIBLE CAUSES**

- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypo-hyperkalemia
- Hypothermia
- Tension pneumothorax,
- Tamponade cardiac
- Toxins
- Thrombosis cardiac or pulmonary

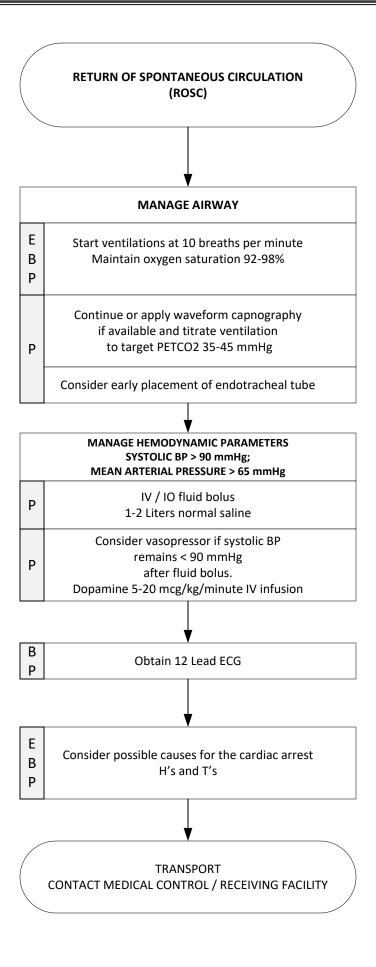
# QAEMS CARDIAC ARREST GUIDELINES

SUMMARY OF HIGH QUALITY CPR COMPONENTS							
COMPONENT	ADULT & ADOLESCENT	CHILD 1 YEAR TO	INFANT LESS THAN 1 YEAR				
		PUBERTY	EXCLUDING NEWBORN				
SCENE SAFETY	Make sure th	e environment is safe for r	escuers & victim.				
RECOGNITION OF	Check for responsiveness						
CARDIAC ARREST	No breathin	g or only gasping (i.e, no no	ormal breathing)				
	No d	lefinite pulse felt within 10	seconds				
	(Breathing & pulse check can be performed simultaneously in less than 10						
		seconds)					
ACTIVATION OF THE EMERGENCY	If you are alone with no	Witnes	sed collapse				
RESPONSE SYSTEM	mobile phone, leave the	Follow procedure to the left for adult/adolescent.					
	victim to call for help &						
	obtain AED before	Unwitne	ssed collapse				
	beginning CPR.	Give 2 minutes of CPR					
	Otherwise send	Leave the victim to activate the emergency response					
	someone & begin CPR	system and get the AED.					
	immediately. Use the		or child and resume CPR'				
	AED as soon as it is	Use the AED as s	soon as it is available.				
	available.						
COMPRESSION-VENTILATION	1 or 2 rescuers	1 rescuer 30:2					
RATIO WITHOUT ADVANCED	30:2	2 or more rescuers 15:2					
AIRWAY							
COMPRESSION-VENTILATION		compressions at a rate of 2					
RATIO WITH ADVANCED AIRWAY	Give 1 breat	th every 6 seconds (10 brea	aths per minute)				
COMPRESSION RATE		100-120/minute					
COMPRESSION DEPTH	At least 2 inches (5 cm)	At least 1/3 AP	At least 1/3 AP diameter of				
		diameter of the chest.	the chest.				
	<del>  _ , , , , , , , , , , , , , , , , , , </del>	About 2 inches (5 cm)	About 1.5 inches (4 cm)				
HAND PLACEMENT	Two hands on the lower	Two hands (or one hand	1 Rescuer				
	half of the sternum.	for very small child) on	Two fingers in the center of				
		the lower half of the	the chest, just below the				
		sternum.	nipple line.				
			2 Rescuers				
			Two thumbs encircling the chest just below the nipple				
			line.				
CHEST RECOIL	Allow full recoil of the c	hast after each compression	on; do not lean on the chest				
MINIMIZING INTERRUPTIONS		ions to compressions to les					
WINGING INTERROPTIONS	-	•	spent on the chest during CPR.				
	Limiting interruptions increa		spent on the chest during of K.				
	Ways to increase CCF:	ises sarvivar rates.					
		the chest ready to start cor	mpressions immediately after a				
	• Compressor hovers over the chest ready to start compressions immediately after a shock, rhythm analysis or other necessary pause.						
	Have the next compressor ready to take over immediately.						
	<ul> <li>Precharge the manual defibrillator 15 seconds before the 2 minute pulse check.</li> </ul>						
RESCUE BREATHING FOR	Rag-valve mask ventilations	1 hreath every 5-6 seconds	Consider 2-nerson BVM				
RESPIRATORY ARREST	Bag-valve mask ventilations: 1 breath every 5-6 seconds. Consider 2-person BVM techniques.						
INCOMINATION ANNEST	Advanced airway: 1 breath every 6 seconds.						
	/ varioca an way. I breatile	.ve.y 0 30001103.					

Protocol appropriate for all provider levels E, B, P



# QAEMS POST CARDIAC ARREST CARE



#### **Initial stabilization Phase**

Resuscitation is ongoing during the post-ROSC phase and many of these activities can occur concurrently. If prioritization is necessary follow these steps:

- Airway management: waveform capnography or capnometry to confirm and monitor endotracheal tube placement.
- Titrate oxygen percent (FiO2) for 92-98% spO2.
- Start ventilaitons at 10 breaths per minute.
- Titrate to PaCO2 of 35-45 mmHg

# Continued Management and Additional Emergent Activities

• Early evaluation of 12 lead ECG

#### H's and T's

- Hypovolemia
- Hypoxia
- Hypothermia
- Hydrogen ion (acidosis)
- Hypokalemia/ hyperkalemia
- Tension pneumothorax
- Toxins
- Tamponade cardiac
- Thrombosis PE
- Thrombosis coronary

# **QAEMS BRADYCARDIA PROTOCOL**

### CRITERIA SYMPTOMATIC BRADYCARDIA

- Heart rate is slow
- Patient has symptoms
- Symptoms are due to the slow heart rate

#### SIGNS & SYMPTOMS POOR PERFUSION

- Acute altered mental status
- Pale, cool, clammy skin
- Chest pain
- Acute heart failure
- Hypotension

#### **SEDATION FOR TCP**

- Most awake patients should be given sedation medication before initiating transcutaneous pacing.

If the patient is hypotensive, consider sedation after TCP has been initiated and systolic BP increases to 90 mmHg.

- Valium (diazepam) 5-10 mg slow IV push
- Morphine 2 mg or fentanyl 25 mcg slow IV push for analgesia.

### **DOSES / DETAILS**

#### **Atropine**

Atropine first dose: 1 mg IV/IO. Repeat every 3-5 minutes. Maximum dose 3 mg.

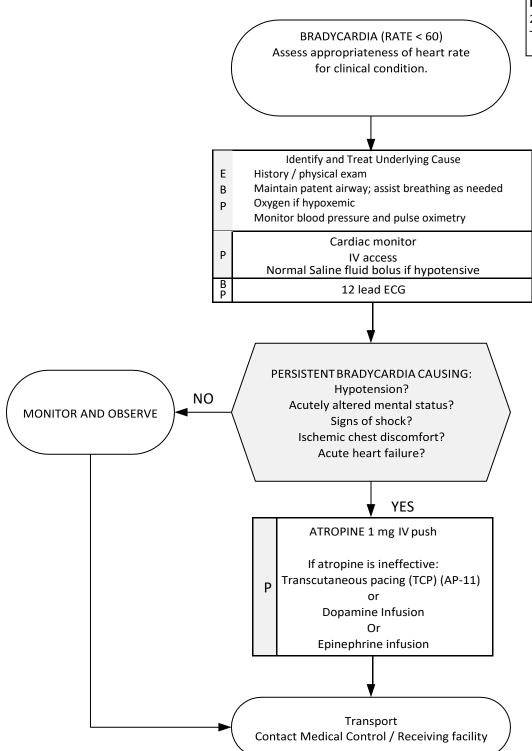
#### **Dopamine IV Infusion**

Usual infusion rate is 5-20 mcg/kg per minute.

Titrate to patient response.

#### **Epinephrine IV Infusion**

2-10 mcg/minute IV infusion. Titrate to patient response.



# QAEMS BRADYCARDIA PROTOCOL

#### **GENERAL NOTES**

- The treatment sequence for symptomatic bradycardia is determined by the severity of the patient's clinical presentation. You may have to move quickly from atropine as the first line treatment to transcutaneous pacing or a beta-adrenergic infusion such as dopamine or epinephrine infusion.
- Atropine doses of less than 0.5 mg may paradoxically result in further slowing of the heart rate.
- Use atropine cautiously in the presence of cardiac ischemia or MI. An atropine-mediated increase in heart rate may worsen ischemia or increase infarct size.
- Do not rely on atropine in Mobitz type II second-degree AV block or third-degree AV block. These rhythms may not be responsive to reversal of cholinergic effects by atropine. Preferably treat with transcutaneous pacing or beta-adrenergic infusion.

#### TRANSCUTANEOUS PACING

Perform these steps

- 1. Place Quick Combo or pacing electrodes on the chest.
- 2. Leave four lead monitoring electrodes on the limbs.
- 3. Turn the pacer on.
- 4. Set the demand rate (usually 60-80, can make adjustments later if needed)
- 5. Set the current (milliamp output) about 2 mA above the dose at which consistent electrical and mechanical capture is observed.
- Electrical capture: observing a wide, bizarre QRS on the monitor at the rate set.
- Mechanical capture: palpating a pulse that is consistent with the rate set.
- TCP is contraindicated in severe hypothermia.
- Conscious patients require sedation/analgesia unless delay for sedation will cause deterioration in patient.
- Assessment of a pulse may be difficult to confirm because electrical stimulation causes muscle jerking that may mimic the pulse.

### **POLICY CROSS REFERENCE**

MEDICATIONS: Atropine, diazepam, dopamine, epinephrine, morphine, fentanyl

AP-11 Transcutaneous pacing

# QAEMS TACHYCARDIA WITH PULSE

#### SIGNS & SYMPTOMS OF POOR PERFUSION

Hypotension

Acutely altered mental status

Pale, cool clammy skin

Ischemic chest pain

Acute heart failure

Tachycardia with ventricular rate < 150 does not usually produce serious signs and symptoms.

## SYNCHRONIZED CARDIOVERSION

Initial recommended doses:

- Narrow QRS/regular (SVT, atrial flutter) = 50-100 joules
- Narrow QRS/irregular (atrial fibrillation) = 120-200 joules
- · Wide, regular (ventricular tachycardia) = 100 joules
- · Wide, irregular (torsades) = defibrillation, not synchronized

### **DRUG DOSES / DETAILS**

Adenosine (narrow QRS complex, regular)

First dose: 6 mg rapid IV push follow with NS flush

Second dose if needed: 12 mg rapid IV push follow with NS flush

#### Lidocaine (wide QRS complex)

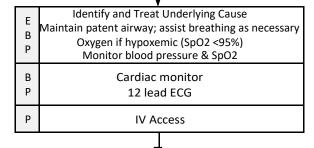
First dose 1-1.5 mg/kg IV push Second dose: half the initial dose

#### **SEDATION**

Most awake patients should be given medication before synchronized cardioversion

- Valium (diazepam) 5-10 mg slow IV push for sedation
- Morphine 2 mg or fentanyl 25 mcg slow IV push for analgesia

ASSESS APPROPRIATENESS OF HEART RATE FOR CLINICAL CONDITION Heart rate typically >/= 150/minute if tachyarrhythmia



#### PERSISTENT TACHYARRHYTHMIA CAUSING:

NO

- Hypotension?
- Acutely altered mental status?
- Signs of shock?
- Ischemic chest discomfort?
- Acute heart failure?

YES Synchronized Cardioversion (AP-17) Consider sedation

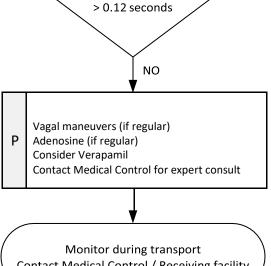
- Normal Saline fluid bolus if hypotensive

YES

- 12 lead ECG

Р

- Consider adenosine if regular and monomorphic
- Consider Lidocaine 1-1.5 mg/kg IV push
- Contact Medical Control for expert consultation



Wide QRS?

Contact Medical Control / Receiving facility

# **QAEMS TACHYCARDIA PROTOCOL**

#### **GENERAL INFORMATION**

- Tachycardia (rate > 100) has many potential causes and may or may not produce symptoms.
- Symptomatic tachycardia means that the fast rate is producing the signs and symptoms.
- Sinus tachycardia (rate usually 101-150) is caused by a
  physiologic response to a factor such as fever, anemia, shock,
  anxiety, toxin exposure. It is helpful to determine sinus
  tachycardia through patient history. Sinus tachycardia will not
  respond to adenosine or cardioversion. Manage the
  underlying cause.
- Tachycardia with rate < 150 does not usually produce serious signs and symptoms.

#### **UNSTABLE PATIENTS**

- Unstable tachycardia exists when the heart rate is so fast that cardiac output is reduced. This can produce serious signs and symptoms including hypotension, acutely altered mental status, acute pulmonary edema, ischemic chest discomfort and other signs of shock.
- A 12 lead ECG should be obtained early in the assessment however, unstable patients require immediate cardioversion.
   Do not delay immediate cardioversion to obtain the 12 lead ECG in an unstable patient.
- If possible, establish an IV and administer sedation to the awake patient before cardioversion however, do not delay the cardioversion if the patient is extremely unstable.

#### SYNCHRONIZED CARDIOVERSION

- Uses a sensor to deliver the shock synchronized with the peak of the QRS complex.
- Synchronization prevents delivery of the shock during the vulnerable period of the cardiac cycle when a shockcould precipitate ventricular fibrillation n.
- When you press the shock button there will likely be a slight delay before the shock is delivered so that the shock is synchronized.
- Pushing the sync button should produce markers above the R wave. This might not occur if there is low amplitude.
- You may need to activate the sync mode each timeyou deliver a synchronized cardioversion.
- Deactivate sync if the patient becomes pulseless and you need to deliver an unsynchronized cardioversion (defibrillation)

#### **STEPS**

- Attach Quick Combo or other defib pads to chest
- Press sync button
- Look for sync markers on the R wave, adjust amplitude / size if no sync markers
- Select appropriate joule setting.
- Push charge button
- Call clear look clear to ensure no-one including yourself is touching the patient
- Press shock
- Reassess

## **POLICY CROSS REFERENCE**

MEDICATIONS: Adenosine, Lidocaine, Morphine, Diazepam, Verapamil

AP 17 Synchronized Cardioversion

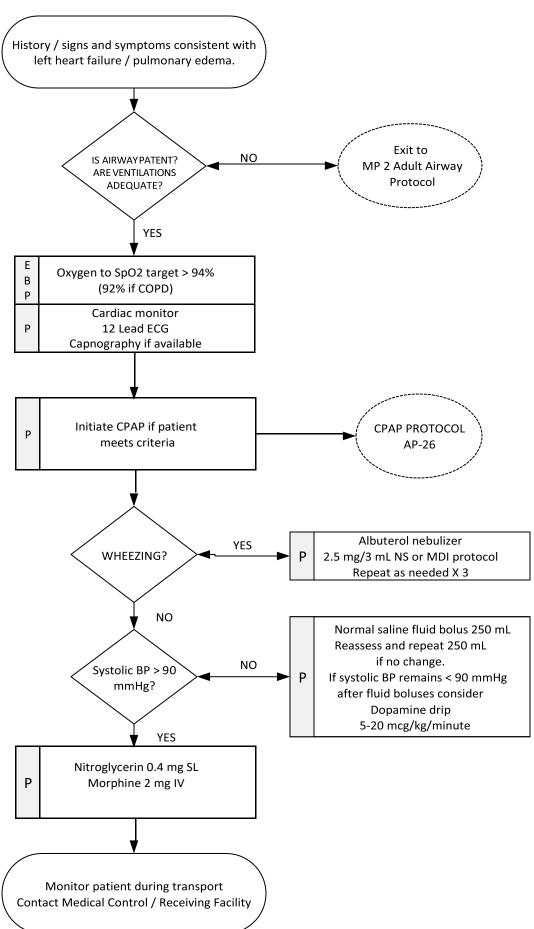
## **QAEMS ACUTE PULMONARY EDEMA**

#### SIGNS AND SYMPTOMS

- Severe dyspnea
- Tachypnea
- Labored breathing
- Use of accessory muscles
- Cyanosis
- Frothy white or pink tinged sputum
- Auscultated crackles bilaterally lungs sound "wet"
- Auscultated wheezing or rhonchi

#### **HISTORY**

- Difficulty breathing whilelying flat
- Paroxysmal nocturnal dyspnea.
- Sleeping sitting up in a chair or recliner.



#### ADDITIONAL INFORMATION

- Nitroglycerin reduces pulmonary congestion by dilating the venous capacitance vessels thus reducing preload. It also reduces afterload by dilating systemic arteries. May administer 0.4 mg SL to a maximum of three doses. Be alert to hypotension.
- Morphine dilates veins to increase venous capacitance thus reducing preload. May administer two 2 mg doses prior to contact with Medical Control. Be alert to hypotension.
- Paramedic / PHRN should be prepared to intubate the patient if the patient is not able to maintain an airway, mental status deteriorates significantly or CPAP fails and SpO2 continues to drop.

## **POLICY CROSS REFERENCE**

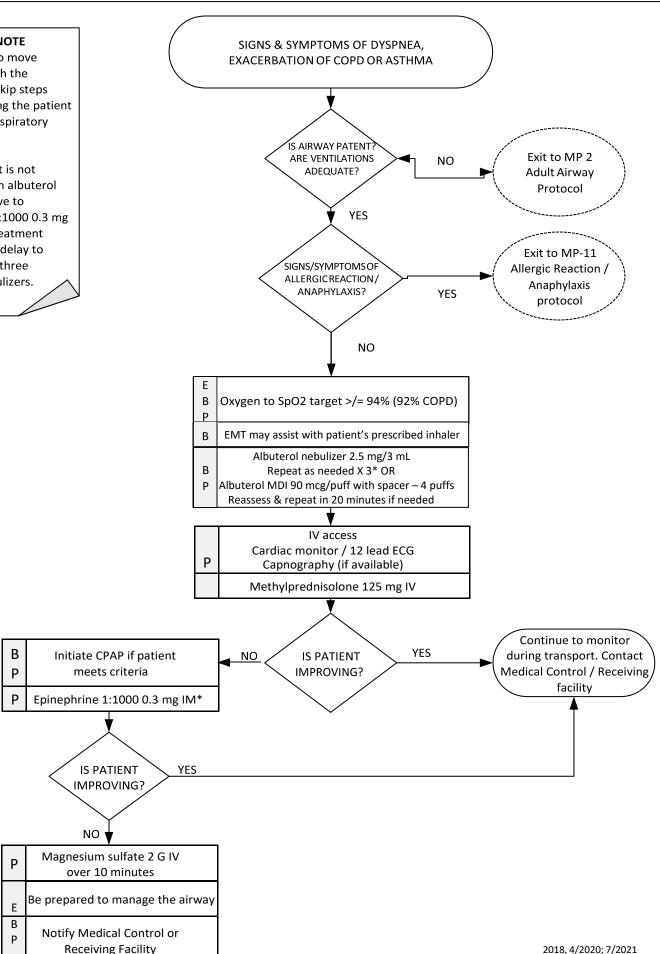
MEDICATIONS: Albuterol, nitroglycerin, morphine, dopamine MP 2 Adult airway protocol AP 26 CPAP

# QAEMS ADULT COPD/ASTHMA/DYSPNEA

#### **IMPORTANT NOTE**

Be prepared to move quickly through the protocol and skip steps when managing the patient with severe respiratory distress.

\* If the patient is not improving with albuterol nebulizer, move to epinephrine 1:1000 0.3 mg IM or other treatment quickly. Don't delay to administer all three albuterol nebulizers.



# QAEMS ADULT COPD/ASTHMA/DYSPNEA

#### **CPAP Protocol AP 26**

- Initiate CPAP if respiratory distress and
- awake & able to follow commands, over age 12 and mask fits, ability to maintain own airway and 2 or more of the following:
- RR > 25/minute
- SpO2 < 94% at any time</li>
- Use of accessory muscles

#### **MANAGEMENT**

- You may need to move quickly through the protocol and skip steps when managing the patient with severe respiratory distress.
- If patient is not improving, consider administration of Epinephrine IM earlier than indicated in the flow chart.

#### **ASSESSMENT**

- Pulse oximetry should be monitored continuously.
- ETCO2 should be monitored if respiratory distress is significant and does not respond to initial nebulized beta agonist.
- A silent chest in respiratory distress is a pre-respiratory arrest sign.

#### **PATIENT POSITIONING**

Position the patient as tolerated. Most patients in respiratory distress prefer to sit upright in a semi-Fowlers or Fowlers position.

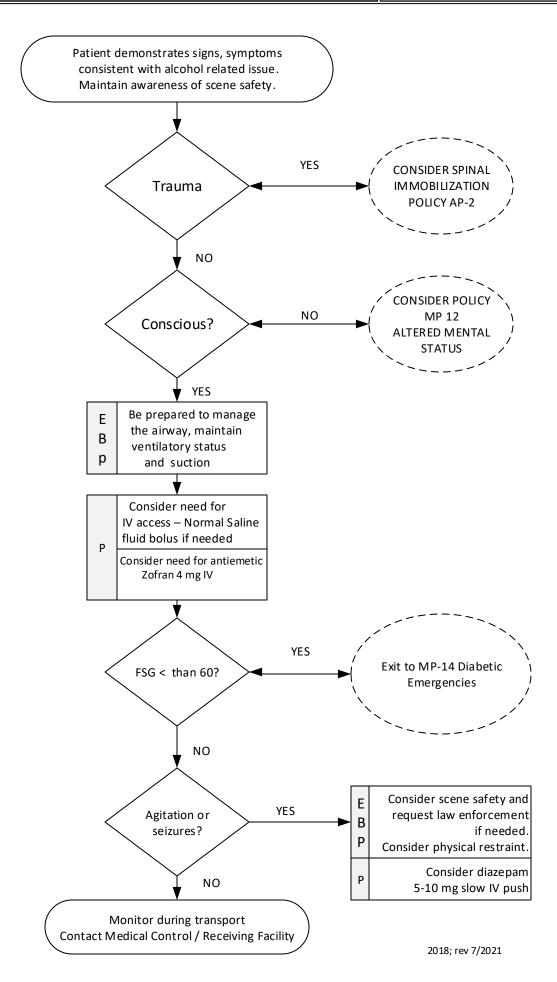
## METERED DOSE INHALER (MDI) WITH SPACER

- Spacer: an add-on device that places some distance between the point of aerosol generation and the patient's mouth. The spacer reduces need for coordination between actuation of the device & inhalation.
- Staff should shake the MDI canister before use.
- Insert the MDI mouthpiece into the end of the spacer device.
- Instruct patient to breathe in, and then breathe out fully.
- Have patient close their lips around the spacer mouthpiece.
- Press the top of the inhaler down to deliver a single puff of medication.
- Have patient take a slow breath in and hold breath for ten seconds.
- Remove device from mouth and have patient exhale.

\*If patient cannot hold their breath they can use the tidal breathing method where they breathe slowly & steadily in and out 4-5 times for each puff of medication.

### **POLICY CROSS REFERENCE**

MEDICATIONS: Albuterol, Methylprednisolone, Epinephrine 1:1000, Magnesium sulfate AP 26 CPAP
AP 30 METERED DOSE INHALER WITH SPACER
MP 2 ADULT AIRWAY PROTOCOL
MP 11 ALLERGIC REACTION / ANAPHYLAXIS



# QAEMS ALCOHOL USE DISORDER

#### **GENERAL**

- Consider the need for law enforcement due to unpredictable nature of the call. Patients can become violent or combative without warning.
- Patients who present with alcohol intoxication or alcohol withdrawal may have problems maintaining their own airway.
   Airway management should be a priority.
- Other goals should include replacing volume depletion, treating hypoglycemia and managing agitation or withdrawal.

#### **DIFFERENTIAL DIAGNOSES**

- Trauma
- Hypoglycemia
- Sepsis
- Stroke
- Seizure disorder
- Psychiatric disorder
- Toxins

#### ALCOHOL WITHDRAWAL

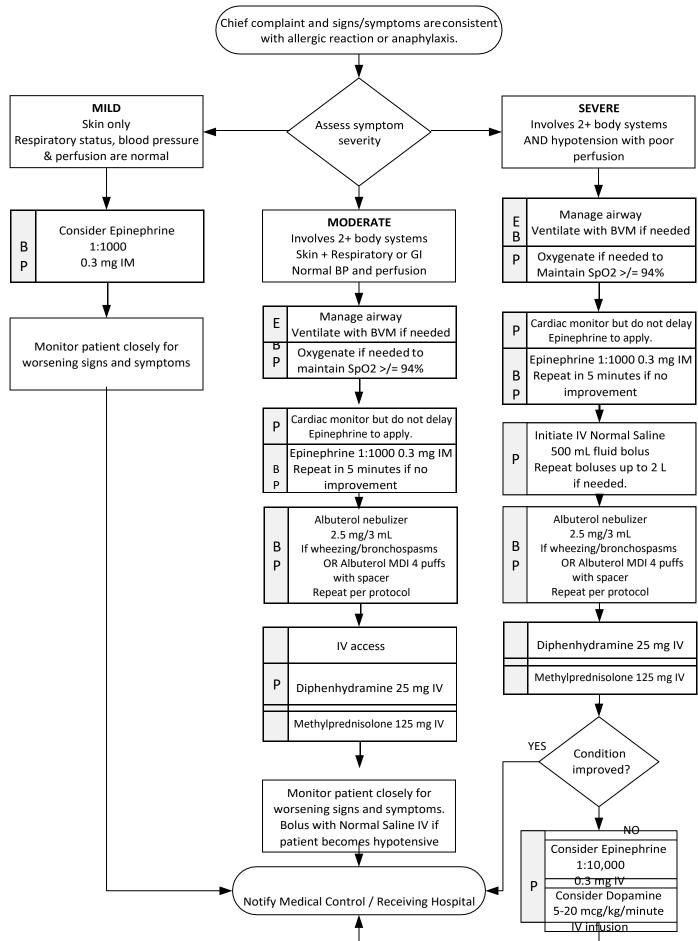
- May start 6-24 hours after last drink.
- Minor signs/symptoms: Headache, anxiety, nausea, palpitations, tremors, diaphoresis
- Moderate signs/symptoms: Hypertension, tachycardia.
- Severe signs/symptoms: Hyperthermia, vomiting, extreme agitation and hallucinations, seizures, cardiac dysrhythmias. Could lead to death.

### NAUSEA / VOMITING

 Zofran (ondansetron) is the preferred antiemetic due to sedative effects of promethazine.



MEDICATIONS: Dextrose 50%; diazepam; ondansetron AP 2 Spinal Immobilization MP 12 Altered Mental Status MP 14 Diabetic Emergencies



## **QAEMS ALLERGIC REACTION / ANAPHYLAXIS**

MILD SYMPTOMS: Skin signs/symptoms only flushing, hives. Itching, erythema with normal respiratory status, blood pressure and perfusion.

MODERATE SYMPTOMS: Involves 2+ body systems - Flushing, hives, itching, erythema plus respiratory (wheezing, dyspnea, hypoxia) and/or gastrointestinal (nausea, vomiting, abdominal pain) with normal blood pressure and perfusion.

SEVERE SYMPTOMS: Involves 2+ body systems as listed in moderate section but there is also hypotension and signs of poor perfusion.

Allergic reactions could occur with only respiratory and gastrointestinal symptoms and no rash / skin involvement.

Angioedema (swelling involving the face, lips or airway structures) may be seen in moderate or severe reactions. This can also be seen in patients taking blood pressure medications such as lisinopril.

The shorter the time frame from exposure to onset of signs/symptoms, the more severe the reaction.

Epinephrine is the drug of choice and should be administered first.

Cardiac monitoring and 12 lead ECG should not delay administration of the first dose of Epinephrine.

IM Epinephrine should be administered first as a priority before or during venous access attempts.

EMT may administer epinephrine IM via Autoinjector or manual draw up and IM injection.

EMT may administer albuterol nebulizer.

#### **POLICY CROSS REFERENCE**

MEDICATIONS: Epinephrine, Albuterol, Diphenhydramine, Solumedrol

# **QAEMS ALTERED MENTAL STATUS**

#### LICTORY

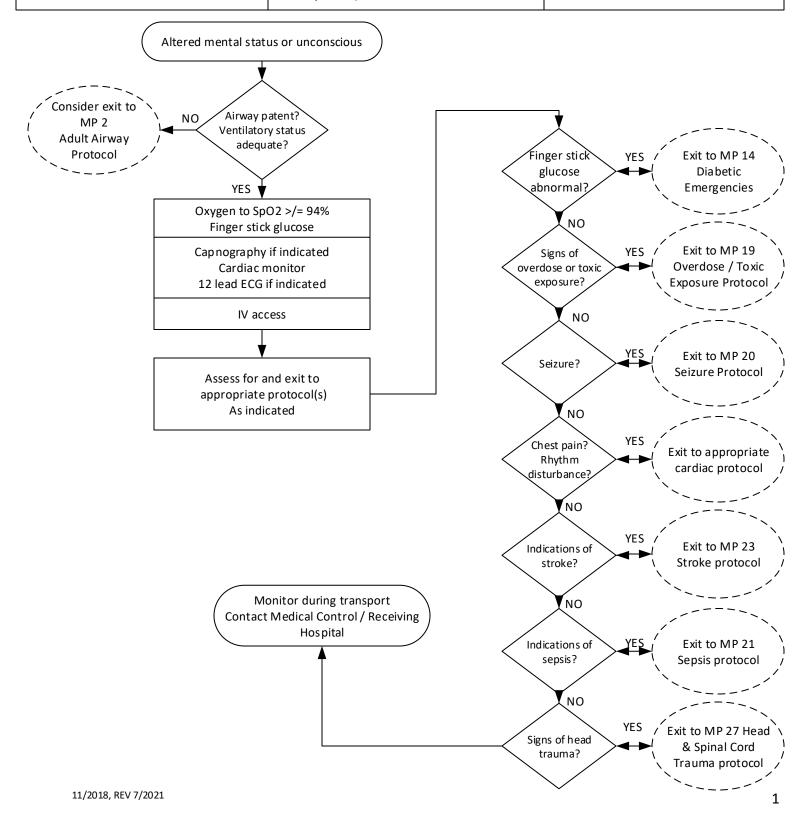
- Known diabetic
- Medic alert tag
- Report of drug use, overdose or toxic exposure
- Drugs / drug paraphernalia
- Past medical history
- Trauma
- Medications

#### SIGNS / SVMPTOM

- Change in normal baseline mental status
- Altered mental status
- Lethargy
- Bizarre behavior
- Hypoglycemia (cool, clammy skin, tachycardia, irritability)
- Hyperglycemia (warm, dry skin, Kussmaul's respirations, fruity breath odor, signs of dehydration)

### **DIFFERENTIAL (AEIOU-TIPS)**

- Alcohol
- Epilepsy / seizure
- Insulin / hypoglycemia / hyperglycemia
- Overdose
- Uremia
- Trauma / toxins
- Infections / sepsis
- Psychiatric
- Stroke



### **POLICY CROSS REFERENCE**

MP 2 Adult Airway Protocol

MP 14 Diabetic Emergencies

MP 19 Overdose / Toxic Exposures

MP 20 Seizure

MP 21 Sepsis

MP 23 Stroke

MP 27 Head and Spinal Cord Trauma

# QAEMS BEHAVIORAL PROTOCOL

#### **HISTORY**

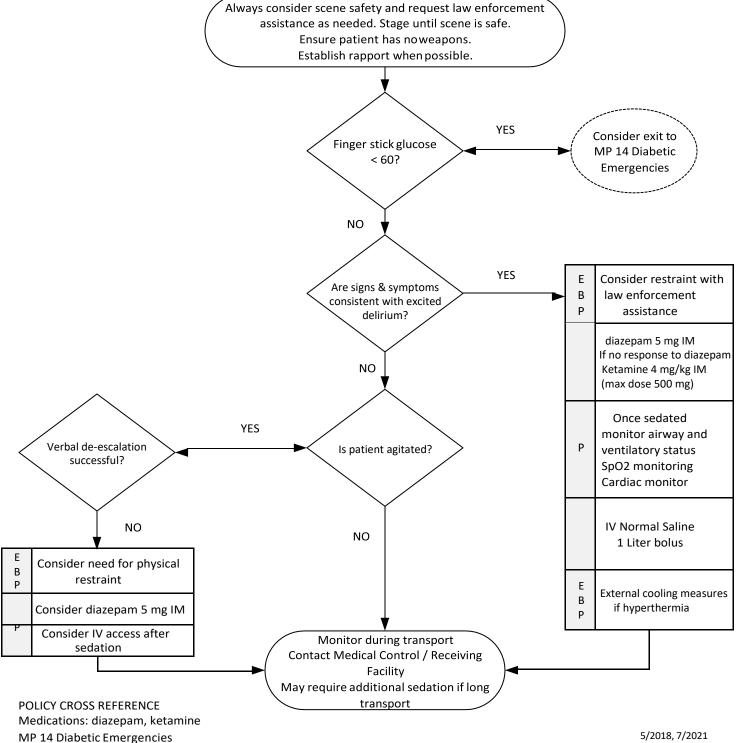
- Situational crisis
- Psychiatric illness
- Injury or threat to self
- Injury or threat to others
- Substance abuse / overdose

#### SPECIFIC OBJECTIVE FINDINGS

- Evaluate general appearance
- Affect and mood
- Hallucinations or delusional thoughts
- Speech
- Attention
- Bizarre behavior
- Excited delirium extreme agitation, hallucinations, combative, bizarre behavior, hyperthermia, incoherent speech, disrobing, paranoia, increased "super human" strength

#### DIFFERENTIAL

- Hypoglycemia
- Hypoxia
- Head trauma
- Alcohol intoxication
- Toxin / substance abuse
- Withdrawal syndromes
- Depression
- Bipolar (manic-depression)
- Schizophrenia
- Anxiety disorders



# **QAEMS BEHAVIORAL PROTOCOL**

#### **GENERAL INFORMATION**

- A behavioral emergency is a situation in which a patient's behavior becomes so unusual, bizarre, threatening or dangerous that it requires intervention.
- Reasonable concern for suicidal or homicidal ideation, or grave disability from psychiatric decompensation, is sufficient to assume the patient may lack medical decision-making capacity to refuse ambulance transport. Whenever possible, informed consent for treatment and transport should be obtained. If the patient refuses care, follow policy O-6.
- Attempt non-confrontational verbal communication to deescalate situation first when possible.
- Assess the patient and surrounding for possible weapons.
- Be alert for possible elopement.

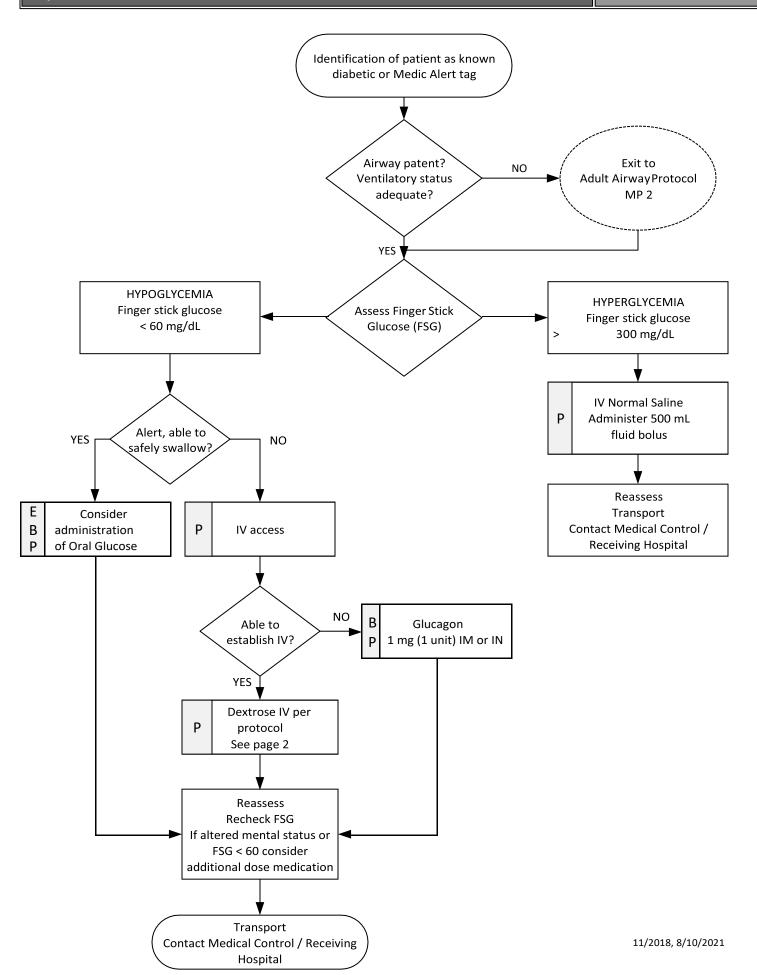
#### PHYSICAL RESTRAINT

- Physical restraint may be necessary when EMS personnel have a reasonable belief that the patient may harm himself or others.
- Safety is a priority only attempt restraint with adequate assistance. Request additional resources – EMS, law enforcement, fire as needed. Consider the need to clear bystanders from the immediate area.
- The objective of physical restraint is to restrict movement without endangering the patient.
- Appropriate restraining device examples include soft restraints, leather restraints, wide rollerbandages, triangular bandages. (Only use locking leather restraints if the caregiver in the patient compartment has the restraint key.)
- Patient monitoring includes positioning of the patient to enable immediate access to the airway and visualization of breathing/chest rise. Circulation in all limbs should be checked at least every 15 minutes during transport.
- Request law enforcement accompany the patient/crew in the ambulance if the patient is handcuffed or if safety concerns.

#### **DOCUMENTATION SHOULD INCLUDE:**

- An objective, concise description of the situation and observed behaviors. If restraint was necessary document behaviors that indicated the patient posed a danger to himself or others.
- Any additional resources that were required on scene.
- If restraint type of restraint utilized, time applied, patient condition before and after restraint, use of additional resources.
- Physical assessment that includes body positioning, airway and breathing, circulation to limbs.
- Treatment provided.

POLICY CROSS REFERENCE Medications: diazepam, ketamine MP 14 Diabetic Emergencies O-6 Refusal



# **QAEMS DIABETIC EMERGENCIES**

#### REFUSAL AFTER HYPOGLYCEMIC EPISODE

- This is considered a low risk refusal IF the patient experienced hypoglycemia due to insulin use which was corrected by administration of oral glucose or IV dextrose and whose family or friend will remain on scene after EMS departure (see O-6 Refusals)
- If your patient becomes alert and oriented after treatment he or she may decide to refuse transport.
  - Reassess the patient carefully including mental status, FSG, vital signs.
- Ensure that the patient is able to swallow and will eat. Determine if there is anyone to stay with the patient until blood sugars normalize.
  - Determine if the patient understands the situation that occurred and the risks related to refusing transport. The patient must make a clear decision regarding transport.
- If the situation does not meet low risk refusal criteria as above, relay clear information regarding the patient's decision to refuse care to Medical Control to obtain consent for the refusal.

#### **MEDICATIONS**

 EMT may administer glucagon via the intramuscular (IM) or intranasal (IN) route.

DEXTROSE 10% (25 grams/ 250 mL =

- Adult dosing: Administer 100 mL of the 10% solution, then reassess mental status and blood glucose. Can administer additional 100mL dose if mental status remains altered and/or blood glucose < 60 mg/dL.</li>
- Pediatric (0.5 gram/kg)
- Pediatric < age 8: 5 mL/kg up to 100 mL
- Pediatric > age 8 use adult dosing

### **POLICY CROSS REFERENCE**

MEDICATIONS: Dextrose; Glucagon; Oral Glucose MP 2 Adult airway protocol

#### **HISTORY**

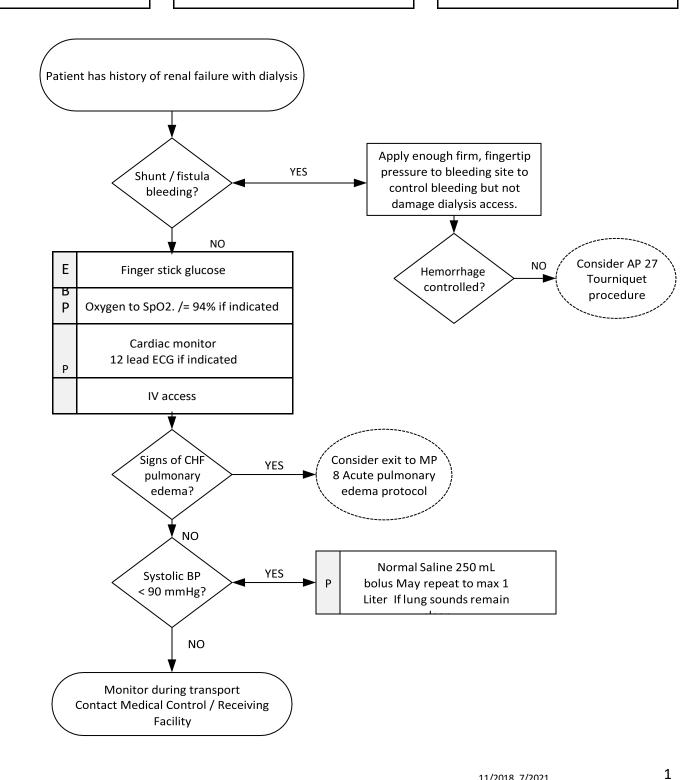
- History of peritoneal dialysis or renal dialysis
- Shunt or fistula access noted
- Dialysis catheter access noted

### SIGNS & SYMPTOMS

- Hypotension
- Altered mental status
- Fever
- Bleeding from access site
- Seizure
- Cardiac arrhythmia

#### **DIFFERENTIAL**

- CHF
- Diabetic emergency
  - Sepsis



11/2018, 7/2021

# QAEMS DIALYSIS / RENAL FAILURE

#### **GENERAL INFORMATION**

- Peritoneal dialysis: If patient complains of fever, abdominal pain or back pain, consider bringing the peritoneal dialysis fluid bag which has drained from the abdomen to the hospital.
- Hemodialysis: usually occurs 3 times per week at a dialysis center but can be performed at home.
- Utilize a dialysis access only if IV and IO is unsuccessful and the patient is in cardiac arrest or near cardiac arrest.

#### **COMMON COMPLICATIONS**

- Disequilibrium syndrome: shift of metabolic waste and electrolytes causing dizziness, nausea, vomiting and possibly seizures.
- Hypotension typically responds to small 250 mL boluses of Normal Saline.

#### **EQUIPMENT MALFUNCTION / ISSUE**

- Air embolism
- Bleeding
- Infection consider the possibility of sepsis

#### **CARDIAC ARREST**

- Follow MP 5 Cardiac Arrest protocol with the following additional medications
- Calcium chloride 1 Gram IV/IO
- Sodium bicarbonate 50 mEq IV/IO

POLICY CROSS REFERENCE
Medications: Calcium chloride, sodium
bicarbonate
AP 27 Tourniquet procedure
MP 8 Acute pulmonary edema

#### **HISTORY**

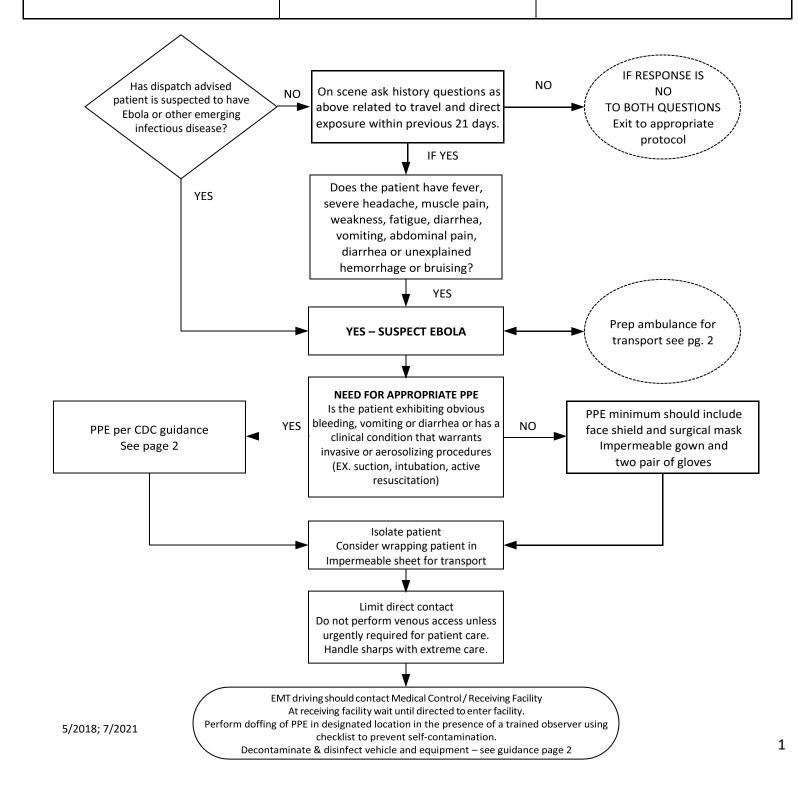
- Travel within the previous 21 days –if yes, location of travel (guidance regarding affected areas of the world will be provided by CDC, IDPH or local health departments).
- Any direct, unprotected contact with blood or body fluids (such as urine, blood, saliva, sweat, vomit, feces) of a person who is confirmed or suspected to have Ebola

#### SIGNS AND SYMPTOMS

 Ebola: fever, severe headache, muscle pain, weakness, fatigue, diarrhea, vomiting, abdominal pain, unexplained bleeding or bruising.

#### **RESOURCES**

- The most up to date information on any emerging infectious disease can befound at www.cdc.org or by contacting your local health department.
- Implementation of specific protocols will be upon the recommendation of local health departments or IDPH.



# QAEMS EMERGING INFECTIOUS DISEASE- EBOLA

# PPE for suspected or confirmed Ebola with bleeding, vomiting or diarrhea or need for aerosolizing procedures:

- Single use impermeable gown extending at least to mid-calf or single use impermeable coverall.
- Respiratory protection: PAPR or disposable NIOSH-certified N-95 respirator in combination with single-use (disposable) surgical hood extending to shoulders and single-use (disposable) full face shield.
- Two pair of disposable gloves with extended cuffs
- Single use disposable boot or shoe covers

Healthcare workers must follow the basic principles below to ensure that no infectious material reaches unprotected skin or mucous membranes while providing patient care.

#### **DONNING PPE**

PE must be donned correctly in proper order before entry into the patient care area; PPE should not be later modified while in the patient care area. The donning activities must be directly observed by a trained observer.

#### **DURING PATIENT CARE**

- PPE must remain in place and be worn correctly for the duration of patient care.
- PPE should not be adjusted during patient care. The one exception is that visibly contaminated outer gloves can be changed and patient care can continue. Contaminated outer gloves must be disposed of with other Ebola-associated waste.
- Healthcare workers should perform frequent disinfection of gloved hands using an ABHR, particularly after contact with body fluids.
- If during patient care any breach in PPE occurs, the agency exposure management plan should be implemented and appropriate occupational health follow-up, if indicated by assessment. In the event of a potential exposure, bloodborne pathogen exposure procedures must be followed in accordance with the OSHA Bloodborne Pathogens Standard.

#### **DOFFING PPE**

Removing used PPE is a high-risk process that requires a structured procedure, a trained observer, a doffing assistant in some situations, and a designated area for removal to ensure protection.

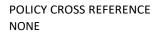
PPE must be removed slowly and deliberately in the correct sequence to reduce the possibility of self-contamination or other exposure to Ebola.

#### **AMBULANCE PREP**

- Remove and keep nonessential equipment away from the patient on the scene and in the ambulance. This will eliminate or minimize contamination. Consider covering equipment that cannot be removed.
- Avoid contamination of reusable porous surfaces not designated for single use. Cover the stretcher with an impermeable material.
- Take measures to isolated the driving compartment from the patient compartment.

# Decontaminate and disinfect (clean) vehicle and equipment while wearing appropriate PPE. Address disposal of waste.

- Consider prepositioning a trained crew wearing appropriate PPE to perform these operations, so that EMS personnel can focus on doffing PPE, communicating with hospital, and finishing appropriate documentation.
- Put on fresh PPE as recommended by CDC before decontaminating and disinfecting the vehicle when body fluids from a patient with suspected Ebola are present. If no bodyfluids are present then minimal PPE should be worn, including face shield and surgical mask; impermeable gown, and two pairs of gloves.
- Use an EPA-registered hospital disinfectant with a label claiming inactivation for a non-enveloped virus (e.g., norovirus, rotavirus, adenovirus, poliovirus) to disinfect environmental surfaces of vehicle and equipment used with suspected or confirmed Ebola virus infection. (http://www.cdc.gov/vhf/ebola/hcp/environmental-infection-control-in-hospitals.html).
- Follow instructions for cleaning and decontaminating surfaces or objects soiled with blood or body fluids.
- After the bulk waste is wiped up, the surface should be disinfected as described below. There should be the same careful attention to the safety of the EMS providers during the cleaning and disinfection of the transport vehicle as there is during the care of the patient.
- A blood spill or spill of other body fluid or substance should be managed by personnel wearing correct PPE, and includes removal of bulk spill matter, cleaning the site, and then disinfecting the site. For large spills, a chemical disinfectant with sufficient potency is needed to overcome the tendency of proteins in blood and other body substances to neutralize the disinfectant's active ingredient. ,(http://www.cdc.gov/vhf/ebola/hcp/environmental-infection-control-in-hospitals.html).
- Clean and disinfect patient-care surfaces and equipment, and other areas that are likely to become contaminated after each transport. Avoid contamination of reusable porous surfaces that are not designated as single use.
- Place contaminated reusable patient care equipment (e.g., glucometer, blood pressure cuff) in biohazard bags and label for cleaning and disinfection. Clean and disinfect reusable equipment according to agency policies and manufacturer's instructions by trained personnel wearing correct PPE.
- Discard any bodily secretions (such as urine or vomit) as directed by hospital staff.
- EMS systems should work with designated receiving hospitals to dispose of waste from suspected Ebola patients. Discarded materials suspected of being contaminated with Ebola (i.e., used PPE, used linens, non-fluid-impermeable pillows or mattresses and bulk waste) that are transported to an off-site disposal facility must be packaged and transported in accordance with the Hazardous Materials Regulations (HMR, 49 C.F.R. Parts171-180).
- Leave vehicle to dry as normal.
- ② Once cleaning is complete, doff PPE using same procedures and trained observer in a designated area as with the patient care crew.



#### **HISTORY**

- Flu-like symptoms
- Travel history
- Sick contacts

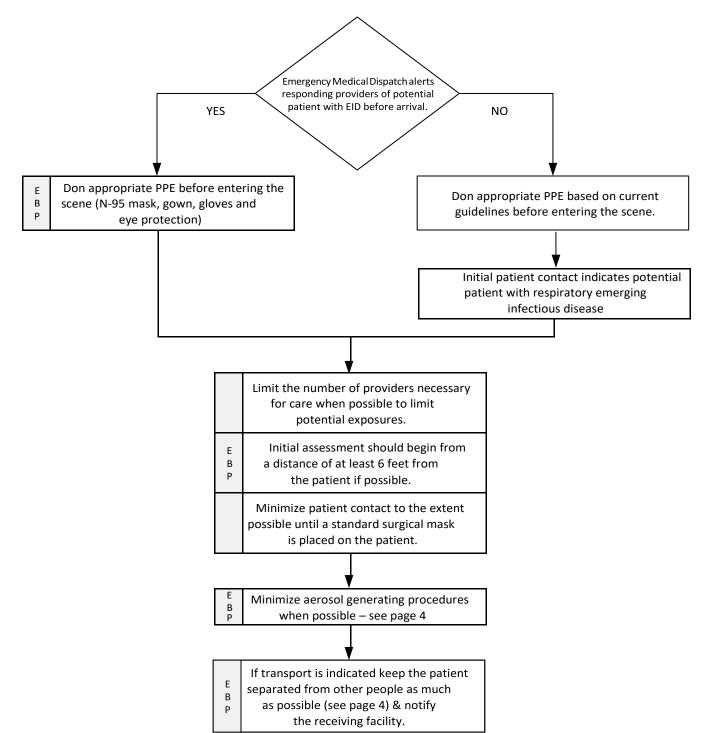
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#### **SIGNS AND SYMPTOMS**

- Fever > 100.4°F
- Cough
- Shortness of breath
- Nasal/ chest congestion
- Sore throat
- Body aches

#### **DIFFERENTIAL**

- Bacterial infections
- Viral infections
- Asthma / COPD
- Cardiac
- Heat related illness
- Hyperthyroidism



# QAEMS EMERGENCY INFECTIOUS DISEASE – RESPIRATORY (COVID-

#### RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

- PATIENTS
- Place a standard surgical mask on the patient
- If a nasal cannula is in place, the facemask can be placed over the cannula. An oxygen mask can be used if clinically indicated.

#### PROVIDERS (Standard, contact and airborne protection)

- Disposable exam gloves
- Disposable isolation gown
- Respiratory protection (e.g. N-95 or higher-level respirator)
- Eye protection (e.g. goggles or disposable face shield that covers the front and sides)

#### AIRWAY MANAGEMENT TECHNQIUES FOR AEROSOL-GENERATING PROCEDURES

- Ensure full provider PPE is donned prior to performing airway or aerosol generating procedures.
- Aerosol-generating procedures should be limited. Use caution when utilizing BVM, CPAP, intubation, blind insertion airway devices, and nebulizer therapies.
  - BVMs and other ventilator equipment should be equipped with HEPA filtration to filter expired air when possible.
  - Non-transport providers should defer aerosol-generating procedures to the transporting agency when possible to limit exposure.
- Limit nebulized breathing treatments if possible. Utilization of albuterol metered dose inhaler (MDI) is encouraged, favoring the use of the patient's own MDI when available.
- Use of BIAD blind insertion airway device would cause less exposure risk when needed.

#### **EMS TRANSPORTATION GUIDELINES**

- Notify the receiving facility about the patient with concern for emerging infectious respiratory disease as soon as possible.
- Keep the patient separated from other people as much as possible.
- Family members and other contacts of the patient suspected of EID should not ride in the transport vehicle, if possible.
- Isolate the driver from the patient compartment and keep the pass-through door/ window tightly shut.
- Vehicle ventilation should be on non-circulated mode when possible. If the vehicle has a rear exhaust fan, turn it on full.
- If the vehicle does not have an isolated drive and patient compartment, open the outside air vents in the driver area and turn the rear exhaust fan on full.

#### **DECONTAMINATION**

- After transport, leave the rear doors of the transport vehicle open to allow for sufficient air exchange.
- Wear appropriate PPE when cleaning and disinfecting.
- Use an EPA-approved disinfectant cleaning product according to product instructions to clean surfaces and reusable equipment.
- Follow current guidelines for the containment and disposal of used PPE and regulated medical waste.
- Follow current guidelines for containing and laundering linen. Avoid shaking linen.

# **QAEMS HYPERTENSIVE CRISIS**

#### HISTORY

- History of hypertension
- Medications for hypertension and compliance with those medications
- Related diseases diabetes, stroke, renal failure, cardiac
- Erectile dysfunction medications
- Pregnancy
- Pain
- Anxiety

### SIGNS & SYMPTOMS

#### One of these

- Systolic BP 220 or >
- Diastolic BP 120 or >

## And at least two of these:

- Headache
- Altered mental status
- Chest pain
- Dyspnea
- Seizure

#### **DIFFERENTIAL**

- Hypertensive encephalopathy
- Primary CNS injury Cushing's response with hypertension and bradycardia
- Aortic dissection / aneurysm
- Myocardial infarction
- Preeclampsia / eclampsia



Systolic BP 220 mmHg or >
OR Diastolic BP 120 mmHg or >
On at least two measurements five minutes apart.

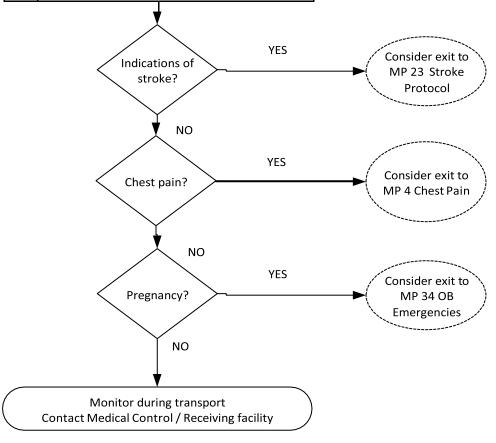
YES

Obtain and document
BP measurement in both arms

E
B
Oxygen to maintain SpO2 >/= 94%
P
Position with head of bed
elevated 30 degrees

Cardiac monitor
P
12 Lead ECG

IV access



# **QAEMS HYPERTENSIVE CRISIS**

#### **GENERAL**

- Hypertension is not uncommon especially in an emergency setting. Hypertension is usually transient and in response to stress and / or pain.
- A hypertensive emergency is based on blood pressure along with symptoms which suggest an organ is suffering damage such as MI, CVA or renal failure. This is very difficult to determine in the prehospital setting in most cases.
- Aggressive treatment of hypertension can result in harm. Most patients, even with significant elevation in blood pressure, need
- only supportive care.
- Specific complaints such as chest pain, dyspnea, pulmonary edema or altered mental status should be treated based on specific protocols and consultation with Medical Control.

#### **POLICY CROSS REFERENCE**

MP 4 Chest Pain protocol MP 34 OB Emergencies protocol MP 23 Stroke protocol

M- labetalol

# **QAEMS NAUSEA & VOMITING**

#### HISTORY

- Onset/duration
- Number of episodes vomiting
- Appearance of the emesis/ blood
- Any contacts /family members sick
- History of pregnancy
- Medications
- Travel history

#### SIGNS/SYMPTOMS

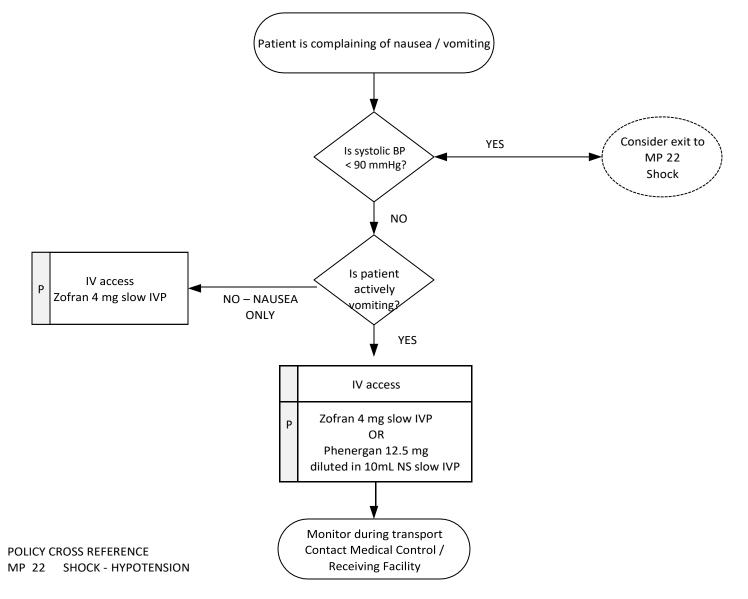
- Abdominal pain
- Abdominal distention
- Diarrhea or constipation

#### DIFFERENTIAL

- Gastroenteritis
- CNS associated (Migraine/headache, stroke. Trauma, tumor)
- Myocardial infarction
- Carbon monoxide poisoning
- Other toxin
- Medications (NSAIDS, narcotics, antibiotics, chemotherapy)
- GI disorder
- Pregnancy

#### MEDICATIONS

- Zofran (ondansetron) 4 mg slow IVP, can repeat dose X 1 in 15 minutes if needed.
- Pediatric dose- contact Medical Control
- Phenergan (promethazine) 12.5 mg diluted in 10 mL NS, slow IVP. Can repeat dose in 15 minutes if necessary.
- Pediatric dose (over age 2) 0.25 mg/kg diluted in 10 mL NS slow IVP – requires contact with Medical Control. No repeat dose.
- Phenergan can produce sedation in elderly or debilitated patients.
- Phenergan could cause akathisia (involuntary movements) or dystonia (muscle spasms and rigidity or rolling of eyes.) If noted administer Benadryl 25 mg slow IVP. (Pediatric contact Medical Control)
- Don't mix antiemetics. If you administered one of your options and it was not effective, contact Medical Control.



11/2018, 7/2021

# QAEMS OVERDOSE / TOXIC EXPOSURE

#### **HISTORY**

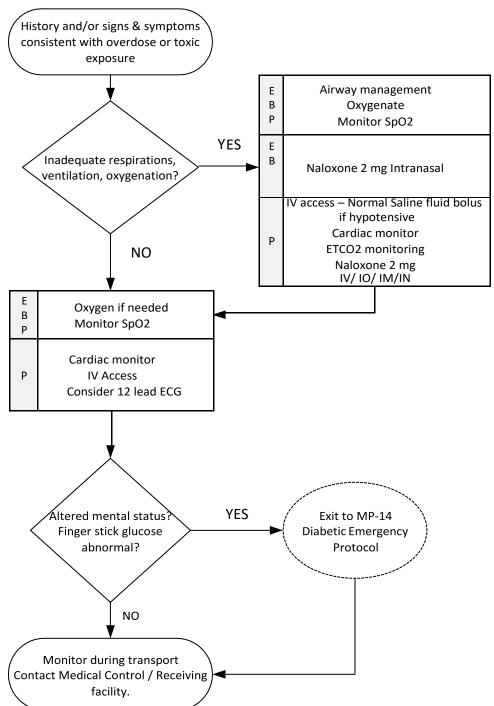
- Suspected or known ingestion of a potentially toxic substance
- Substance ingested, route, time of ingestion, quantity
- Reason (suicidal, accidental, criminal)
- SAMPLE

#### SIGNS AND SYMPTOMS

- Mental status changes
- Hypotension/ hypertension
- Decreased respiratory rate
- Tachycardia, dysrhythmias
- Seizures
- S.L.U.D.G.E
- Excited delirium extreme agitation, hallucinations, combative, bizarre behavior, hyperthermia, incoherent speech, disrobing

#### DIFFERENTIAL

- Opioid overdose
- CNS depressant / sedative overdose
- Stimulants
- Insecticides / pesticides
- Tricyclic antidepressants (TCAs)
- Cardiac medications
- Solvents, cleaning agents



#### **SPECIFIC ANTIDOTES**

Insecticide / pesticide exposure with S.L.U.D.G.E

- Atropine 2-5 mg IV may need to repeat in 5-10 minutes
- Be prepared for airway management / suction

Tricyclic antidepressant (example Elavil, Tofranil, triavil, amitriptyline)

- If QRS is > 0.12 seconds or arrhythmias or seizures administer sodium bicarbonate 50 mEq IV push
- Be prepared for sudden change in responsiveness
- Be prepared for seizures

Beta blocker / Calcium channel blocker overdose

- Glucagon 2 mg IM or IV
- Calcium chloride 1 gram slow
   IV push over 2-3 minutes
- May need transcutaneous pacing for severe cases
- IV fluid boluses for shock

#### Carbon monoxide

- Remove from source
- High flow oxygen

POLICY CROSS REFERENCE

Medications: naloxone, atropine, sodium bicarbonate, glucagon, calcium chloride MP 14 Diabetic Emergencies

# **QAEMS SEIZURES**

#### HISTORY

- Reported or witnessed seizure activity
- Prior seizure history
- Medical alert tag
- Seizure medication
- History of trauma
- History of diabetes
- History of fever
- History of alcohol use, abuse or abrupt cessation
- History of pregnancy / preeclampsia
- Time of onset and duration of seizures

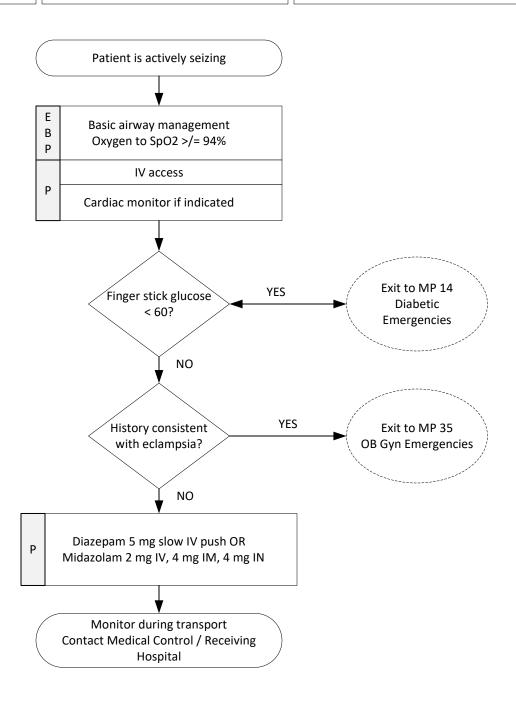
### SIGNS / SYMPTOMS

- Tonic clonic or jerking movement
- Altered mental status
- Drowsiness
- Incontinence
- Tongue injury

**STATUS EPILEPTICUS**: two or more successive seizures without a period of consciousness or recovery.

#### **DIFFERENTIAL**

- Hypoglycemia
- Hypoxia
- Head trauma
- Tumor
- Electrolyte abnormality
- Medication non-compliance
- Toxins
- Infection /fever
- · Alcohol withdrawal
- Eclampsia
- Stroke
- Hyperthermia



#### **POLICY CROSS REFERENCE**

Medication: diazepam MP 14 Diabetic Emergencies MP 35 OB GYN Emergencies

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# QAEMS SEPSIS

### **HISTORY**

- Age > 18
- Duration, severity of fever
- Past history pneumonia, urinary tract infection, meningitis, cellulitis, decubitus ulcers, recent hospitalization and/or surgical procedure
- Immunocompromised: transplant, HIV/AIDS, diabetes, cancer
- Already treating infection

#### SIGNS & SYMPTOMS

- Altered mental status
- Hyperthermia > 100.4 F or hypothermia </= 96.8F (If no thermometer – skin hot or cold)
- Heart rate > 90
- Respiratory rate > 22 or PaCO2 < 32 mmHg
- Systolic BP </= 90 mmHg
- Hyperglycemia / hypoglycemia

#### **DIFFERENTIAL**

- Cancer tumors, lymphoma
- Medication or drug reaction
- Hyperthyroid
- Meningitis
- Hyperglycemia

#### TIME

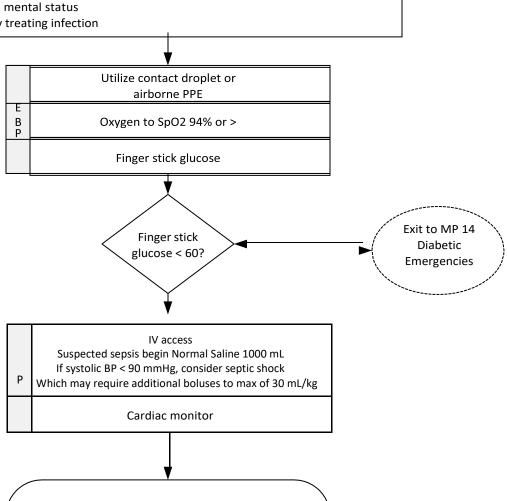
- Temperature
- Infection
- **Mental Status**
- Extremely III

#### Two or more of the following criteria

- Heart rate > 90/minute
- Respiratory rate > 22/minute or PaCO2 < 32 mmHg or mechanical ventilation
- Body temp > 100.4 F or </= 96.8 F
- Systolic BP </= 90 mmHg

### Plus 1 of the following

- Chief complaint suggestive of infection
- Altered mental status
- Already treating infection



11/20/2018, 8/9/2021

Monitor during transport Contact Medical Control / Receiving Facility

# QAEMS SEPSIS

### **GENERAL**

- Keep patient warm if skin feels cold or body temperature is below normal.
- Contact receiving hospital as soon as possible to notify of possible sepsis (sepsis alert).

## TIME MNEMONIC FOR RECOGNITION

- Temperature (greater than 100.4 F or less than 96.8 F)
- Infection
- Mental Status (altered)
- Extremely III

POLICY CROSS REFERENCE MP 14 Diabetic Emergencies

# QAEMS SHOCK / HYPOTENSION

#### **HISTORY**

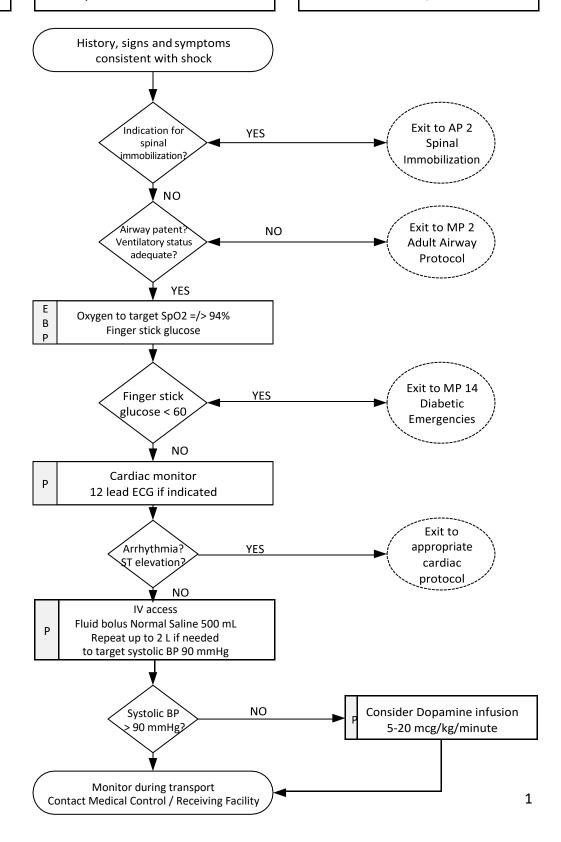
- Blood loss trauma, gastrointestinal, obstetrical
- Fluid loss vomiting, diarrhea, fever, infection
- Cardiac issue MI, CHF, arrhythmia
- Medications
- Allergic reaction
- Poor oral intake

#### SIGNS & SYMPTOMS

- Restlessness, confusion
- Weakness, dizzy
- Weak, thready pulse
- Pale, cool, clammy skin
- Delayed capillary refill
- Hypotension
- · Coffee ground emesis
- Tarry stools

## DIFFERENTIAL

- Shock hypovolemic, cardiogenic, septic, anaphylactic, neurogenic
- Ectopic pregnancy
- Arrhythmias
- Pulmonary embolus
- Tension pneumothorax
- Vasovagal
- Medication effect / overdose



# QAEMS SHOCK / HYPOTENSION

### **GENERAL**

- Hypotension can be defined as a systolic blood pressure of less than 90. This is not always reliable and should be interpreted in context and patients typical BP if known.
- Shock may be present with a normal blood pressure initially.
- Shock often is present with normal vital signs and may develop insidiously.
- Tachycardia may be the only manifestation.
- Consider all possible causes of shock and treat per appropriate protocol.

### **POLICY CROSS REFERENCE**

Medication: Dopamine AP 2 Spinal Immobilization MP 14 Diabetic Emergencies MP 2 Adult Airway Protocol

# QAEMS SUSPECTED STROKE

#### **HISTORY**

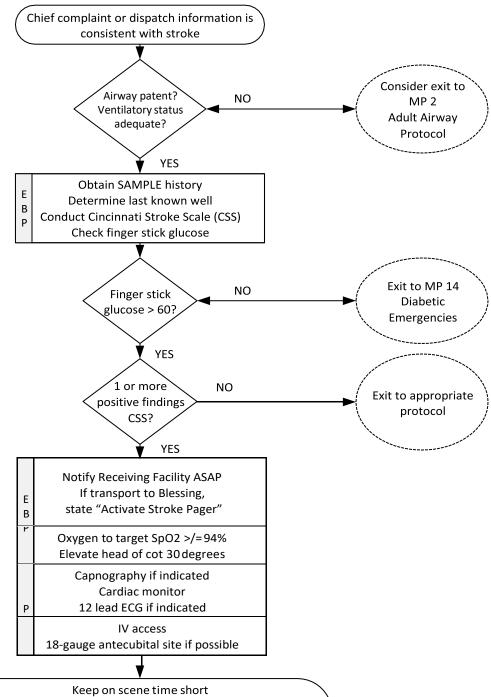
- Previous CVA
- TIA
- Previous cardiac vascular surgery
- Diabetes
- Hypertension
- Atrial fibrillation
- Coronary artery disease

#### SIGNS & SYMPTOMS

- Altered mental status
- Weakness or paralysis one side ofbody
- Slurred speech, aphasia, dysphasia
- Headache
- Dizziness, vertigo
- Syncope

#### **DIFFERENTIAL**

- Stroke thrombotic or embolic ~ 85%
- Stroke hemorrhagic ~ 15%
- Transient ischemic attack (TIA)
- Hypoglycemia
- Seizure
- Trauma
- Tumor



Monitor during transport

Transport to a Primary Stroke Center
or to a Stroke Ready Hospital (has CT and tPA)

# **QAEMS SUSPECTED STROKE**

#### **CINCINNATI STROKE SCALE**

Facial Droop (Ask the patient to smile)

- Normal: Both sides of the face move equally
- Abnormal: One side of face does not move

Speech: (Ask the patient to repeat a simple sentence)

- Normal: Patient uses correct words with no slurring.
- Abnormal: Slurred speech or inappropriate words or unable to speak

Arm drift (Ask patient to close eyes and hold arms straight out in front of them.)

- Normal: Both arms move equally or not at all.
- Abnormal: One arm drifts downward compared to the other arm.
- Any one abnormal finding in the CSS is an indication of stroke. Do not delay on scene. Notify the receiving facility as soon as possible – if transporting to Blessing use "Activate the Stroke Pager" verbiage to ensure appropriate response in the Emergency Department.

#### **COMMUNICATION AND DOCUMENTATION: All**

communications and documentation of suspected stroke should include

- SAMPLE history
- Last known well
- Cincinnati Stroke Scale results
- Blood glucose results
- Whether there was loss of consciousness

#### **LAST KNOWN WELL**

- One of the most important factors for the prehospital provider to determine is the last known time that the patient was symptom free. This needs to be as precise as possible and reported as an actual time.
- Treatment in the hospital including eligibility for thrombolytic medication depends on accuracy of this information.

**DESTINATION HOSPITAL**: All suspected stroke patients should be transported to a hospital capable of providing emergent stroke care.

- All EMS providers should be familiar with the capabilities / designation of the hospitals in their service area or nearby.
  - A listing of Illinois hospitals with stroke center designations is available at http:// www.dph.illinois.gov/sites/default/files/publications/ stroke-center-listing-101117.pdf
- Quincy Area EMS System hospitals have all received IDPH designations indicating they are capable of providing emergent stroke care.
  - Primary Stroke Center: Blessing Hospital
  - Acute Stroke Ready Hospitals: Illini Community Hospital, Memorial Hospital in Carthage
- Bypass / Diversion: If the closest stroke designated hospital is on bypass or diversion or indicates they temporarily do not have CT capability, contact Medical Control for guidance.

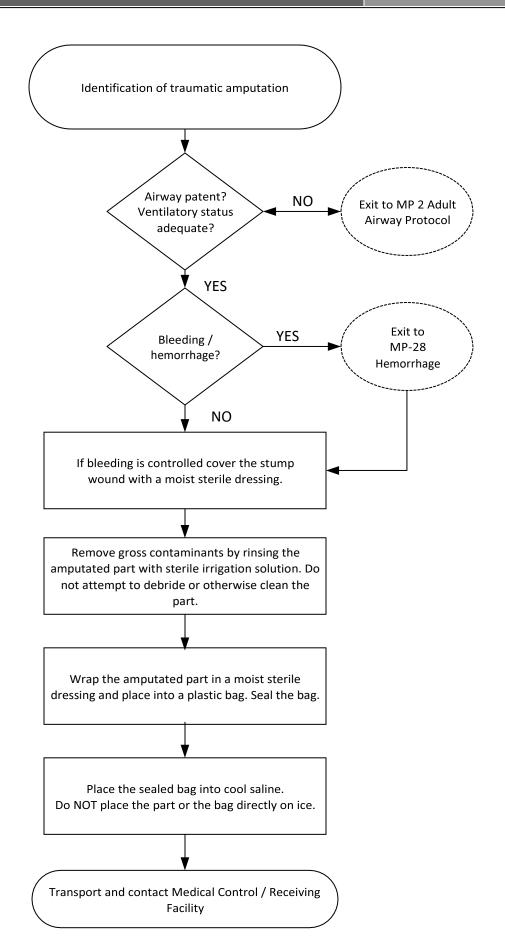
#### **POLICY CROSS REFERENCE**

MP 14 Diabetic Emergencies MP 2 Adult Airway Protocol

#### **ALL Provider Levels**

(E) Emergency Medical Responder (B) Emergency Medical Technician (P) Paramedic/PHRN

Do not delay transport to search for amputated parts. Search should be continued by other on-site providers (EMS, law enforcement, fire)



### **POLICY CROSS REFERENCE**

MP 2 Adult Airway Protocol MP 28 Hemorrhage

### QAEMS ADULT THERMAL BURN

- Type of exposure (heat, gas, chemical)
- Inhalation injury
- Time of injury
- Past medical history and medications
- Other trauma
- Loss of consciousness

#### SIGNS AND SYMPTOMS

- Redness, pain, swelling, blisters
- Dizziness
- Altered mental status
- Hypotension/ shock
- Potential for airway compromise could be indicated by hoarseness, stridor, muffled voice, wheezing

#### DIFFERENTIAL

- Superficial (1<sup>ST</sup> degree) redness, pain (do not include in TBSA)
- Partial thickness (2<sup>nd</sup> degree) redness, pain with blistering
- Full thickness (3rd degree) charred, leathery
- Thermal injury
- Chemical injury
- Electrical injury
- Radiation injury
- Blast injury

Assess Burn / Concomitant Injury Severity

### MINOR BURN < 5% TBSA 2<sup>nd</sup>/ 3<sup>rd</sup> degree No inhalation injury Not intubated Normotensive GCS 14 or > Remove rings, bracelets, & constricting items Dry clean sheet or dressings Oxygen to SpO2 target >94% В Monitor SpO2 Monitor ETCO2 if available IV access if indicated Pain management Morphine 2-4 mg IV or Fentanyl 25-50 mcg IV Rapid transport to appropriate destination. Contact Medical Control / Receiving Facility

#### **SERIOUS BURN**

#### 5-15% TBSA 2<sup>nd</sup> & 3<sup>rd</sup> degree burns

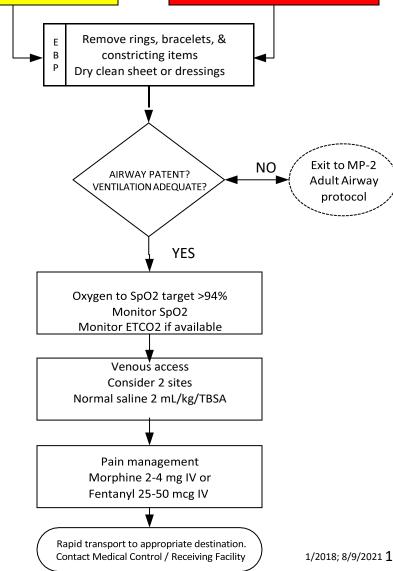
- Suspected inhalation injury or requires intubation
- Hypotensive
- GCS 13 or <

When reasonably accessible, transport to a Burn Center

#### **CRITICAL BURN**

- > 15% TBSA 2<sup>nd</sup> & 3<sup>rd</sup> degree burns
- Associated multiple trauma
- Definitive airway compromise

When reasonably accessible, transport to a Burn Center



### QAEMS ADULT THERMAL BURN

#### **GENERAL**

- Burn patients are trauma patients, assess for multisystem trauma.
- Ensure that any smoldering clothing has been extinguished.
- Cut off clothing. Remove shoes, boots or leather items that could hold in heat.
- Remove jewelry.
- Do NOT apply burn ointments in the field.
- Do NOT remove tar or asphalt in the field unless it affects the airway.
- The usual rules of splinting apply.
- Burn patients are prone to hypothermia. Don't attempt to cool by applying water or ice. Maintain normothermia.

### FLUID REPLACEMENT MODIFIED BROOKE FORMULA

- 2 mL X BSA burned X Weight in kg
- The goal is to provide adequate fluid resuscitation based on patient condition, not to administer this amount during field management.
- Give ½ of the total amount over the first eight hours.
- Give ½ of the total amount over the next 16 hours.

#### **PAIN MANAGEMENT**

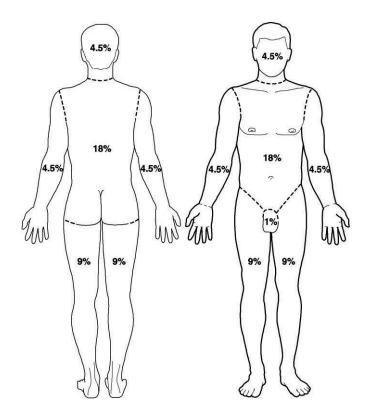
 Patients with burns may require higher loading doses of pain medications. Consider starting with high end of normal dosing such as Morphine 4 mg or fentanyl 50 mcg.

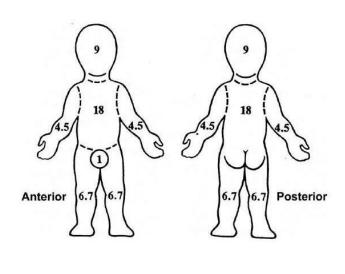
#### **BURN CLASSIFICATION**

- Superficial redness, pain
- Partial thickness redness, blisters, pain
- Full thickness charred, leathery, white, no pain at site

#### **TRANSPORT**

 Patients with moderate and critical burns will most likely be transferred to a burn center. Patients are usually transported to the closest appropriate facility. If unsure, contact Medical Control.





#### **POLICY CROSS REFERENCE**

MEDICATIONS: Morphine; fentanyl MP 2 Adult Airway Protocol MP 3 Pain Management

### QAEMS ELECTRICAL BURNS / LIGHTNING

#### **Electrical Injury**

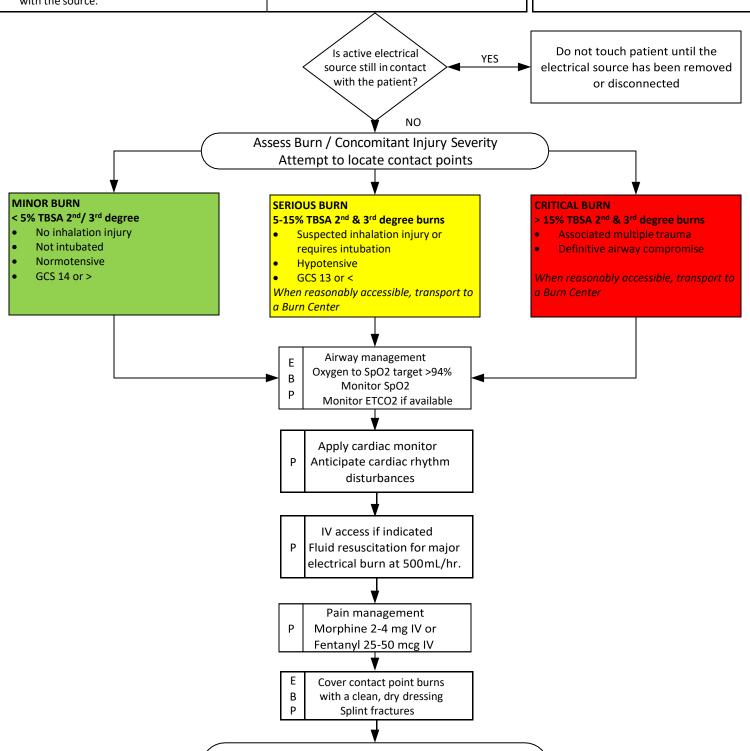
- Direct injuries occur when a patient contacts an electrical source. There could be multiple contact points where electrical current enters and exits the body.
- Indirect injuries occur when patient receives an injury associated with the electrical shock such as falling from a ladder after receiving shock and sustaining fractures from the fall.
- Arc: electricity traveling between two conductors & transmitted to a person near but not in contact with the source.

#### ACCECCIMENT

- Try to determine history, what patient was doing when the injury occurred.
- Anticipate thermal burns, cardiac rhythm disturbances, fractures, internal injury and CNS damage.
- Surface burns may reflect only a small portion of the overall burn injury. Deep tissue injury can occur anywhere along the path current traveled through the body.

Lightning Injuries occur due to close proximity (arc) or direct contact with a conduit for the lightning energy transfer.

- Lightning injuries are more likely to produce CNS disruption, cardiac rhythm disturbances and arc or flash injuries.
- The EMS provider is not at risk for shock by touching the victim of a lightning strike however may also be at risk if lightning is in the area.



Transport to appropriate destination.

Contact Medical Control / Receiving Facility

### **QAEMS CHEMICAL BURNS**

#### DECONTAMINATION

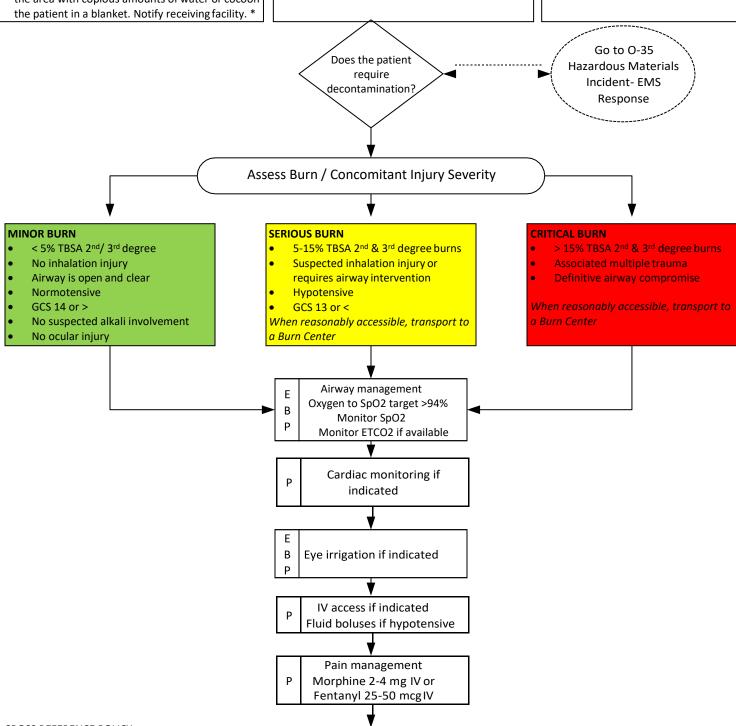
- Patients with chemical contamination who you receive in the cold zone / safe zone should already be decontaminated. Always check to be sure decontamination has occurred.
- There should be no contaminated clothing, jewelry or other belongings on the patient and these may have been safely bagged to transport with the patient.
- If no haz mat team, have patient remove all clothing, brush off any solid substance & irrigate the area with copious amounts of water or cocoon the patient in a blanket. Notify receiving facility. \*

#### **ASSESSMENT**

- Try to determine the history what the patient was doing when chemical injury occurred
- Obtain the name of the product and bring the container to the hospital if safe to do so.
- An exothermic reaction from the chemical may produce a thermal burn.
- Effects of the chemical can include burns, pulmonary edema, cardiac rhythm disturbances or cardiac arrest.

#### **EYE IRRIGATION**

- Irrigate the contaminated eye with saline solution or water continuously for at least 20 minutes.
- If only one eye is affected do not contaminate the unaffected eye.



Transport to appropriate destination.

Contact Medical Control / Receiving Facility

Notify early if no decontamination on scene. \*

### QAEMS DROWNING

#### **HISTORY**

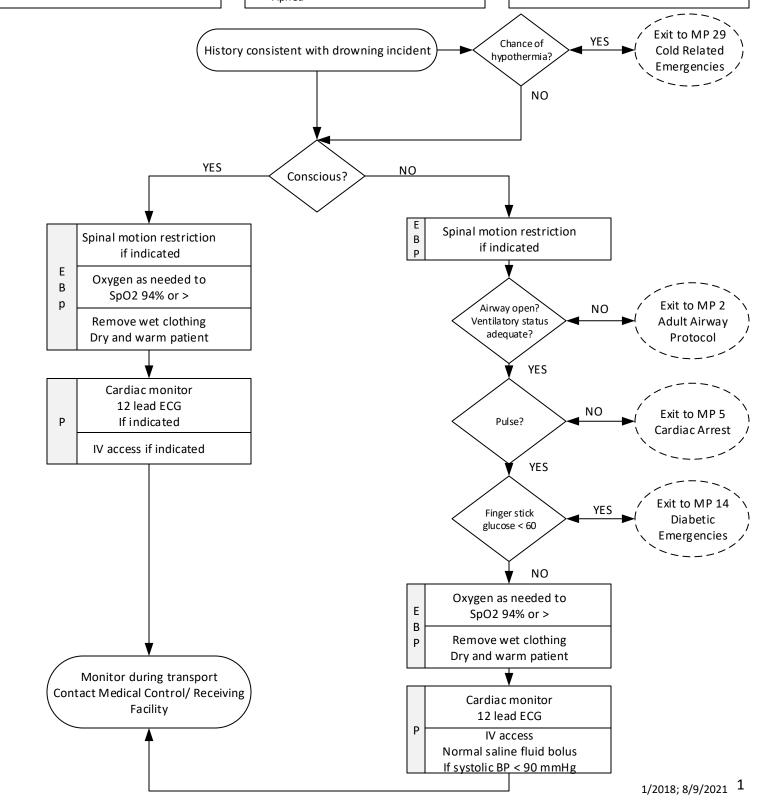
- Submersion in water regardless of depth
- Possible history of trauma
- Duration of submersion or immersion
- Temperature of water or possibility of hypothermia

#### SIGNS & SYMPTOMS

- Altered mental status or unresponsive
- Decreased or absent vital signs
- Vomiting
- Foam from mouth
- Coughing
- Wheezing, crackles, rhonchi, stridor
- Apnea

#### **DIFFERENTIAL**

- Trauma
- Hypoglycemia
- Cardiac arrhythmia
- Post-immersion
- Pressure injury from scuba diving



### QAEMS DROWNING

#### GENERAL

- Safety should be your primary consideration. If the victim is in the water use means to remove without endangering yourself or other crew members
- All victims of drowning who require any form of resuscitation (including rescue breathing alone) should be transported to the hospital for evaluation and monitoring, even if they appear to be alert and demonstrate effective cardiores piratory function at the scene.
- If patient refuses treatment and transport after evaluation, strongly advise to seek further medical evaluation. Symptoms could be delayed for hours.
- Consider need for CPAP if meets criteria to open alveoli and push fluid out of lungs.
- Cervical spine injuries and head trauma should be suspected in all
  unwitnessed incidents and injuries involving body surfers, board surfers,
  and victims diving in shallow water or water with submerged objects
  such as rocks and trees. (Ref PHTLS ninth ed. Pg 639)

#### **POLICY CROSS REFERENCE**

MP 2 Adult Airway Protocol MP 5 Cardiac Arrest MP 14 Diabetic Emergencies

#### SIGNS & SYMPTOMS TBI

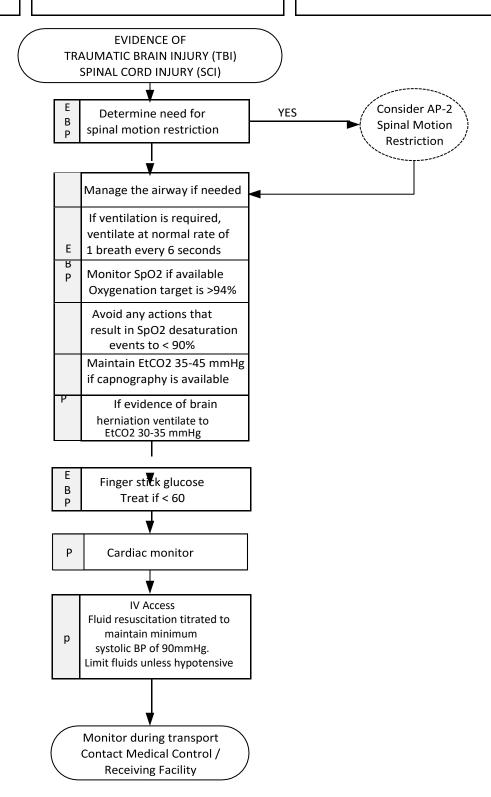
- Altered mental status
- Amnesia
- Vomiting
- Pupillary changes

#### **RECOGNITION CEREBRAL HERNIATION**

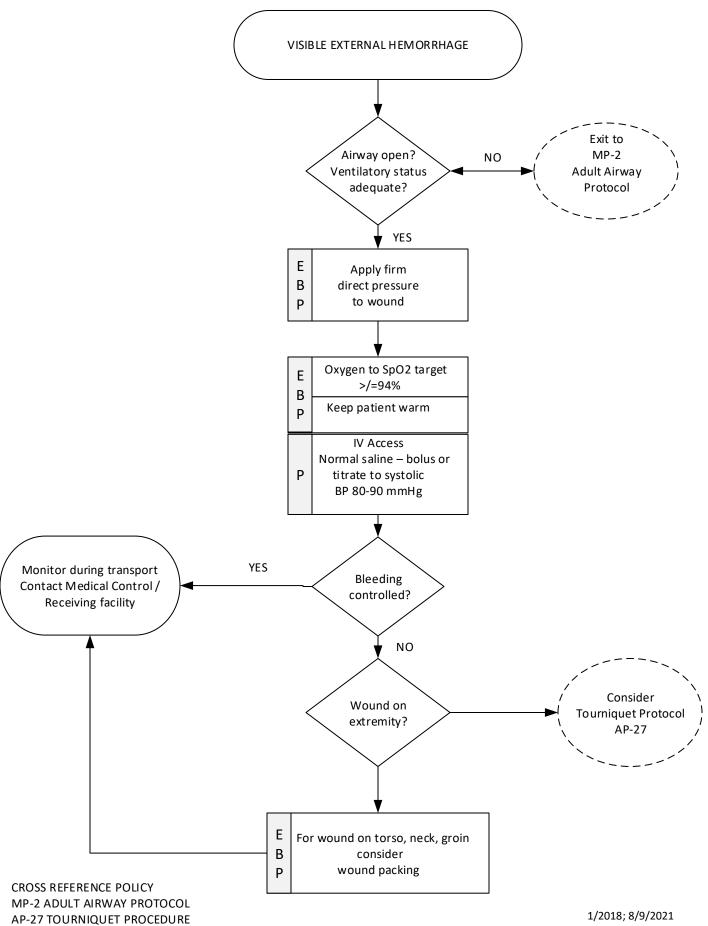
- Cushing triad: increasing systolic BP, slowing heart rate, irregular respirations
- Unilateral or bilateral dilation of pupils with sluggish or no reaction to light
- Posturing- decerebrate or decorticate

#### SIGNS & SYMPTOMS SCI

- Inability to move (paralysis)
- Weakness in arms or legs
- Tingling or numbness is arms or legs
- "Hold" up position
- Priapism



POLICY CROSS REFERENCE AP-2 Spinal Immobilization



1/2018; 8/9/2021

### QAEMS HEMORRHAGE

#### **DIRECT PRESSURE**

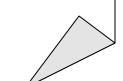
- Direct hand pressure should be applied directly over the bleeding site and is the first technique employed to control external hemorrhage.
- Direct pressure is almost always effective if firm pressure is employed for a minimum of 3-5 minutes and it is ensured that pressure is being applied directly over the wound.
- Applying direct pressure to exsanguinating hemorrhage takes precedence over insertion of IV lines and fluid resuscitation.

#### **WOUND PACKING**

- The most effective bleeding control for hemorrhage from a deep wound may be achieved by packing dressing material directly over the bleeding vessel deep into the wound, then applying a compression dressing.
- Wound packing may be utilized when the wound is in a location on the body that prohibits use of a tourniquet.

#### **FLUID RESUSCITATION**

- Fluid resuscitation should be targeted to keeping the systolic blood pressure between 80-90 mmHg which should allow for perfusion of vital organs.
- Infusing large volumes of IV fluid could have detrimental affects of disturbing the clot or further diluting clotting factors and oxygen carrying capacity.



POLICY CROSS REFERENCE MP 2 ADULT AIRWAY PROTOCOL AP 27 TOURNIQUET

## QAEMS COLD RELATED EMERGENCIES

#### **HISTORY**

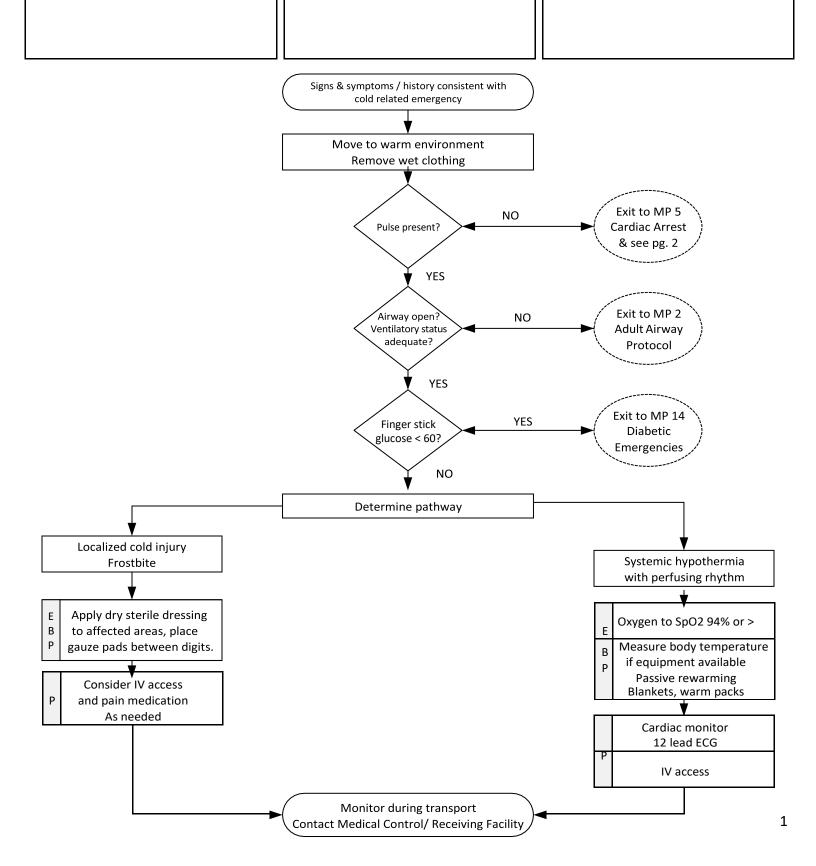
- Age, very young and old 2
- Exposure to decreased temperatures but may occur in normal temperatures
- Past medical history / Medications
- Drug use: Alcohol, barbiturates
- Infections / Sepsis
- Length of exposure / Wetness / Wind chill

#### **SIGNS & SYMPTOMS**

- Altered mental status / coma
- Cold, clammy
- Shivering
- Extremity pain or sensory abnormality Bradycardia
- Hypotension or shock

#### **DIFFERENTIAL**

- Environmental exposure
- Sepsis
- Hypoglycemia
- CNS dysfunction stroke, head injury, spinal cord injury



### **QAEMS COLD RELATED EMERGENCIES**

#### SEVERE HYPOTHERMIA AND CARDIAC ARREST (2010 & 2015 AHA ECC guidelines)

- Severe hypothermia (body temperature <30°C [86°F]) is associated with marked depression of critical body functions, which may make the victim appear clinically dead during the initial assessment. Therefore, lifesaving procedures should be initiated unless the victim is obviously dead (e.g., rigor mortis, decomposition, decapitation).
- The victim should be transported as soon as possible to a center where aggressive rewarming during resuscitation is possible.
- Patients with severe accidental hypothermia and cardiac arrest may benefit from resuscitation even in cases of prolonged downtime and prolonged CPR. The patient should not be considered dead until rewarming has taken place.
- The temperature at which defibrillation should first be attempted in the severely hypothermic patient and the number of defibrillation attempts that should be made have not been established. If pVT or VF is present, defibrillation should be attempted. If pVT or VF persists after a single shock, the value of deferring subsequent defibrillations until a target temperature is achieved is uncertain. It should be considered reasonable to follow the ACLS algorithm and provide additional shocks as the patient is rewarmed.
- It may be reasonable to consider administration of a vasopressor (Epinephrine) during cardiac arrest according to the standard ACLS algorithm concurrent with rewarming strategies. (Class IIb, LOE C).
- 2 Antiarrhythmic agents (Lidocaine) should be deferred in the severely hypothermic patient in cardiac arrest or use longer dosing intervals.
- Contact Medical Control for advice as needed.

#### **POLICY CROSS REFERENCE**

MP 2 Adult Airway Protocol MP 5 Cardiac Arrest MP 14 Diabetic Emergencies

11/2018, 8/9/2021

### QAEMS HEAT RELATED EMERGENCIES

#### **HISTORY**

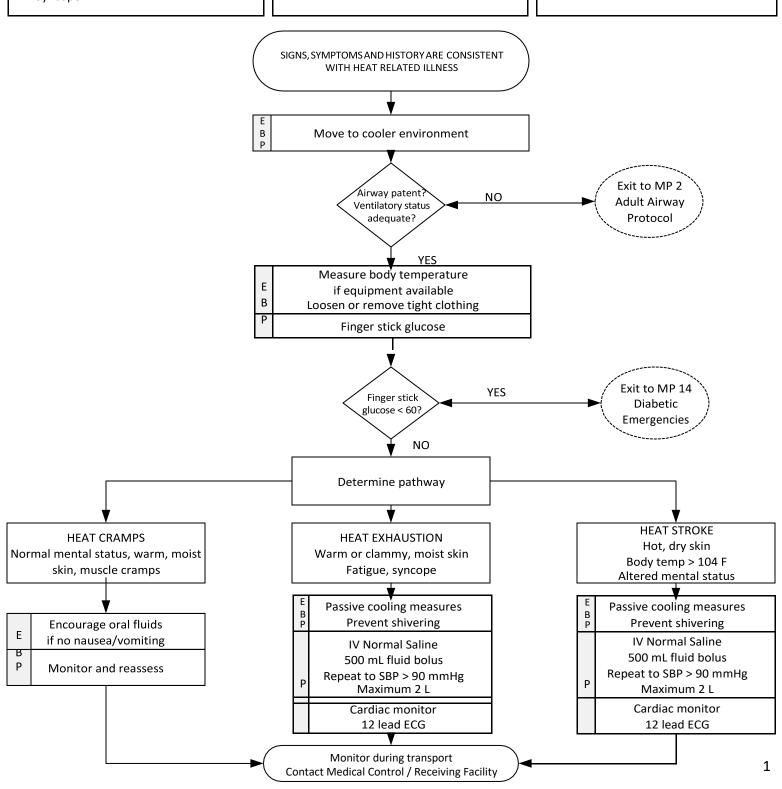
- Age very young or elderly
- Exposure to high temperatures and/or humidity
- Past medical history
- Medications
- Poor oral intake
- Extreme exertion
- Fatigue
- Cramping
- Syncope

#### SIGNS AND SYMPTOMS

- Altered mental status
- Hot dry skin
- Warm, sweaty skin
- Nausea / vomiting
  - Cramps
- Seizures

#### DIFFERENTIAL

- Heat cramps, heat exhaustion or heat stroke
- Fever (infection)
- Dehydration
- Medications
- Hyperthyroidism (thyroid storm)
- Delirium tremens
- CNS lesions or tumors



## QAEMS HEAT RELATED EMERGENCIES

#### GENERAL

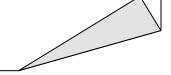
- Heat cramps are usually self-limiting and will resolve with cooling and fluid/electrolyte intake. Rarely is there a need for pain medication.
- Heat exhaustion is a common heatrelated illness and is usually mild.
- Heat stroke is a serious illness that involves multiple body systems and often results in circulatory failure.

#### PASSIVE COOLING MEASURES

- Remove patient to a cool environment.
- Loosen or remove any tight clothing.
- Allow convection to cool the patient by fanning or using the air conditioner in the ambulance.

### ADDITIONAL COOLING MEASURES FOR HEAT STROKE

- Target body temperature is 102.5 F
- Apply cold packs to the neck, axillae and groin.
- Cover the patient with a dampened sheet and use the fan/AC to circulate cool air.
- Remove wet sheet once target body temperature is achieved.
- Prevent shivering.



#### POLICY CROSS REFERENCE

MP 2 Adult Airway Protocol MP 14 Diabetic Emergencies

11/2018, 8/9/2021

### **QAEMS LATEX ALLERGIES**

### IMMEDIATE REACTION- SYSTEMIC – usually occurs within 15 minutes

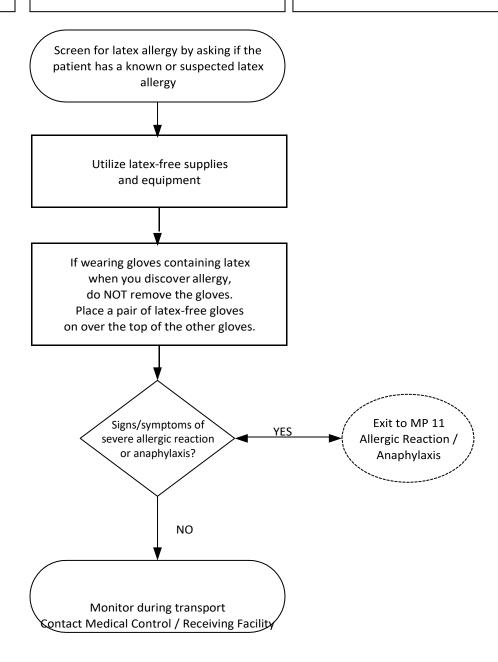
- Generalized rash
- Itching / Urticaria (hives)
- Dyspnea
- Wheezing, stridor
- Tachycardia, tachypnea
- Dizzy, lightheaded, syncope
- Abdominal cramps
- Nausea, vomiting, diarrhea
- Hypotension
- Altered mental status
- Cardiac arrest

### DELAYED REACTION: May produce signs and symptoms within 6-48 hours

- Localized itching
- Localized erythema (redness)
- Localized rash or vesicles (small blisters)
- Dry patches
- Crusting and thickening of the skin

#### AT RISK PERSONS

- Healthcare workers
- Workers with industrial exposure to latex / rubber industry
- History multiple surgeries
- Spina bifida
- Urogenital abnormalities or frequent urinary procedures
- Predisposition to allergies



POLICY CROSS REFERENCE
MP 11 Allergic Reaction / Anaphylaxis

11/2018, 8/9/2021 1

# QAEMS RADIATION EXPOSURE

#### **LICTODY**

- Type of exposure or contamination
- Route of exposure- ingestion, inhalation, absorption through skin or mucous membranes or injection
- Time and duration
- SAMPLE history
- Trauma

#### SIGNS AND SYMPTOMS

- Effects of irradiation may not be evident for days or weeks
- Effects of contamination will depend on the amount and form of contamination and may include burns, respiratory distress, loss of consciousness, hypotension, shock.

#### DIFFERENTIAL

- External irradiation: all or part of the patient's body has been exposed but is not contaminated. Poses no risk of contamination to EMS crews.
- Contamination: Patient has been contaminated by radioactive materials in the form of solid, liquid or gas and is a risk to EMS crew.
- Could happen in combination.

Appropriate for all provider Suspected radiation exposure levels Try to determine irradiation versus contamination E, B, P Limit exposure to contaminated patient or material through limiting time in contact with contaminated patient, maintaining adequate distance, and wearing appropriate PPE NO Decontamination Exit to appropriate required? protocol YES Wrap the patient in blankets Decontamination to be performed NO YES and limit contact to necessary Decon team available? by trained haz mat crew who have procedures. appropriate PPE Notify receiving hospital of contaminated patient. Exit to appropriate protocol Monitor during transport Contact Medical Control / Receiving Facility At receiving facility if contaminated patient, wait with patient until instructed. 11/2018, 8/9/2021

### QAEMS OB DELIVERY UNCOMPLICATED

#### **OB HISTORY**

- Length of gestation how many weeks or months pregnant? Due date?
- Gravida how many times pregnant?
- Parity How many deliveries?
- Prenatal care?
- Any problems during the pregnancy?
- When did contractions start?
- How far apart are the contractions?
- Urge to push?
- Has water broken? If yes, did it look clear?
- SAMPLE

#### **OB ASSESSMENT**

- Assess for crowning during contractions. Visual inspection only.
- Crowning = the presenting part of the baby is at the vaginal opening.
  - Fetal heart tones (if able)
- Abdominal assessment
- Vital signs
- SpO2
- Any bleeding / Amount
- Presence of meconium
- Urge to push

**EQUIPMENT FOR DELIVERY** 

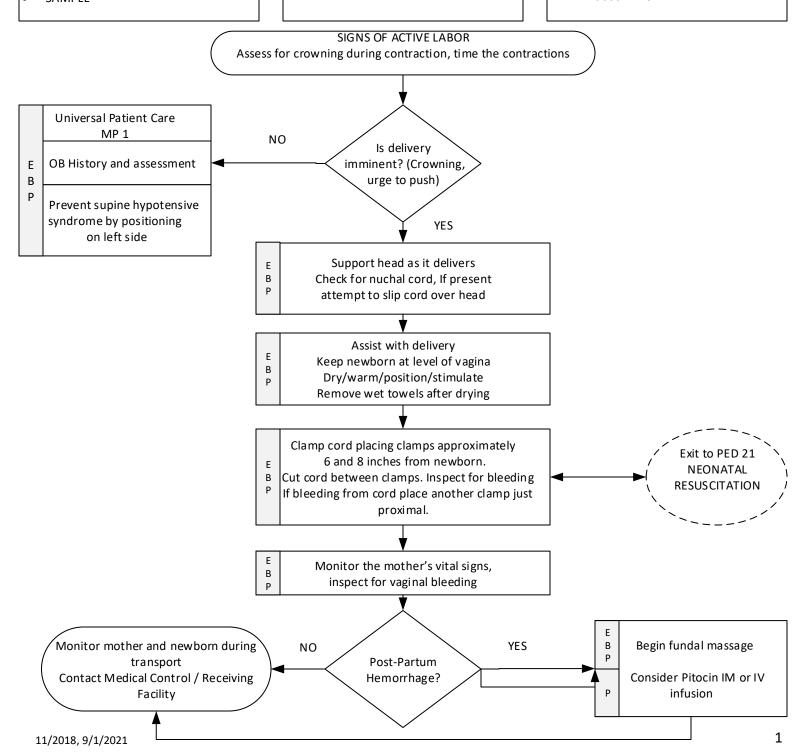
OB kit

**Towels** 

PPE - gloves. Face shield, gown

#### POLICY CROSS REFERENCE

PED 21 NEONATAL RESUSCITATION



### **QAEMS OB DELIVERY WITH COMPLICATIONS**

#### OR HISTORY

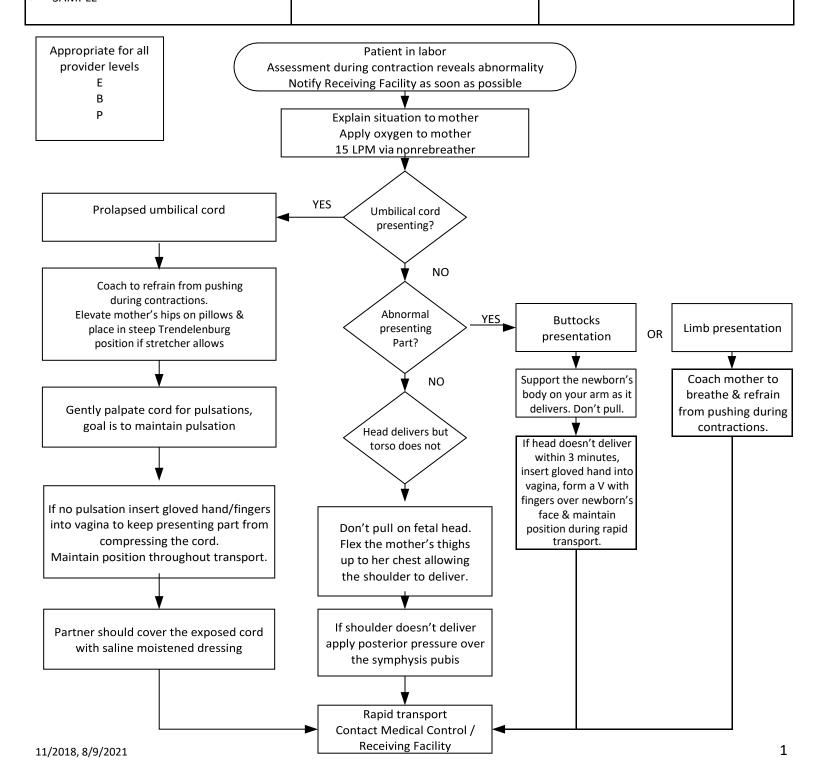
- Length of gestation how many weeks or months pregnant? Due date?
- Gravida how many times pregnant?
- Para How many deliveries?
- Prenatal care?
- Any problems during the pregnancy?
- When did contractions start?
- How far apart are the contractions?
- Urge to push?
- Has water broken? If yes, did it look clear?
- SAMPLE

#### SIGNS AND SYMPTOMS

- Prolapsed cord: umbilical cord is protruding from the vagina.
- Shoulder dystocia: Head delivers then retracts tightly against the mother's perineum (turtle sign) or shoulderdoes not deliver with next two contractions.
- Breech: presenting part other than the fetal head.

#### DIFFERENTIAL

- Prolapsed cord
- Abnormal presentation buttocks, foot, hand
- Shoulder dystocia
- Other issue



### QAEMS OB - GYN EMERGENCY

#### **HISTORY**

- Obtain SAMPLE history
- Hypertension meds
- Prenatal care
- Prior pregnancies / births
- Vaginal bleeding onset, try to quantify amount (ex. pads saturated per hour)

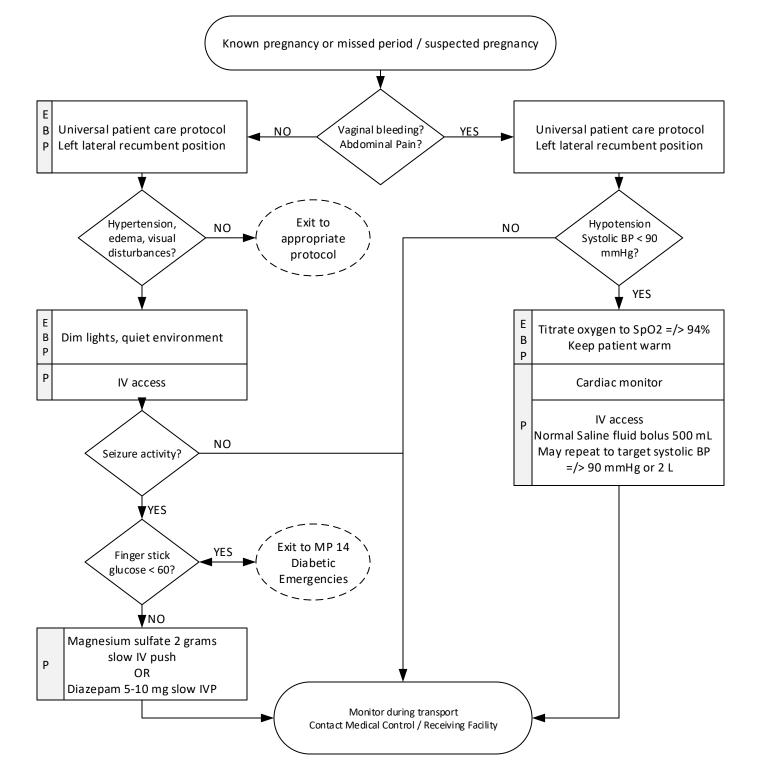
#### •

#### SIGNS AND SYMPTOMS

- PRE-ECLAMPSIA: Hypertension, severe headache, visual changes, edema hands and face.
- ECLAMPSIA: Same as Pre-eclampsia plus seizure activity.
- SPONTANEOUS ABORTION / MISCARRIAGE: Abdominal pain/cramps, vaginal bleeding or spotting.
- THIRD TRIMESTER VAGINAL BLEEDING: with or without abdominal pain

#### **DIFFERENTIAL**

- Pre-eclampsia / eclampsia
- Placenta previa
- Placenta abruptio
- Spontaneous abortion (miscarriage)



#### **VAGINAL BLEEDING**

 Ask patient to quantify bleeding – number of pads used per hour

#### **TRAUMA**

 Any pregnant patient involved in an MVC should be evaluated by a physician.

#### PREECLAMPSIA - ECLAMPSIA

- Recommended Exam: Mental Status, abdomen, heart, lungs, neuro
- Severe headache, vision changes, or RUQ pain may indicate preeclampsia
- In the setting of pregnancy, hypertension is defined as BP >140 systolic or > 90 diastolic, or a relative increase of 30 systolic and 20 diastolic from the patient's normal (prepregnancy) blood pressure.
- Magnesium may cause hypotension and decreased respiratory drive. Use with caution

#### SUPINE HYPOTENSIVE SYNDROME

- May occur in pregnant patients over 20 weeks gestation due to the gravid uterus compressing the inferior vena cava when the patient is supine.
- Maintain patient in left lateral recumbent position to minimize risk of supine hypotensive syndrome.
- Remember that pregnant patients who are immobilized should be tilted in order to minimize risk of supine hypotensive syndrome.

#### **POLICY CROSS REFERENCE**

Medication: diazepam, magnesium sulfate

MP 14 Diabetic Emergencies

11/2018, 8/9/2021

### **QAEMS SUSECTED ABUSE**

**CHILD ABUSE**: mistreatment of a child under the age of 18 by:

- Parent or romantic partner
- Immediate relative or someone living in the home
- Caretaker such as babysitter or daycare worker
- Any person responsible for the child's welfare such as an educator, coach, health care worker.

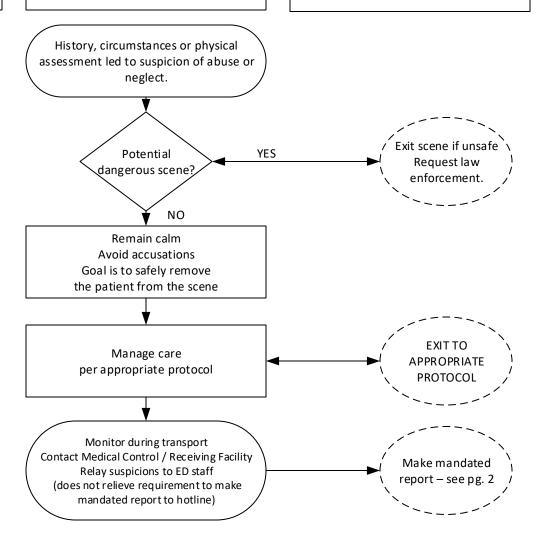
Protocol appropriate for all provider levels E,B, P

#### **PHYSICAL ABUSE**

- Injuries are inconsistent with child's developmental age
- Fractures in children unable to walk
- Multiple bruises or welts in various stages of healing in areas not prone to bruising (face, neck, ears, back, backs of legs/arms)
- Pattern burns or injuries

#### **REPORTING HOTLINES**

- Child abuse hotline: 1-800-252-2873 24 hours
- Adult Protective Services hotline: 1-866-800-1409 (for seniors age 60 and over and adults with disabilities age 18-59)



### **QAEMS SUSPECTED ABUSE**

DCFS has the primary responsibility for protecting children through the investigation of suspected abuse or neglect by parents and other caregivers in a position of trust or authority over the child.

TYPES OF ABUSE

- Physical: physical injuries
- Neglect: failure of the parent or caretaker to meet minimum parenting standards for providing adequate supervision, food, clothing, medical care, shelter or other basic needs.
- Sexual: fondling, sexual contact
- Mental: emotional or psychological

The Illinois Department on Aging investigates reports of abuse or neglect of seniors over age 59, and adults with disabilities age 18-59.

- All types of abuse listed above can occur as well as financial abuse
- DOCUMENTATION: The Patient Care Report form should be detailed and objective describing injuries and scene observations.
   It is important to include any statements made in quotations.

#### SUSPECTED DOMESTIC ABUSE

EMS providers are required to be able to provide information to victims of domestic abuse in order for them to access support services.

- Domestic Violence Helpline 877-863-6338 The number is toll-free, multilingual and available 24/7. The victim calls the helpline and the trained operator assists them to determine type of services needed and how to access those.
- Quanada (Quincy) 1-800-369-2287

### Making the mandated report – Child Abuse Be prepared to provide the following information if known

- Patient name, age, address
- Name & address of suspected abuser
- Relationship of the caretaker to the patient
- Your observations
- Names & ages of siblings in the home
- Any other relevant information

Making the mandated report – seniors over age 60 or adults with disabilities 18-59. Be prepared to provide the following information if known:

- Patient name, sex, age, general condition
- Alleged abuser's name, age, relationship to the patient
- Circumstances your observations
- Any immediate danger, any danger to investigators
- Your opinion whether the patient has the ability to make the report themselves
- Your name, phone number and profession
- Name of anyone else with knowledge of the situation

### **QAEMS THORACIC TRAUMA**

#### Signs & Symptoms

#### Pneumothorax

- Dyspnea
- Diminished or absent lung sounds on affected side

#### **Tension Pneumothorax**

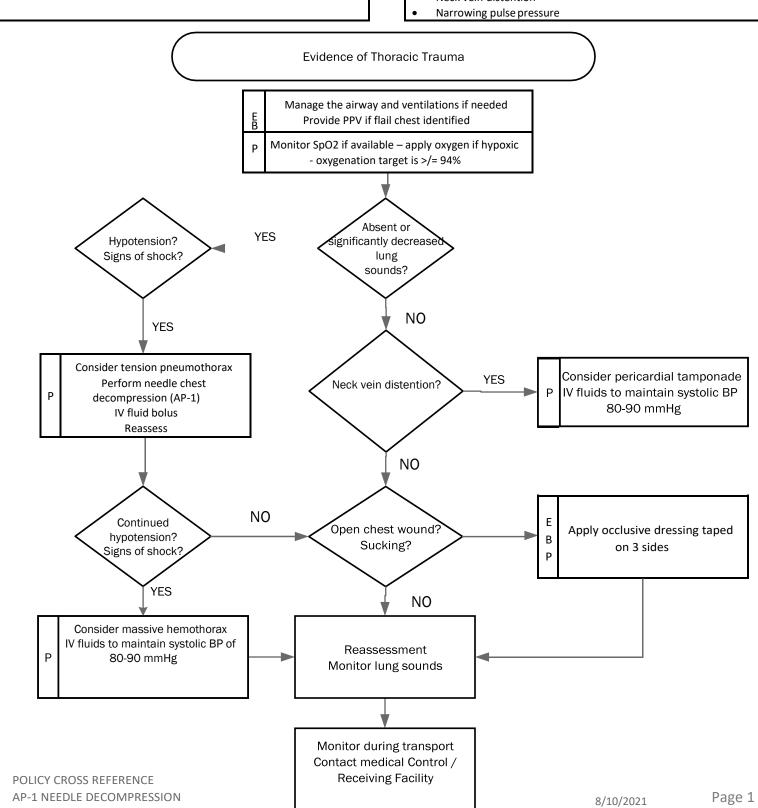
- Above plus hypotension
- · Tracheal deviation away from affected side
- Neck vein distention

Absent or significantly diminished lung sounds on one side differential

- Pneumothorax
- Open pneumothorax
- Tension pneumothorax
- Hemothorax

Pericardial tamponade signs & symptoms

- Muffled or distant heart sounds
- Neck vein distention



### QAEMS TRAUMATIC ARREST PROTOCOL

#### **GENERAL**

- Resuscitation success rates of trauma patients in cardiac arrest are extremely poor, usually due to prolonged hypoxia.
- Efforts to resuscitate are more likely to be successful if EMS arrives early in the arrest, understands the differences between traumatic cardiac arrest and medical cardiac arrest and treatment is directed at identifying and treating the underlying cause.
- Traumatic arrest is usually caused by airway problems, breathing problems (from chest trauma) and / or circulatory problems (internal or external hemorrhage.

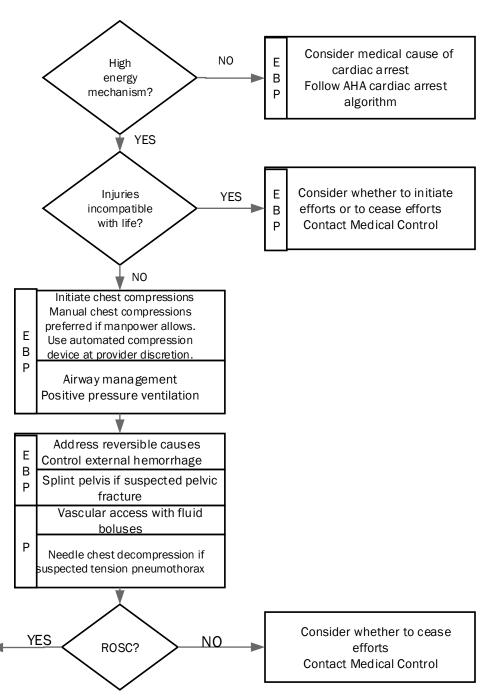
#### CONSIDER:

- Medical cause of cardiac arrest such as drowning or cardiac event preceding the collapse. Follow standard AHA algorithms if suspected.
- Reversible causes: Hypoxia, hypovolemia, tension pneumothorax and cardiac tamponade

#### DECISION TO STOP RESUSCITATION

 Guided by duration of cardiac arrest, lack of response to life saving interventions, persistently low ETCO2, Medical Direction

TRAUMATIC CARDIAC ARREST Confirmed by no pulse, no signs of life



facility Maintain airway, oxygenation, systolic BP 80-90 mmHg

Rapid transport

Contact Medical Control / Receiving

### QAEMS SCUBA RELATED EMERGENCIES

#### **DIVE RELATED ILLNESSES**

- Decompression sickness (bends): occurs when the diver makes a rapid ascent or is at depth too long causing nitrogen bubbles to form in the blood and tissues
- Arterial gas embolism (AGE): results from pulmonary overpressure when expanding gases rupture the alveoli allowing bubbles to enter the arterial circulation
- Barotrauma: occurs when trapped air expands in a closed space - ears, sinuses, lungs

#### **ASSESSMENT**

NEUROLOGICAL: Headache, visual changes, altered mental status, motor/ sensory deficits, paralysis/ hemiplegia, seizures

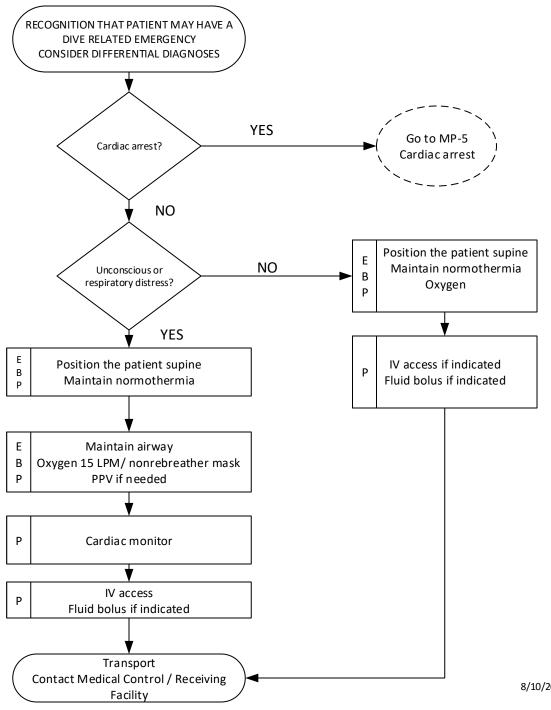
RESPIRATORY: dyspnea, tachypnea, cough, crackles/rales, frothy pink sputum

SKIN: itching, rash, skin marbling, localized cyanosis, pitting edema, pain especially in the

DIFFERENTIAL DIAGNOSES: stroke, heart failure, hypoglycemia/ hyperglycemia

#### **INFORMATION**

- Decompression sickness can occur up to 24 hours after a dive.
- Scuba diving is a popular sport and there are many dive sites in the Midwest.
- Dive emergencies can occur at any depth
- Complete a dive history including maximum depth of the dive, time spent at depth, number of dives, alcohol or drugs, time since reaching the surface.
- A dive computer or dive buddy can provide critical information regarding the dive and events leading up to the emergency if available.
- DAN (Divers Alert Network) emergency line 1-919-684-9111 for consultation



### QAEMS ABDOMINAL AND PELVIC TRAUMA

#### **GENRAL INFORMATION**

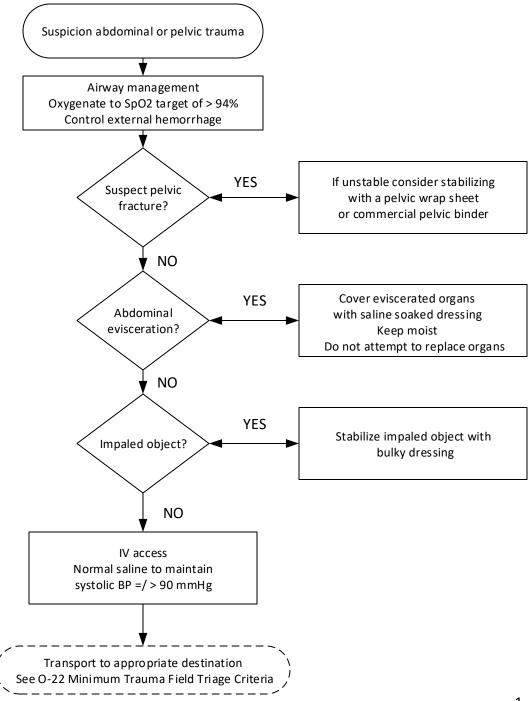
- Assess mechanism of injury
- The pelvic area is a potential space that can accumulate 1500+ mL of blood.
- The abdomen can hold 1500 mL of blood before showing obvious distention

#### SIGNS / SYMPTOMS PELVIC TRAUMA

- Early suspicion, identification & management of pelvic fracture reduces risk of death.
- Pain in the pelvic area, groin, hips, low back
- Deformity, bruising or swelling over bony prominences, pubis, perineum or scrotum.
- Leg length discrepancy or rotation.
- Wounds over the pelvis or bleeding from the rectum, vagina or urethra.

#### SIGNS / SYMPTOMS ABDOMINAL TRAUMA

- Abdominal pain
- Contusions, wounds over the abdomen
- Unexplained shock could indicated intra-abdominal hemorrhage
- Cullen's sign: peri-umbilical ecchymosis may indicate intraabdominal hemorrhage (late sign)
- Grey-Turner sign: ecchymosis of the flank may indicate intraabdominal hemorrhage (late sign)
- Abdominal distention (late sign)



# QAEMS HIGH- ALTITUDE ILLNESS

#### **HIGH ALTITUDE ILLNESSES**

- Acute Mountain Sickness (AMS): headache, dizziness, insomnia, loss of appetite, nausea, fatigue
- High Altitude Pulmonary Edema (HAPE): dyspnea, tachycardia, tachypnea, crackles or wheezing, low SpO2, cyanosis, cough, headache, nausea, fatigue
- High Altitude Cerebral Edema (HACE): ataxia (unsteady gait), change in mental status, confusion, headache, seizure, coma, neurologic deficits

#### **HISTORY / ASSESSMENT**

- ☐ History of having been to a location with altitude > 6000 feet
- Acute exacerbation of chronic medical conditions is more common than severe altitude illnesses
- Symptoms of altitude illnesses usually resolve within 6-48 hours after descent to lower altitude
- If the patient did well at altitude but developed symptoms after returning home, evaluate for other conditions
   History prior altitude illness
- Infection
- Hypoglycemia or hyperglycemia

Acute exacerbation of a chronic illness

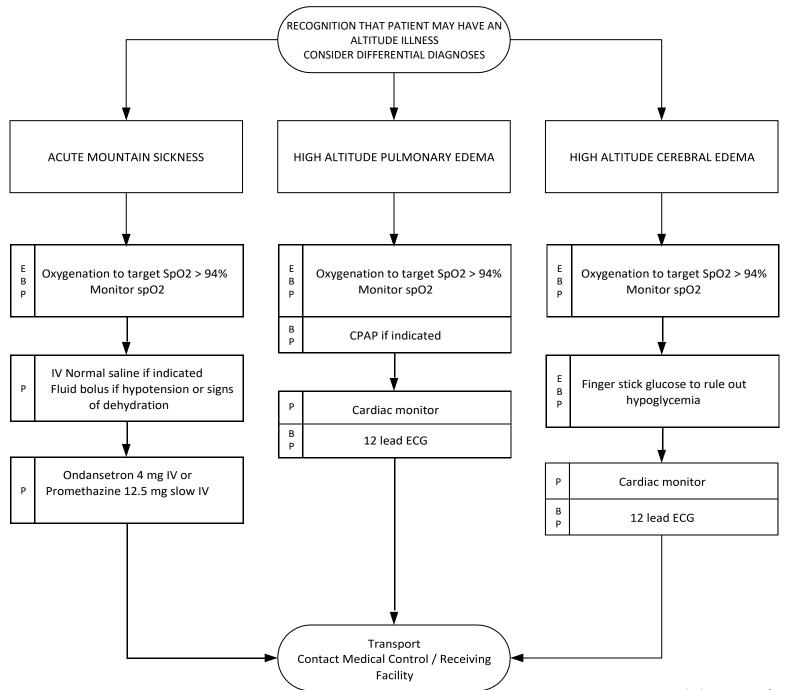
- Asthma
- Heart failure

Dehydration

Pulmonary embolism

**DIFFERENTIAL DIAGNOSES** 

Migraine headache



### **QAEMS BLAST INJURY**

#### **HISTORY**

- Nature of device if known agent, industrial, terrorism, improvised explosive device
- Method of delivery: explosive, incendiary
- Environment: open, closed
- Distance from device: intervening protective barrier, other environmental hazards

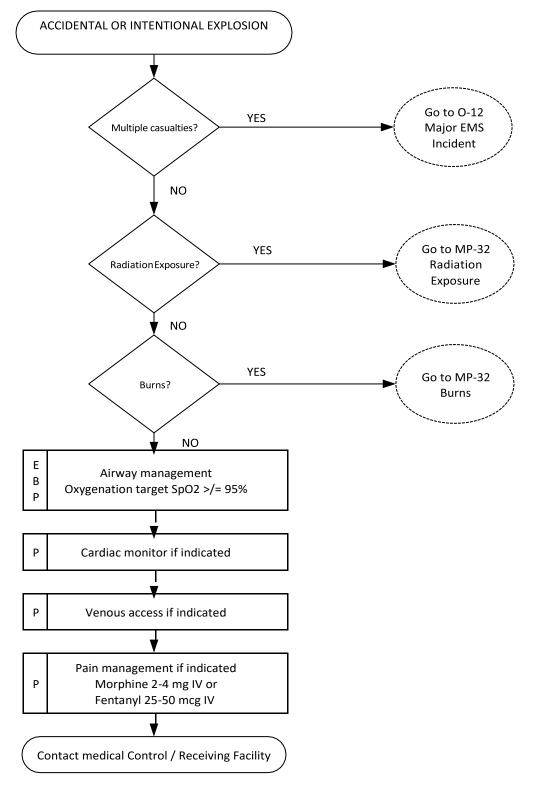
PRIMARY BLAST INJURY: from pressure wave (ears, lungs, hollow organs)

SECONDARY BLAST INJURY: from debris, shrapnel -most common cause of death. (Punctures, wounds, lacerations, amputations)

TERTIARY BLAST INJURY: from patientfalling, being thrown, pinned by debris (Blunt, crush)

#### SCENE SAFETY / MASS CASUALTY

- Be alert to potential for secondary devices or secondary explosions
- Consider the threat of structural collapse, contaminated particles or fire hazards
- See O-12 Major EMS Incident / Multiple Casualty Protocol
- See O-12b START triage protocol
- Patient will receive minimal treatment on scene unless awaiting transport



# QUINCY AREA EMS SYSTEM MEDICATION PROTOCOLS

Revised 9/1/2021

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

Scott Hough, MD EMS Medical Director Christopher R Solaro, MD, PH Associate Medical Director

# QUINCY AREA EMS SYSTEM MEDICATION LIST

# Antony Wollaston, MD, EMS Medical Director Christopher Solaro, MD, PhD, EMS Associate Medical Director

Adenosine (Adenocard)	M-1.1
Albuterol	M-1.2
Aspirin	M-1.3
Atropine	M-1.4
Calcium Chloride	M-1.5
Dextrose	M-1.6
Diazepam (Valium)	M-1.7
Diphenhydramine (Benadryl)	M-1.8
Dopamine (Intropin)	M-1.9
Epinephrine 1:1000	M-1.10
Epinephrine 1:10,000	M-1.11
Epi-pen	M-1.12
Glucagon	M-1.14
Ketamine	M-1.32
Lidocaine (Xylocaine)	M-1.15
Magnesium Sulfate	M-1.16
Methylprednisolone	M-1-31
Morphine	M-1.17
Naloxone (Narcan)	M-1.18
Nitroglycerin	M-1.19
Oral Glucose Gel (Insta-Glucose, Glucose)	M-1.20
Oxytocin (Pitocin)	M-1.21
Phenergan	M-1.22
Sodium Bicarbonate	M-1.23
Verapamil	M-1.24
Metoprolol Tartrate	M-1.25
Zofran	M-1.29
Fentanyl Citrate	M-1.30
Midazolam (Versed)	M-1.33
IV FLUIDS	
0.9% Sodium Chloride (Normal Saline)	M-2.1

Re: 3/10, 9/10, 1/15, 2/16, 1/18, 9/21

	ADENOSINE (ADENOCARD)
CLASS	Antiarrhythmic; nucleoside
ACTION	<ul> <li>Slows the heart rate by slowing conduction through the AV node. Blocks re-entry pathways in supraventricular tachycardias.</li> </ul>
INDICATIONS	Narrow complex tachycardias; Supraventricular tachycardias (SVT)
CONTRAINDICATIONS	Second- or third-degree heart block, sick sinus syndrome, hypersensitivity to the drug
PRECAUTIONS	Can produce bronchoconstriction in asthma patients.
SIDE EFFECTS	Side effects are usually brief due to the short half-life of the drug.  Conversion arrhythmias  Facial flushing  Headache Shortness of breath Dizziness Lightheadedness Nausea Chest pain
ROUTE	Rapid IV bolus over 1-2 seconds via antecubital IV site. Follow each dose with 10 to 20 mL flush of normal saline and raise the arm.
DOSE	<ul> <li>Initial dose = 6 mg</li> <li>Second dose of 12 mg in 1-2 minutes if rhythm does not convert</li> </ul>
PEDIATRIC DOSE	<ul> <li>0.1 mg/kg very rapidly at closest central IV injection site</li> <li>Repeat dose is 0.2 mg/kg</li> <li>Maximum single dose = 12 mg</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose.</li> <li>Reference policy PED-5</li> </ul>
ONSET	Immediate
DURATION	1-2 minutes
STOCK	(5) 6 mg/2 mL vials

	ALBUTEROL (PROVENTIL, VENTOLIN)
CLASS	Beta-2 agonist; synthetic sympathomimetic
ACTION	Stimulates beta 2 receptor sites in the smooth muscle of the bronchial tree to reverse bronchospasm.
INDICATIONS	·
INDICATIONS	Asthma, emphysema, bronchospasm associated with other conditions.
CONTRAINDICATIONS	Known hypersensitivity to the drug
PRECAUTIONS	Could cause severe paradoxical bronchospasm with
	repeated excessive use.
SIDE EFFECTS	<ul><li>Tachycardia</li></ul>
	<ul><li>Palpitations</li></ul>
	<ul><li>Anxiety</li></ul>
	<ul><li>Tremors</li></ul>
	<ul><li>Headache</li></ul>
	<ul><li>Sweating</li></ul>
	■ Bad taste
	■ PVC's
	<ul><li>Hypotension</li></ul>
ROUTE	Inhalation via nebulizer
	Metered dose inhaler with spacer
DOSE	2.5 mg (nebulizer) – may repeat X 3 if needed
	MDI 90 mcg/puff with spacer – 4 puffs; may repeat in 20 minutes if
	needed
PEDIATRIC DOSE	<ul> <li>Per order of Medical Control</li> </ul>
	■ Reference policy PED – 7.2
ONSET	5 to 15 minutes
DURATION	2 to 3 hours
STOCK	(4) 2.5 mg/3 mL unit doses
	(1) MDI 90 mcg/puff with spacer

ASPIRIN CHEWABLE	
CLASS	Anti-inflammatory; platelet aggregation inhibitor
ACTION	Prevents formation of clots by blocking formation of thromboxane
	A2 which causes platelets to aggregate and arteries to constrict.
INDICATIONS	Acute coronary syndrome; acute MI; chest pain (non-traumatic)
CONTRAINDICATIONS	<ul><li>Known hypersensitivity to the drug</li></ul>
	<ul><li>Bleeding disorders</li></ul>
	<ul><li>Active ulcer disease</li></ul>
	<ul><li>Asthma</li></ul>
PRECAUTIONS	None
SIDE EFFECTS	<ul><li>Nausea/vomiting</li></ul>
	<ul><li>Heartburn</li></ul>
	<ul><li>GI bleeding</li></ul>
	<ul><li>Increased bleeding time</li></ul>
	<ul><li>Wheezing</li></ul>
ROUTE	Oral – have the patient chew all four tablets and swallow
DOSE	Four 81 mg chewable tablets
PEDIATRIC DOSE	None
ONSET	30 to 60 minutes
DURATION	4 to 6 hours
STOCK	(4) chewable tablets 81 mg each

12/98, re: 2/99, 8/01, 9/04, 4/05, 5/07 (reviewed 4/10/18)

	ATROPINE SULFATE	
CLASS	Parasympathetic blocker; anti-cholinergic	
ACTION	<ul> <li>Increases the heart rate (positive chronotrope) by binding to muscarinic receptor sites to block the action of acetylcholine.</li> <li>Enhances both sinus node automaticity and atrioventricular conduction.</li> </ul>	
INDICATIONS	<ul><li>Symptomatic bradycardia</li><li>Organophosphate poisoning</li></ul>	
CONTRAINDICATIONS	<ul> <li>Use with caution in high degree heart blocks with wide QRS</li> <li>Use with caution in the patient with MI as an increase in heart rate could increase cardiac workload</li> </ul>	
PRECAUTIONS	A dose less than 0.5 mg in the adult could result in paradoxical slowing of the heart rate.	
SIDE EFFECTS	<ul> <li>Tachycardia</li> <li>Hypertension</li> <li>Palpitations</li> <li>Headache</li> <li>Blurred vision</li> <li>Dilated pupils</li> <li>Dry mouth</li> <li>Confusion</li> <li>Drowsiness</li> </ul>	
ROUTE	<ul><li>IV push</li><li>Endotracheal</li></ul>	
DOSE	<ul> <li>Symptomatic bradycardia: 1 mg every 3-5 minutes to maximum dose of 3 mg.</li> <li>Organophosphate poisoning: 2-5 mg IVP</li> </ul>	
PEDIATRIC DOSE	<ul> <li>0.02 mg/kg</li> <li>Minimum single dose is 0.1 mg.</li> <li>Maximum single dose 1 mg</li> <li>May repeat once</li> <li>Use Broselow tape or pediatric weight-based dosing chart to confirm dose.</li> <li>Reference policy PED-3.2</li> </ul>	
ONSET	2 to 5 minutes	
DURATION	20 minutes	
STOCK	(5) 1 mg/10 mL Abbojects	

CALCIUM CHLORIDE	
CLASS	Calcium salt
ACTION	Positive inotrope (increases the force of
	contraction) Increases myocardial automaticity
INDICATIONS	Calcium channel blocker overdose
	<ul><li>Hypocalcemia</li></ul>
	<ul><li>Magnesium intoxication</li></ul>
	<ul><li>Hyperkalemia</li></ul>
CONTRAINDICATIONS	Patients taking digitalis (Digoxin, lanoxin)
PRECAUTIONS	Precipitates with sodium bicarbonate – flush the IV line before
	and after administration.
SIDE EFFECTS	<ul><li>Extravasation (infiltration) can cause necrosis, sloughing of</li></ul>
	skin or abscess.
	<ul><li>Hypotension</li></ul>
ROUTE	IV
DOSE	1-gram slow IVP over 3-5 min
PEDIATRIC DOSE	<ul> <li>Per Medical Control</li> </ul>
	<ul> <li>Utilize Broselow tape or pediatric weight-based</li> </ul>
	dosing chart to confirm dose
ONSET	5 to 15 minutes
DURATION	Dose dependent (effects may last up to 4 hours)
STOCK	(1) 10 mL Abboject (100 mg/mL)

1/94; re: 11/97, 8/01, 9/04, 5/07, 4/18 (reviewed 8/95)

DEXTROSE IV	
CLASS	Hyperglycemic agent; hypertonic agent
ACTION	Supplies supplemental glucose to elevate the blood sugar.
INDICATIONS	<ul> <li>Suspected or known hypoglycemia (blood sugar &lt; 60)</li> <li>Diabetic with mental status changes if glucometer not available</li> </ul>
CONTRAINDICATIONS	Do not administer to head injured patients unless they are known to be hypoglycemic
PRECAUTIONS	Take care to prevent extravasation
SIDE EFFECTS	Irritation to vein with pain and redness could occur but is less likely with Dextrose 10%
ROUTE	IV
DOSE	ADULT: 100 mL of 10% solution IV at wide open rate; may repeat if blood sugar remains < 60 or altered mental status
PEDIATRIC DOSE	5 mL / kg of 10% solution – max 100 mL
ONSET	30 to 60 seconds
DURATION	Depends upon the level of hypoglycemia
STOCK	Dextrose 10% 250 mL bag (2)

1/94 ; re: 8/95, 11/97, 9/99, 8/01, 9/04, 5/07, 9/09, 2/16, 7/2021 (reviewed 4/10/18)

	DIAZEPAM (VALIUM)	
CLASS	Benzodiazepine	
	Anticonvulsant; skeletal muscle relaxant, sedative-hypnotic	
ACTION	Anticonvulsant properties due to enhancement of GABA-mediated	
	presynaptic inhibition at the spinal level as well as in the brain	
	stem reticular formation. CNS depressant.	
INDICATIONS	<ul> <li>Active seizures</li> </ul>	
	<ul> <li>Sedation prior to synchronized cardioversion</li> </ul>	
	<ul> <li>Sedation prior to transcutaneous pacing</li> </ul>	
	Acute anxiety	
CONTRAINDICATIONS	History of hypersensitivity to the drug.	
PRECAUTIONS	<ul> <li>May precipitate if mixed with other drugs – always</li> </ul>	
	flush the IV line before and after administration.	
	<ul> <li>Elderly patients may experience adverse effects</li> </ul>	
	more quickly – administer the medication slowly.	
	<ul> <li>Monitor level of consciousness, BP, pulse and</li> </ul>	
	respiratory status closely	
	<ul> <li>Be prepared to manage the airway</li> </ul>	
SIDE EFFECTS	<ul><li>CNS depression; drowsiness</li></ul>	
	<ul><li>Respiratory depression</li></ul>	
	<ul><li>Hypotension</li></ul>	
	<ul> <li>Phlebitis; venous thrombosis</li> </ul>	
ROUTE	<ul> <li>IV (administer no faster than 1 mg/minute)</li> </ul>	
	<ul> <li>IM (Onset of action 15-30 minutes)</li> </ul>	
	■ Rectal	
DOSE	<ul> <li>Seizures: 5 mg slow IV push at 1 mg/minute. Can</li> </ul>	
	be repeated in 3-5 minutes. Maximum dose 10 mg.	
	<ul> <li>Sedation prior to electrical therapy: 5 mg slow IV push at</li> </ul>	
	1 mg/minute. Maximum dose of 10 mg.	
	<ul> <li>Acute anxiety: 2-5 mg IM or slow IV push.</li> </ul>	
	Excited delirum 5 mg IM	
PEDIATRIC DOSE	<ul> <li>For Seizures: 0.1-0.3 mg/kg slow IV push over 2-3</li> </ul>	
	minutes.	
	<ul><li>Less than age 5 maximum dose = 5 mg</li></ul>	
	Over age 5 maximum dose 10 mg	
	<ul> <li>Utilize Broselow tape or pediatric weight-based</li> </ul>	
	dosing chart to confirm dose.	
ONCET	Reference policy PED-11.2	
ONSET	IV = less than 15 minutes	
DUDATION	IM = 15 to 30 minutes	
DURATION	3 hours	
STOCK	(2) 10 mg/2 mL syringes	

DIPHENHYDRAMINE (BENADRYL)	
CLASS	Antihistamine
ACTION	<ul> <li>Competes with histamine for H1 histamine receptor sites.</li> <li>Anticholinergic</li> <li>Antiemetic</li> </ul>
INDICATIONS	<ul> <li>Allergic reaction; anaphylaxis</li> <li>Dystonic reaction due to phenothiazines (Ex: Phenergan)</li> <li>Nausea/vomiting</li> </ul>
CONTRAINDICATIONS	<ul><li>Known hypersensitivity to the drug</li><li>Acute asthma attack</li></ul>
PRECAUTIONS	May cause drowsiness and sedation.
ROUTE	<ul> <li>CNS depression; drowsiness; confusion</li> <li>Dizziness; vertigo</li> <li>Excitement especially in children</li> <li>Tachycardia</li> <li>Palpitations</li> <li>Ataxia</li> <li>Dry mouth</li> <li>Blurred vision</li> <li>Headache</li> <li>Urine retention</li> <li>IV (Slow IVP at 25 mg/minute)</li> </ul>
	■ Deep IM
DOSE	25 mg
PEDIATRIC DOSE	<ul> <li>1-2 mg/kg</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> <li>Reference policy PED-10.2</li> </ul>
ONSET	IV = 1 to 5 minutes IM = 15 minutes
DURATION	3 to 4 hours
STOCK	(1) 50mg/mL injectable

1/94; re: 12/94, 2/95, 11/97, 8/01, 9/04, 5/07,4/18 (reviewed: 8/95)

DOPAMINE (INTROPIN)	
CLASS	Vasopressor; Adrenergic; Catecholamine
ACTION	<ul> <li>Acts on alpha and beta 1 receptor sites to vasoconstrict and increase heart rate.</li> <li>Positive chronotrope (increases heart rate)</li> <li>Positive inotrope (increases force of cardiac contraction</li> <li>Vasopressor at higher doses (increases BP)</li> </ul>
INDICATIONS	<ul> <li>Symptomatic bradycardia refractory to atropine</li> <li>Cardiogenic shock with hypotension</li> </ul>
CONTRAINDICATIONS	<ul> <li>Hypersensitivity to the drug</li> <li>Hypovolemic shock</li> <li>Tachydysrhythmias</li> <li>Ventricular dysrhythmias (V-tach / V-fib)</li> </ul>
PRECAUTIONS	<ul> <li>Dopamine is not a substitute for fluid or blood volume deficits</li> <li>Extravasation (infiltration) can cause necrosis with tissue sloughing</li> <li>Monitor vital signs every 5 minutes during administration</li> <li>Monitor cardiac rhythm closely.</li> </ul>
SIDE EFFECTS	<ul> <li>Tachycardia</li> <li>Ectopic beats</li> <li>Angina</li> <li>Palpitations</li> <li>Headache</li> <li>Nausea; vomiting</li> <li>Hypertension</li> </ul>
ROUTE	IV infusion (The infusion rate must be monitored precisely – preferred to use with an IV pump)
DOSE	■ 5-20mcg/kg/min
PEDIATRIC DOSE	<ul> <li>Per Medical Control 5-20 mcg/kg/minute infusion</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> <li>Reference policy PED-9.2</li> </ul>
ONSET	5 minutes
DURATION	5 to 10 minutes
STOCK	(1) 1600 mcg/mL premix solution (800 mg/500 mL)

Cross Reference: MP 5 Post Cardiac Arrest Care MP 8 Acute Pulmonary Edema

1/94; re: 11/97, 8/01, 9/04, 5/07, 4/18, 7/21 (reviewed: 8/95)

EPINEPHRINE 1:1000 SOLUTION	
CLASS	Sympathomimetic; Catecholamine; bronchodilator
ACTION	<ul> <li>Beta-2 receptor agonist promotes bronchodilation</li> <li>Beta-1 receptor agonist = positive chronotrope         <ul> <li>(increases heart rate); positive inotrope (increases force of cardiac contraction)</li> </ul> </li> </ul>
INDICATIONS	<ul> <li>Allergic reaction</li> <li>Anaphylaxis</li> <li>Asthma</li> <li>Exacerbation of some forms of COPD</li> </ul>
CONTRAINDICATIONS	<ul> <li>Patients with underlying cardiovascular disease</li> <li>Hypertension</li> <li>Pregnancy (safety in pregnancy and lactation not established)</li> <li>Patients with tachydysrhythmias</li> </ul>
PRECAUTIONS	<ul> <li>Protect from light</li> <li>Monitor vital signs every 5 minutes</li> <li>Monitor cardiac rhythm closely</li> </ul>
SIDE EFFECTS	<ul> <li>Tachycardia</li> <li>Palpitations</li> <li>Anxiety; restlessness</li> <li>Tremors</li> <li>Headache</li> </ul>
ROUTE	IM
DOSE	0.3 mg IM
PEDIATRIC DOSE	<ul> <li>0.01 mg/kg up to 0.3 mg</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> <li>Reference policy PED-10.2</li> </ul>
ONSET	5 to 10 minutes
DURATION	20 minutes
STOCK	(3) 1 mg/mL ampules

1/94; re: 11/97, 8/01, 9/04, 5/07, 4/19, 5/18 (reviewed: 8/95)

	EPINEPHRINE 1:10,000	
CLASS	Catecholamine; cardiac stimulant	
ACTION	<ul> <li>Beta 1 and beta 2 adrenergic effects</li> <li>Positive chronotrope (increases heart rate)</li> <li>Positive inotrope (increases force of cardiac contraction</li> </ul>	
INDICATIONS	<ul> <li>Cardiac arrest with ventricular fibrillation, pulseless ventricular tachycardia, asystole, pulseless electrical activity (PEA)</li> <li>Anaphylaxis</li> </ul>	
CONTRAINDICATIONS	None when used in an emergency situation such as cardiac arrest	
PRECAUTIONS	<ul> <li>Protect from light</li> <li>Can be deactivated by alkaline solutions – flush the IV line before and after administration</li> </ul>	
SIDE EFFECTS	Tachydysrhythmias	
ROUTE	IV Endotracheal (ET)	
DOSE	<ul> <li>Cardiac arrest: 1 mg every 3-5 minutes; ET dose is 2 – 2.5 mg</li> <li>Anaphylaxis: 0.3mg slow IVP</li> </ul>	
PEDIATRIC DOSE	<ul> <li>0.01 mg/kg IV</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> <li>Reference policy PED-2.2</li> </ul>	
ONSET	IV = immediate	
DURATION	3 to 5 minutes	
STOCK	(6) 1 mg /10 mL Abbojects	

1/94; re: 11/97, 8/01, 9/04, 5/07, 4/18 (reviewed: 8/95)

	EPI-PEN	
CLASS	Catecholamine	
ACTION	<ul> <li>Produces bronchodilation</li> </ul>	
	<ul> <li>Positive chronotrope (increases heart rate)</li> </ul>	
	<ul> <li>Positive inotrope (increases force of cardiac contraction)</li> </ul>	
INDICATIONS	Anaphylaxis	
CONTRAINDICATIONS	Chest pain consistent with angina/cardiac	
PRECAUTIONS	<ul><li>Protect from light</li></ul>	
	<ul> <li>Assess vital signs every 5 minutes</li> </ul>	
SIDE EFFECTS	<ul><li>Tachycardia</li></ul>	
	<ul><li>Dizziness</li></ul>	
	<ul><li>Nausea; vomiting</li></ul>	
	<ul><li>Headache</li></ul>	
ROUTE	Intramuscularly (IM)	
DOSE	0.3 mg	
PEDIATRIC DOSE	0.15 mg for pediatric patient 60 pounds or less	
ONSET	5 to 10 minutes	
DURATION	20 minutes	
STOCK	BLS units	
	(1) Adult Epi-Pen	
	(1) Epi-Pen Junior	

	GLUCAGON (GLUCAGEN)	
CLASS	Endocrine – pancreatic hormone	
ACTION	<ul> <li>Causes breakdown of glycogen stored in the liver to glucose</li> <li>Inhibits glycogen synthesis</li> <li>Elevates blood glucose level</li> </ul>	
INDICATIONS	<ul> <li>Hypoglycemia when unable to establish an IV site</li> <li>Betablocker or calcium channel blocker overdose</li> </ul>	
CONTRAINDICATIONS	<ul><li>Hypersensitivity to the drug</li><li>Hypersensitivity to beef or pork protein</li></ul>	
PRECAUTIONS	<ul> <li>Only effective if there are sufficient stores of glycogen in the liver</li> <li>Use with caution in patients with cardiovascular or renal disease</li> <li>Transport immediately after administration</li> </ul>	
SIDE EFFECTS	Nausea / vomiting	
ROUTE	IM IN (intranasal)	
DOSE	<ul> <li>Hypoglycemia 1 unit (1 unit = 1 mg)</li> <li>Betablocker or calcium channel blocker overdose 2 mg IM or IV</li> </ul>	
PEDIATRIC DOSE	<ul> <li>0.03 mg/kg – maximum dose 1 mg</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> <li>Reference policy PED-12.2</li> </ul>	
ONSET	5 to 20 minutes	
DURATION	20 to 30 minutes	
STOCK	(1) 1 mg (1 unit) vial; with diluent	

1/94; re: 11/97, 8/01, 9/04, 5/07, 4/18,11/18 (reviewed: 8/95)

LIDOCAINE (XYLOCAINE)	
CLASS	Antiarrhythmic
ACTION	<ul> <li>Class IB antiarrhythmic agent decreases depolarization, automaticity and excitability in the ventricles during the diastolic phase by direct action on the tissues especially the Purkinje network.</li> <li>Increases the ventricular fibrillation threshold making it more difficult for the heart to go into VF.</li> <li>Suppresses ventricular ectopic activity</li> </ul>
INDICATIONS	<ul><li>Ventricular Tachycardia</li><li>Ventricular fibrillation</li><li>Malignant PVCs</li></ul>
CONTRAINDICATIONS	<ul> <li>Hypersensitivity to the drug or to the amide-type local anesthetics.</li> <li>High degree heart blocks (2<sup>nd</sup> degree type II, 3<sup>rd</sup> degree)</li> <li>Ventricular ectopy in conjunction with bradycardia</li> </ul>
PRECAUTIONS	<ul> <li>Monitor level of consciousness for signs of CNS toxicity.</li> <li>Consider maintenance infusion after bolus.</li> <li>Maintenance infusion dosage should be reduced if over age 70, liver disease, CHF or shock.</li> </ul>
SIDE EFFECTS	<ul> <li>Confusion; lethargy</li> <li>Anxiety; restlessness; nervousness</li> <li>Lightheadedness</li> <li>Muscle twitching; seizures</li> <li>Bradycardia</li> <li>Hypotension</li> <li>Cardiac arrhythmias</li> <li>Cardiac arrest</li> </ul>
ROUTE	<ul><li>IV push</li><li>Endotracheal (ET)</li><li>IV infusion</li></ul>
DOSE	<ul> <li>1 to 1.5 mg/kg initial dose. Repeat doses of 0.5 to 0.75 mg/kg can be repeated every 5 to 10 minutes to maximum of 3 mg.</li> <li>Ventricular ectopy: 1 to 1.5 mg/kg IVP; repeat doses every 10 minutes at 0.5 to 0.75 mg/kg IVP to maximum of 3 mg/kg.</li> <li>Maintenance drip: 2 to 4 mg/minute</li> </ul>
PEDIATRIC DOSE	<ul> <li>1 mg/kg – may repeat every 3 to5 minutes to maximum of 3 mg</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> <li>Reference policy PED-4</li> </ul>
ONSET	45 to 90 seconds
DURATION	10 to 20 minutes
STOCK	(3) 100 mg/5 mL Abbojects (1) Premix bag 2 grams/500 mL Normal Saline

MAGNESIUM SULFATE	
CLASS	Anticonvulsant; magnesium supplement
ACTION	<ul> <li>Acts as a physiologic calcium channel blocker to block neuromuscular transmission.</li> <li>Central nervous system depressant</li> <li>Inhibits smooth muscle contraction</li> </ul>
INDICATIONS	<ul> <li>Seizures associated with eclampsia</li> <li>Polymorphic ventricular tachycardia / Torsades de Pointe</li> <li>Ventricular fibrillation associated with hypomagnesemia</li> <li>Severe bronchospasm unresponsive to beta agonists and corticosteroids</li> </ul>
CONTRAINDICATIONS	<ul><li>Heart block</li><li>Hypocalcemia</li><li>Hypotension</li></ul>
PRECAUTIONS	<ul> <li>Side effects can occur from too rapid administration or if given undiluted.</li> <li>Monitor vital signs, cardiac status and respiratory status closely.</li> </ul>
SIDE EFFECTS	<ul> <li>Drowsiness</li> <li>Depressed reflexes; flaccid paralysis</li> <li>Respiratory depression; respiratory paralysis</li> <li>Bradycardia, other arrhythmias</li> <li>Hypotension; cardiac collapse</li> <li>Hypothermia</li> <li>Flushed skin; rash; itching</li> </ul>
ROUTE	IV
DOSE	<ul> <li>Seizures associated with eclampsia: 2 grams slow IVP over 3-5 minutes.</li> <li>Polymorphic ventricular tachycardia: 1-2 grams of 50% solution diluted in 10 mL of sterile water and administered over 1-2 minutes.</li> <li>Severe bronchospasm: 2 grams over 10 minutes.</li> </ul>
PEDIATRIC DOSE	None
ONSET	Immediate
DURATION	3 to 4 hours
STOCK	(1) 5 grams/10 mL 50% solution Abboject (500 mg/mL)

MORPHINE SULFATE	
CLASS	Opiate
ACTION	<ul> <li>Narcotic analgesic that binds to opiate receptors in the brain to produce pain relief. (opiate agonist)</li> <li>Peripheral vasodilation decreases systemic vascular resistance and venous return (decreases preload and afterload)</li> <li>CNS depressant</li> </ul>
INDICATIONS	<ul> <li>Severe pain</li> <li>CHF with pulmonary edema</li> </ul>
CONTRAINDICATIONS	<ul> <li>History of sensitivity to the drug</li> <li>Head injury</li> <li>Hypovolemia</li> <li>Hypotension</li> <li>Undiagnosed abdominal pain</li> </ul>
PRECAUTIONS	Can cause hypotension and respiratory depression in higher doses. (Narcan should be available as a reversal agent.)
SIDE EFFECTS	<ul> <li>Decreased level of consciousness</li> <li>Respiratory depression</li> <li>Hypotension</li> <li>Nausea; vomiting</li> <li>Dizziness</li> <li>Headache</li> </ul>
ROUTE	■ IV ■ IM
DOSE	<ul> <li>IV: Standard initial dose is 2 mg. slow IVP.</li> <li>2<sup>nd</sup> dose: 2mg may be given prior to contact Medical Control</li> </ul>
PEDIATRIC DOSE	<ul> <li>Per Medical Control</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> </ul>
ONSET	<ul><li>IV = Immediate</li><li>IM = 5 to 30 minutes</li></ul>
DURATION	3 to 5 hours
STOCK	(5) 2 mg/mL tubexes

NALOXONE (NARCAN)	
CLASS	Narcotic antagonist
ACTION	Reverses the effects of narcotics by competing for and
	blocking opiate receptors.
INDICATIONS	<ul> <li>For complete or partial reversal of narcotics</li> </ul>
	including: morphine, meperidine, heroin, dilaudid,
	paregoric, percodan, fentanyl, methadone.
	<ul> <li>For complete or partial reversal of synthetic narcotics</li> </ul>
	such as: nubain, stadol, talwin, darvon.
	<ul> <li>Coma of unknown origin with suspected</li> </ul>
	narcotic involvement.
	<ul> <li>Alcoholic coma</li> </ul>
CONTRAINDICATIONS	Known hypersensitivity to the drug
PRECAUTIONS	<ul> <li>Administer with caution to patients dependent</li> </ul>
	upon narcotics as it may cause withdrawal effects
	including seizures.
	<ul> <li>Narcan is a short acting drug and the dose may</li> </ul>
	need augmentation every 5 minutes.
	<ul> <li>Larger than average doses (2-5 mg) may be needed</li> </ul>
	for management of Darvon overdose or alcoholic
	coma.
	<ul> <li>The patient may become combative upon reversal of</li> </ul>
	the opiate. Appropriate precautions should be taken
	prior to
	administration to ensure the safety of emergency
	providers.
SIDE EFFECTS	Nausea; vomiting
	■ Tremors
	<ul><li>Sweating</li></ul>
	<ul><li>Hypertension</li></ul>
ROUTE	- IV
	■ IM
	<ul><li>IN (intranasal)</li></ul>
	<ul><li>Endotracheal (ET)</li></ul>
DOSE	■ 2 mg /2ml
	<ul> <li>May repeat in 2 to 3-minute intervals for 2 to 3 doses if</li> </ul>
	no response.
	<ul> <li>Failure to obtain reversal after 2 to 3 doses indicates</li> </ul>
	other disease process or overdose on other non-opioid
	type drugs.
PEDIATRIC DOSE	<ul> <li>Less than 20 kg = 0.1 mg/kg Maximum dose 2 mg</li> </ul>
	■ Greater than 20 kg = 2 mg single dose
	<ul> <li>Utilize Broselow tape or pediatric weight-based</li> </ul>
	dosing chart to confirm dose
	Reference policy PED-12.2
ONSET	IV = Immediate
	IM = 5 to 10 minutes
DUDATION	IN = 2-5 minutes
DURATION	20 to 30 minutes
STOCK	(2) 2 mg/2mL vial

1/94; re: 11/97, 8/01, 9/04, 5/07, 11/18, 2/19 (reviewed: 8/95, 6/06, 4/18)

NITROGLYCERIN	
CLASS	Organic nitrate
ACTION	<ul> <li>Relaxes vascular smooth muscle</li> </ul>
	<ul> <li>Dilation of coronary arteries</li> </ul>
	<ul> <li>Dilation of systemic arteries (reduces afterload)</li> </ul>
	<ul> <li>Venous dilation (reduces preload)</li> </ul>
INDICATIONS	Chest pain suspected to be cardiac in origin
	<ul> <li>Pulmonary edema</li> </ul>
CONTRAINDICATIONS	<ul><li>Hypotension</li></ul>
PRECAUTIONS	<ul> <li>Monitor blood pressure before and after administration of</li> </ul>
	each dose.
	<ul> <li>Do not administer if systolic BP less than 90</li> </ul>
	<ul><li>Protect from light</li></ul>
SIDE EFFECTS	<ul><li>Headache</li></ul>
	<ul><li>Facial flushing</li></ul>
	<ul> <li>Dizziness</li> </ul>
	<ul><li>Hypotension</li></ul>
	■ Bradycardia (rare)
	■ Reflex tachycardia
ROUTE	<ul><li>Sublingual</li></ul>
	<ul><li>Topical</li></ul>
DOSE	<ul> <li>Sublingual: place 1 tablet under the patient's tongue. May</li> </ul>
	repeat every 5 minutes for a total of 3 tablets.
	<ul> <li>Topical: Used for long transport times when sublingual</li> </ul>
	nitroglycerin has been helpful in reducing chest pain. Place
	½ inch of nitropaste on the ruled applicator measuring
	paper. Apply to a hairless are of the skin on the chest. Tape
	in place. Remove any previously applied nitroglycerin
	patches/ointment.
PEDIATRIC DOSE	None
ONSET	1 to 2 minutes
DURATION	15 to 30 minutes
STOCK	(1) 25 tablet bottle of 0.4 mg tablets
	(2) Unit doses of topical nitroglycerin and ruled applicator
	papers

5/93, re: 1/94, 11/97, 5/99, 9/04, 6/06, 5/07 (reviewed 8/95, 8/01, 4/10/18

ORAL GLUCOSE (INSTA-GLUCOSE; GLUTOSE)	
CLASS	Glucose
ACTION	Increases blood glucose levels
INDICATIONS	Known or suspected hypoglycemia in the diabetic patient
CONTRAINDICATIONS	<ul> <li>Decreased level of consciousness that could lead</li> </ul>
	to choking or risk of aspiration.
	<ul><li>Inability to swallow</li></ul>
PRECAUTIONS	None
SIDE EFFECTS	None
ROUTE	Oral
DOSE	30 grams (one tube)
PEDIATRIC DOSE	Only as ordered by Medical Control
ONSET	
DURATION	
STOCK	(1) 30-gram tube

1/99, 8/01, 9/04, 5/07 (reviewed: 6/06, 4/18)

	OXYTOCIN (PITOCIN)	
CLASS	Hormone	
ACTION	Stimulates uterine smooth muscle contraction to slow post-	
	partum hemorrhage after expulsion of the placenta.	
INDICATIONS	Post-partum hemorrhage	
CONTRAINDICATIONS	Any condition other than post-partum hemorrhage	
PRECAUTIONS	<ul> <li>Ensure that the placenta has delivered prior</li> </ul>	
	to administration of oxytocin.	
	<ul> <li>Ensure that there is not another fetus present prior</li> </ul>	
	to administration.	
	<ul> <li>Too rapid administration could result in uterine rupture.</li> </ul>	
SIDE EFFECTS	<ul><li>Nausea; vomiting</li></ul>	
	<ul><li>Seizures</li></ul>	
	<ul><li>Hypotension</li></ul>	
	<ul><li>Anaphylaxis</li></ul>	
	<ul><li>Arrhythmias</li></ul>	
	■ Coma	
ROUTE	■ IM	
	■ IV infusion	
DOSE	■ IM: 3-10 units	
	<ul> <li>IV infusion: Mix 10 units in 1000 mL of Normal Saline. This</li> </ul>	
	yields 10 milliunits/mL. Start the infusion very slowly	
	at 10 milliunits (1mL) per minute or as indicated by	
	Medical control.	
PEDIATRIC DOSE	None	
ONSET	IV = Immediate	
	IM = 3 to 5 minutes	
DURATION	IV = 20 minutes after infusion is stopped	
	IM = 2 to 3 hours	
STOCK	(1) 10 USP units/mL vial	

	PROMETHAZINE (PHENERGAN)	
CLASS	Phenothiazine Antihistamine	
ACTION	Inhibits the chemoreceptor trigger zone in the medulla to produce anti-emetic effect. Blocks H1 and H2 histamine	
INDICATIONS	receptor sites.	
CONTRAINDICATIONS	Vomiting Acute asthma attack	
PRECAUTIONS		
PRECAUTIONS	<ul> <li>Extravasation (infiltration) can cause necrosis, tissue sloughing, gangrene</li> <li>Should be diluted in at least 10 mL Normal Saline</li> <li>Should be administered very slowly over several minutes</li> <li>Patient should be instructed to advise you if any pain or burning with administration</li> </ul>	
SIDE EFFECTS	<ul> <li>Drowsiness; excess sedation; confusion</li> <li>Hypotension</li> <li>Dizziness</li> <li>Palpitations</li> </ul>	
ROUTE	IV	
DOSE	12.5 mg diluted in 10 mL Normal Saline slow IVP. May repeat X 1 if necessary for a maximum dose of 25 mg.	
PEDIATRIC DOSE	<ul> <li>Child over age 2 = 0.25 – 0.5 mg/kg with maximum dose of 25 mg</li> <li>Not for administration in patients under the age of two years.</li> <li>Dilute in 10 mL normal saline and administer very slowly over several minutes</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> </ul>	
ONSET	3 to 5 minutes	
DURATION	6 to 12 hours	
STOCK	(2) 25 mg inj.	

	SODIUM BICARBONATE		
CLASS	Alkalinizing agent (buffer)		
ACTION	Binds free hydrogen ions to form carbonic acid. Effectively increases the blood pH.		
INDICATIONS	<ul> <li>Acidosis associated with prolonged down time in cardiac arrest</li> <li>Tricyclic antidepressant overdose</li> </ul>		
CONTRAINDICATIONS	Alkalosis		
PRECAUTIONS	<ul> <li>Correct dosage is essential to avoid overcompensation of pH.</li> <li>Flush IV line before and after administration of the drug. Is not compatible with many other drugs in the IV line.         Precipitates with calcium chloride. Inactivates epinephrine and dopamine.     </li> <li>Extravasation (infiltration) may cause ulceration, tissue necrosis or tissue sloughing at injection site.</li> </ul>		
SIDE EFFECTS	<ul><li>Alkalosis</li><li>Electrolyte imbalance</li></ul>		
ROUTE	IV		
DOSE	1 mEq/kg initially. Tricyclic antidepressant overdose 50mEq IV		
PEDIATRIC DOSE	<ul> <li>Use pediatric 4.2% solution.</li> <li>0.5-1 mEq/kg initial dose followed by 0.5 mEq/kg doses every 10 minutes as indicated.</li> <li>Utilize Broselow tape or pediatric weight-based dosing chart to confirm dose</li> </ul>		
ONSET	Immediate		
DURATION	30 to 60 minutes		
STOCK	(1) 50 mL Abboject (1 mEq/mL) (1) 10 mL Abboject 4.2% pediatric solution (0.5 mEq/mL)		

1/94; re: 11/97, 8/01, 6/04, 5/07, 4/18, 8/19 (reviewed: 8/95, 9/04)

VERAPAMIL (CALAN)		
CLASS	Calcium channel blocker	
ACTION	<ul> <li>Blocks the entry of calcium into the cell</li> <li>Slows conduction through the AV node</li> </ul>	
	<ul> <li>Negative chronotrope (slows heart rate)</li> </ul>	
111516151616	Negative inotrope (decreased force of cardiac contraction)	
INDICATIONS	To control the rate in hemodynamically stable atrial fibrillation or	
CONTRAINDICATIONS	atrial flutter with rapid ventricular response.  Hypotension	
CONTRAINDICATIONS	riypoterision	
	<ul><li>Cardiogenic shock</li><li>Myocardial infarction</li></ul>	
	·	
	<ul><li>Wide complex tachycardias</li><li>WPW syndrome</li></ul>	
	<ul><li>Patients taking beta blockers</li></ul>	
PRECAUTIONS	Vital signs should be monitored closely.	
PRECAUTIONS	<ul> <li>May induce or exacerbate CHF/pulmonary edema</li> </ul>	
SIDE EFFECTS	Headache	
SIDE EFFECTS	Dizziness	
	■ Sweating	
	■ Seizures	
	Bradycardia	
	Heart blocks	
	Hypotension	
	• Asystole	
	<ul> <li>Ventricular fibrillation</li> </ul>	
ROUTE	IV	
DOSE	<ul><li>2.5-5 mg slow IVP over 2-3 minutes.</li></ul>	
	<ul> <li>May repeat at 5-10 mg in 15-30 minutes if rhythm</li> </ul>	
	persists with no adverse effects after initial dose.	
	<ul> <li>Total dose should not exceed 30 mg in 30 minutes.</li> </ul>	
PEDIATRIC DOSE	Verapamil is not recommended in the pediatric	
population in the absence of Medical Direction.		
	Reference policy PED-5	
ONSET	3 to 5 minutes	
DURATION	2 hours	
STOCK	(2) 5 mg/2 mL vials	
* -	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

METOPROLOL TARTRATE		
CLASS	Beta-Adrenergic blocking agent	
ACTION	<ul> <li>Exerts mainly beta-1 adrenergic blocking activity although Beta-2 receptors are blocked at high doses</li> </ul>	
INDICATIONS	<ul> <li>Acute MI in hemodynamically stable patients</li> </ul>	
CONTRAINDICATIONS	<ul> <li>MI in patients with a HR of less than 60 bpm</li> <li>2<sup>nd</sup> or 3<sup>rd</sup> degree heart blocks</li> <li>Systolic BP is less than 100</li> <li>Sinus Bradycardia</li> </ul>	
PRECAUTIONS	Use with caution in impaired hepatic function and during lactation	
SIDE EFFECTS	?	
ROUTE	■ PO	
DOSE	■ 25 mg	
PEDIATRIC DOSE	<ul> <li>Not determined for children</li> </ul>	
ONSET	15 minutes	
DURATION		
STOCK	25 mg tablet	

ONDANSETRON				
(ZOFRAN):				
CLASS	Anti-emetic, selective Serotonin (5HT3) Receptor antagonist			
ACTION	<ul> <li>Ondansetron reduces the activity of the vagus</li> </ul>			
	nerve which activates the vomiting center in the			
	medulla oblongata, and also blocks serotonin			
	receptors in the chemoreceptor trigger zone. It has			
	little effect on vomiting caused by motion sickness.			
INDICATIONS	<ul> <li>Moderate to severe nausea, vomiting</li> </ul>			
CONTRAINDICATIONS	Hypersensitivity to the drug			
	<ul><li>Prolonged QT syndrome</li></ul>			
	<ul><li>Concurrent use of Apomorphine (Apokyn), an anti-</li></ul>			
	parkasonian drug			
PRECAUTIONS	<ul> <li>Not well studied in children less than 2 years of age</li> </ul>			
	<ul> <li>Use with caution with patients concurrently using drugs</li> </ul>			
	which effect QT interval (i.e., Procainamide, amiodarone,			
	TCA's, Haldol)			
	Use with caution with hepatic impairment  (acception and project descent intervals or			
	(consider prolonging dosage intervals or decreasing dose)			
SIDE EFFECTS	② Sedation ■ Angina			
3.52 2.1.2013	<ul><li>Hypopension</li><li>Torsades de Pointes (rare)</li></ul>			
	☐ Trypoperision Torsidaes de Forntes (fure)			
ROUTE	■ IV/IO			
DOSE (ADULT)	<ul> <li>Adult – 4 mg, repeated once in 15 minutes PRN</li> </ul>			
PEDIATRIC DOSE	Pediatric – (>2 years of age) Contact Medical Control			
ONSET	3–5 minutes			
DURATION	■ 2-4 hours			
STOCK	■ 4 mg/2 ml vials			
SPECIAL				
CONSIDERATIONS				

FENTANYL CITRATE (SUBLIMAZE)		
CLASS	Opiate; synthetic narcotic	
ACTION	A potent, short-acting opioid agonist; Relieves pain by stimulating receptors in the central nervous system. It has an analgesic effect approximately 50-100 times greater than that of morphine – a 50 mcg dose has roughly the same analgesic effect as 5 mg of morphine.	
INDICATIONS	Non-cardiogenic pain Cardiogenic pain Aid in procedural sedation	
CONTRAINDICATIONS	Hypersensitivity to the drug	
PRECAUTIONS	<ul> <li>Has an additive effect with other opiates and benzodiazepines / sedatives including alcohol which may contribute to respiratory depression.</li> <li>Rapid administration may result in spasm of respiratory muscles and chest wall rigidity resulting in difficulty or inability to ventilate the patient. Administer slowly to prevent this complication.</li> <li>If over age 65, history of COPD or CO2 retention, use lower dosing of 25 mcg IV or 50 mcg IN.</li> </ul>	
SIDE EFFECTS	CNS depression, respiratory depression, bradycardia, transient hypotension, ventilatory impairment in COPD patients, hives	
ROUTE	IV, IN	
DOSE	Adult: IV 50 mcg slow IVP; IN 100 mcg Severe pain such as burns or trauma may increase initial dose to 50 mcg slow IVP with max total dose 100 mcg.	
PEDIATRIC DOSE	Requires contact with Medical Control 1 mcg/kg slow IVP, max dose 25 mcg; IN dose 50 mcg	
ONSET OF ACTION	Immediate for IV route	
DURATION OF ACTION	Peak effect 30-60 minutes	
STOCK	(2) 100mcg/2ml bottles	
NOTE:	Fentanyl Citrate should be mixed with 10ml of Normal saline flush prior to administration except IN route.	

METHYLPREDNISOLONE (SOLUMEDROL)		
CLASSIFICATION	Glucocorticoid; corticosteroid	
ACTION	Decreases inflammation and immune responses by stabilizing membranes of white blood cells responding to a site of infection or inflammation.	
INDICATIONS	<ul> <li>Acute exacerbation of asthma or COPD with bronchospasm.</li> <li>Acute allergic reaction or anaphylaxis with bronchospasm.</li> </ul>	
CONTRAINDICATIONS	<ul><li>Known hypersensitivity</li><li>Systemic fungal infections</li></ul>	
PRECAUTIONS	<ul> <li>This medication will not produce an immediate effect.</li> <li>Avoid use in burn and smoke inhalation victims due to increased risk of infection and mortality.</li> </ul>	
SIDE EFFECTS / ADVERSE EFFECTS	<ul> <li>Adverse effects with a single prehospital dose are uncommon but could include diaphoresis, facial flushing andhypertension.</li> <li>Other: insomnia, heartburn, increased appetite, abdominal distention, delayed wound healing, increased susceptibility to infection.</li> </ul>	
ROUTE	IV / IO	
ADULT DOSE	125 mg slow IV push over at least 3 minutes	
PEDIATRIC DOSE	Contact Medical Control	
ONSET OF ACTION	1-2 hours	
DURATION OF ACTION	8-24 hours	
STOCK	One 125 mg vial	
CROSS REFERENCE LOCATION	MP 9 ADULT COPD/ASTHMA/DYSPNEA MP 13 ALLERGIC REACTION / ASTHMA Charge sheets	

KETAMINE HCL (KETALAR)		
CLASSIFICATION	Dissociative anesthetic	
ACTION	Provides analgesia, amnesia and sedation	
INDICATIONS	Excited delirium	
CONTRAINDICATIONS	Known schizophrenia	
PRECAUTIONS	<ul> <li>Be prepared for hypoxia and need for advanced airway control.</li> <li>Be aware of duration of action -</li> </ul>	
SIDE EFFECTS / ADVERSE	Transient tachycardia	
EFFECTS	Hypertension	
	Hypersalivation	
	Laryngospasm	
	Vomiting	
	Respiratory depression	
ROUTE	IM	
ADULT DOSE	4 mg/kg up to 500 mg maximum dose	
PEDIATRIC DOSE	Contact Medical Control	
ONSET OF ACTION	3-5 minutes (IM)	
DURATION OF ACTION	20-30 minutes (IM)	
STOCK	500 mg/10 mL	
CROSS REFERENCE LOCATION	MP 12 Behavioral Emergency	

CLASS  Benzodiazepine, sedative hypnotic  ACTION  Potentiates GABA, causing amnesia, sedation and skeletal muscle relaxation; no effect on pain  INDICATIONS  • Active seizures • Conscious patient requiring sedation for synchronized cardioversic or transcutaneous pacing • Sedation for intubated patients with mechanical ventilator (CCT only)  CONTRAINDICATIONS  • History of hypersensitivity to benzodiazepines • Shock • Hypotension • Coma  PRECAUTIONS  • Patients with COPD, chronic hepatic or renal failure, CHF, acute alcohol intoxication, and the elderly may have increased risk of respiratory depression • If COPD or CO2 retention, use lower dose • Close monitoring of mental status, vital signs, respiratory status, ETCO2 and SpO2 • Be prepared for mechanical ventilation  SIDE EFFECTS • Amnesia	MIDAZOLAM (VERSED)		
relaxation; no effect on pain  INDICATIONS	CLASS		
relaxation; no effect on pain  INDICATIONS			
INDICATIONS  Active seizures Conscious patient requiring sedation for synchronized cardioversic or transcutaneous pacing Sedation for intubated patients with mechanical ventilator (CCT only)  CONTRAINDICATIONS History of hypersensitivity to benzodiazepines Shock Hypotension Coma  PRECAUTIONS Patients with COPD, chronic hepatic or renal failure, CHF, acute alcohol intoxication, and the elderly may have increased risk of respiratory depression If COPD or CO2 retention, use lower dose Close monitoring of mental status, vital signs, respiratory status, ETCO2 and SpO2 Be prepared for mechanical ventilation  SIDE EFFECTS Active seizures Conscious patient requiring sedation for synchronized cardioversion reprinciples	ACTION		
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or transcutaneous pacing  Sedation for intubated patients with mechanical ventilator (CCT only)  CONTRAINDICATIONS  History of hypersensitivity to benzodiazepines Shock Hypotension Coma  PRECAUTIONS  Patients with COPD, chronic hepatic or renal failure, CHF, acute alcohol intoxication, and the elderly may have increased risk of respiratory depression If COPD or CO2 retention, use lower dose Close monitoring of mental status, vital signs, respiratory status, ETCO2 and SpO2 Be prepared for mechanical ventilation  SIDE EFFECTS  Amnesia	INDICATIONS		
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<ul> <li>Hypotension</li> <li>Coma</li> <li>Patients with COPD, chronic hepatic or renal failure, CHF, acute alcohol intoxication, and the elderly may have increased risk of respiratory depression</li> <li>If COPD or CO2 retention, use lower dose</li> <li>Close monitoring of mental status, vital signs, respiratory status, ETCO2 and SpO2</li> <li>Be prepared for mechanical ventilation</li> <li>SIDE EFFECTS</li> </ul>	CONTRAINDICATIONS		
Coma  PRECAUTIONS  Patients with COPD, chronic hepatic or renal failure, CHF, acute alcohol intoxication, and the elderly may have increased risk of respiratory depression  If COPD or CO2 retention, use lower dose  Close monitoring of mental status, vital signs, respiratory status, ETCO2 and SpO2  Be prepared for mechanical ventilation  SIDE EFFECTS  Amnesia		• Shock	
PRECAUTIONS  Patients with COPD, chronic hepatic or renal failure, CHF, acute alcohol intoxication, and the elderly may have increased risk of respiratory depression  If COPD or CO2 retention, use lower dose  Close monitoring of mental status, vital signs, respiratory status, ETCO2 and SpO2  Be prepared for mechanical ventilation  SIDE EFFECTS  Amnesia		Hypotension	
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If COPD or CO2 retention, use lower dose     Close monitoring of mental status, vital signs, respiratory status, ETCO2 and SpO2     Be prepared for mechanical ventilation  SIDE EFFECTS  Amnesia			
<ul> <li>Close monitoring of mental status, vital signs, respiratory status, ETCO2 and SpO2</li> <li>Be prepared for mechanical ventilation</li> <li>SIDE EFFECTS</li> <li>Amnesia</li> </ul>			
ETCO2 and SpO2  • Be prepared for mechanical ventilation  SIDE EFFECTS  • Amnesia		·	
Be prepared for mechanical ventilation  SIDE EFFECTS      Amnesia			
SIDE EFFECTS • Amnesia		·	
	CIDE EFFECTS		
	SIDE EFFECTS		
		Mental status changes including drowsiness, confusion     Distincts	
<ul><li>Dizziness</li><li>Respiratory depression or respiratory arrest</li></ul>			
Hypotension			
Nausea & vomiting			
ROUTE • IV / IO	ROLITE		
• Intranasal	NOOTE		
• IM			
ADULT DOSE Sedation: 2 mg slow IV	ADUIT DOSE		
Seizures: 2 mg slow IV OR 4 mg IN OR 2 mg IM	7.202.2002		
Sedation for interfacility transfer of intubated/ mechanically ventilated			
patient see CCT-11			
PEDIATRIC DOSE Contact Medical Control	PEDIATRIC DOSE	Contact Medical Control	
ONSET of ACTION 3-5 minutes for IV/IO; 6-14 minutes for IN			
DURATION 1-6 hours		·	
STOCK (2) 10 mg / 2 mL vial (5 mg/mL)			

#### **IV FLUIDS**

0.9% SODIUM CHLORIDE (NORMAL SALINE)		
CLASS		
ACTION	Fluid and sodium replacement	
INDICATIONS	<ul> <li>Heat-related problems (e.g., heat exhaustion, heat stroke)</li> <li>Freshwater drowning</li> <li>Hypovolemia</li> <li>Diabetic ketoacidosis</li> <li>IV Lifeline</li> </ul>	
CONTRAINDICATIONS	None	
PRECAUTIONS	<ul> <li>Electrolyte depletion (K+, Mg++, Ca++, among others) can occur following administration of large amounts of normal saline</li> <li>May cause fluid overload if rate is not closely monitored.</li> </ul>	
SIDE EFFECTS	■ Thirst	
ROUTE	IV Infusion	
DOSE	<ul> <li>Dependent upon patient condition and situation being treated. In freshwater drowning and heat emergencies, the administration is usually rapid</li> </ul>	
PEDIATRIC DOSE	<ul> <li>Dose is dependent on patient size and condition</li> <li>Trauma resuscitation 20 ml/kg initial bolus</li> <li>Utilize Broselow Tape or pediatric weight-based dosing chart to confirm dose. Reference Policy PED-9</li> </ul>	
ONSET		
DURATION		
STOCK		

# QUINCY AREA EMS SYSTEM OPERATIONAL PROTOCOLS

### Revised 1/2024

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

Scott Hough, MD EMS Medical Director

Christopher R Solaro, MD, PHD Associate Medical Director

## QUINCY AREA EMS SYSTEM OPERATIONAL POLICIES

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#### MEDICAL AUTHORITY PATTERN/SCENE MANAGEMENT AUTHORITY

- I. The EMS Medical Director and the Alternate EMS Medical Director are the designated final medical authorities.
- II. The first arriving EMS team on the scene is responsible under the direct authority of the EMS Medical Director and will assume responsibility for carrying out appropriate patient care at the scene.
- III. Responsibility and authority for patient management will be transferred to the team providing the highest level of care at the scene upon their arrival.
- IV. Levels of care from the highest to the most basic are:
  - A. Flight Teams
  - B. Transporting ALS Units
  - C. Non-transporting ALS Units
  - D. Transporting BLS Units
  - E. Non-Transporting BLS Units
  - F. Emergency Medical Responders
- V. In the event of unsafe scene conditions, authority/responsibility for patient care will begin once the scene has been declared safe and/or the patient has been moved to an area designated as safe by the appropriate law enforcement/fire/rescue agency in control of the scene as established by local incident command structure
- VI. In the event that a patient being transported interfacility requires the accompaniment of additional medical staff, IE a nurse, critical care nursing team, physician, respiratory therapist, or CT tech, the most advanced provider will charge patient care. This should be clearly established prior to departure. In the majority of cases the only additional providers authorized to assume complete responsibility for the patient would be a specialized nurse (IE a pediatric critical care nurse on a NICU transfer), an advanced practice RN or Physician Assistant, or a physician.
  - A. EMS and the advanced provider must know their roles prior to departure with the patient.
  - B. In cases where a higher-level provider assumes patient care responsibility, the EMS crew will function to assist the advanced provider.
  - C. In cases where the additional provider is a specialist, but not necessarily a higher level provider than an ALS EMS crew (IE a CT tech, a respiratory therapist, a standard RN not delivering advanced or specialize care outside the normal EMS scope of practice) the patient will remain under the care of the ALS EMS crew and the additional healthcare provider will act to assist the EMS crew.

#### ABANDONMENT/UTILIZATION OF MANPOWER

- I. EMS shall respond as dispatched within their geographical area.
- II. Once medical care has been initiated, the EMS personnel are committed to the care of the patient until the patient is delivered to appropriate aid with the same or higher degree of training and ability.
- III. The highest level of care team on the scene is responsible under the authority of the EMS physician and/or designated authority of the ECRN and will assume responsibility for carrying out appropriate patient care on scene and enroute during transport.
- IV. In the event there are several patients and ALS treatment is begun on a patient who needs transportation, a paramedic or PHRN must accompany the patient to the hospital

12/84, re: 11/97. 12/98, 5/98, 9/99, 8/01, 10/15, 5/18, 11/21

(reviewed: 8/95)

#### INTERVENING PHYSICIAN/NURSE AT THE SCENE

#### I. <u>Physician is a Bystander:</u>

- A. Require identification.
- B. Determine if physician is willing to assume responsibility for patient care and accompany patient to the hospital.
- C. Confirm all orders with Medical Control.

#### II. <u>Physician is Patient's Physician:</u>

- A. Confirm identity as patient's physician
- B. Determine if physician is willing to assume responsibility for patient care and accompany patient to the hospital.
- C. If physician accompanies the patient, confirm and document physician's orders with Medical Control.
- D. In the event the physician orders therapy not consistent with the system medical protocol, he shall be requested to accompany the patient to the hospital to continue his therapy and assume responsibility. All therapy shall be confirmed and documented with Medical Control.
- E. If physician does not accompany the patient, confirm physician's orders with Medical Control. In the event of conflict or change in condition, follow orders of Medical Control.

#### III. Nurse is a Bystander:

- A. Require identification.
- B. Notify Medical Control.
- C. The nurse at the scene shall function under the direction of the ALS team.

#### TRANSPORT TO AN APPROPRIATE HOSPITAL

- I. When known, the patient choice of hospital is to be honored with the following noted exceptions:
  - A. When the patient is unresponsive, or when the patient condition does not allow him to make an informed decision, and there is also no patient physician or agent with durable power of attorney for health care present to make his desires known. (The patient's physician can only make the decision if on scene, assumes control of the care, and accompanies the patient after conferring with Medical Control.)
  - B. If a critically ill or injured patient appears to be in need of specialized care available at only a specific hospital.
  - C. If the patient's choice is not either a trauma center or the closest hospital.
  - D. If the patient's choice of hospital would require the ambulance to travel an unreasonable distance from its primary coverage area.
- II. Medical Control must be consulted when A, B, C, or D, above exists. The ambulance crew will contact Medical Control and after field assessment is given, the EMS physician will evaluate and decide the disposition of the patient.
  - A. When contacted by an ambulance requesting direction on where to transport a patient the EMS physician will direct the ambulance to the closest most appropriate hospital.
  - B. The ambulance may be directed to a more distant hospital if the EMS Medical Director or his qualified designee has determined that the benefits outweigh the risks.
  - C. The EMS Medical Director or qualified designee must note on the ER radio log that determination and sign the record.
- III. The receiving facility may direct bypass when current resources are exceeded. Bypass may only be initiated if the receiving hospital emergency physician certifies that transport to the further hospital would not be detrimental to the patient and the bypass meets criteria in O-33.
- IV. Category I trauma patients should be transported to the nearest trauma center if one is within 25 minutes transport time from the scene.
- V. While unavailable at this time due to lack of local facilities offering in-patient drug and mental health treatment (August 2023) QAEMS is committed to working with local partners to allow for the transport of select EMS patients directly to a mental health facility or to a drug treatment facility should these services become available in our four-county area.
- VI. While unavailable at this time QAEMS is committed to working with urgent or immediate care facilities that would allow for direct transport from EMS to their facilities for patient care. This would be evaluated on a case-by-case basis and would depend upon the type of urgent or immediate care facility, their scope of practice, and their level of care provided.

#### **RESOURCE HOSPITAL OVERRIDES/INTERVENTION**

- I. This policy shall be initiated when one of the following occurs:
  - A. No radio response by the receiving hospital after three attempts by the prehospital unit.
  - B. Deviation from Quincy Area EMS System medical protocols, operational protocols, or communication protocols.
  - C. When the Associate Hospital requests the intervention.
  - D. When an EMS crew requests the intervention.
- II. Intervention should first be initiated as suggestions given to the treating physician via phone by the Resource Hospital physician.
- III. If this indirect intervention does not result in closer compliance to the Quincy Area EMS System policies, then:
  - A. The Resource Hospital / EMS physician will notify the Associate Hospital physician via recorded line that the Resource Hospital physician is "overriding" the call.
  - B. The Resource Hospital / EMS Physician will notify the prehospital unit that the Resource Hospital is overriding the call.
  - C. The Associate Hospital will continue to monitor the call but may not intercede.
- IV. The radio log will be marked for review with details of the event and orders given.
  - A. The call will be entered into the QA process as an event.
  - B. The EMS Medical Director or designee will contact the Associate hospital physician as part of the QA process as needed.

12/84; re: 11/97, 5/98, 8/01, 1015, 3/18, 11/21

(reviewed: 8/95)

#### **REFUSAL OF SERVICES**

- I. Purpose: clarifies the responsibility of the EMS Provider when a patient refuses treatment and/or transportation.
  - A. At no time should any EMS provider suggest patient refusal. Advise the patient of the nature of proposed care and the potential consequences of refusing care.
  - B. Patient is defined as any subject with a complaint of injury or illness or a mechanism of injury that has potential for injury.
- II. Who May Refuse Care: The following individuals may refuse medical care and/or transportation if the patient in question does not appear to be a threat to himself or others:
  - A. An adult patient, age 18 years of age or older who is capable of making decisions.
  - B. A minor patient (under age 18) who is capable of making decisions and meets one or more of the following criteria:
  - 1) Has been granted legal emancipation and provides supporting documentation
  - 2) Is pregnant
  - 3) Is a parent
  - C. A Durable Power of Attorney for Health Care for a patient who is unable to make decisions.
  - D. The legal guardian or parent of a minor patient
- III. Refusal Procedure for Persons Meeting Criteria in Section II. Documentation should include the following information:
  - A. Assess the patient and obtain vital signs. If the patient refuses assessment, document this on the Patient Care Report form.
  - B. Explain to the patient or legal guardian the potential benefits of treatment/transport.
  - C. Explain to the patient or legal guardian the risks associated with their decision to refuse treatment/transport.
  - D. Medical Control MUST be contacted via radio or phone to verify acceptance of the refusal for all HIGH-RISK REFUSALS.
    - 1) HIGH RISK REFUSALS
      - a. Head injury with altered level of consciousness or change in Glasgow Coma Scale
      - b. Suspected or known alcohol or drug intoxication
      - c. Any time that medications are administered and patient refuses transport with the exception of oral glucose, dextrose 10% or albuterol nebulizer.
      - d. Significant mechanism of injury (Examples: MVC with vehicle rollover, fall from significant height, significant penetrating trauma).
      - e. Acutely altered mental status or impaired judgment that is not normal for the patient.
      - f. Unstable or abnormal vital signs
      - g. Ask for assistance from family members, other trusted adults, ED physician.

#### 2) LOW RISK REFUSALS

- a. Low speed MVC without significant injury.
- b. Isolated injuries not related to a high-risk mechanism.
- c. Third party calls where no injury or illness is present.
- d. Non-injury call for assistance.
- e. A patient with no other concerning complaints whose mental status is not normal but is confirmed to be usual for the patient by family or friends who will remain on scene with the patient after EMS departure.
- f. A patient with hypoglycemia due to insulin use which was corrected by administration of oral glucose or IV dextrose 10% and whose family or friend who will remain on scene after EMS departure.
- g. A patient with a respiratory complaint that requires only one albuterol nebulizer treatment to correct.
- h. A patient with heat-related muscle cramps that requires only IV fluid administration to correct.
- E. Obtain signature from the patient or legal guardian and the EMS provider obtaining the refusal. It is preferable to have two witnesses. Only obtain the signature after contact with Medical Control for HIGH-RISK REFUSALS.
- F. If the patient or legal guardian refuses treatment and/or transport after having been informed of the risks involved and also refuses to sign the refusal form, relay this information to Medical Control for both HIGH RISK and LOW RISK REFUSALS.

#### IV. Patient with Diminished Mental Capacity

- A. Assess the patient as completely as possible and obtain vital signs. Consent is implied if the patient's mental status is such that he/she is incapable of making a rational decision.
- B. Advise the patient of the risks associated with his decision to refuse treatment/transport
- C. If family members/friends are present, advise them of the risks associated with the patient's refusal of treatment/transport. They may be able to reason with the patient.
- D. If unsuccessful in reasoning with the patient and/or family, contact Medical Control for further instructions. You may be instructed to obtain assistance from law enforcement to use reasonable force/restraints to provide treatment/transport.

#### V. Refusal by a Minor

- A. Assess the patient and obtain vital signs. If the patient refuses assessment, document this in the narrative.
- B. Determine patient age and if under age 18, determine emancipation status.
- C. If the minor does not meet the criteria listed in Section II.B., contact with a parent or legal guardian must be made.

- D. Contact the parent/legal guardian by phone and report circumstances of the incident and patient condition. Advise that the patient is refusing care and ask if they would like the patient to be treated/transported.
- E. If the parent/legal guardian refuses treatment/transport, advise them of risks and ask them to repeat the refusal to a witness if possible.
- F. Contact Medical Control for verification of the refusal.
- G. If contact with the parent/legal guardian is unsuccessful, contact Medical Control for further instructions.
- H. If this process would delay the treatment of another seriously ill or injured patient on the scene, refer to Section VI below

#### VI. Multiple Refusal Incident

- A. Initial EMS personnel on the scene should perform an initial triage to determine the number of victims/injuries and whether additional resources are needed. There may be many people involved in the incident, but few injuries requiring ambulance transport. A brief initial contact should be made with all potential patients.
- B. If the ambulance crew determines there are seriously ill or injured patients requiring their immediate attention, additional EMS personnel should be requested to assist with minor injuries and obtaining refusals.
  - 1) Additional EMS personnel may consist of additional ambulance crews or non-transport crews.
  - 2) The additional personnel will assess remaining potential patients and follow guidelines in previous sections for obtaining refusals.

revised: 4/92, 11/97, 9/99, 10/00, 8/01, 1/02, 2/04,5/18, 11/18, 11/21 (reviewed: 8/95)

#### **TREATMENT OF MINORS**

- I. Definition of minor: Any person under the age of eighteen.
  - A. Anyone under the age of eighteen is to be considered a minor unless they meet one or more of the following criteria:
    - 1. Has been granted legal emancipation and can provide documentation of this
    - 2. Is pregnant
    - 3. Is a parent
- II. Treatment of a minor
  - A. Assess the patient
  - B. Obtain consent from the parent or legal guardian for treatment/transport
  - C. If a delay to locate the parent or legal guardian could adversely affect the patient, begin lifesaving measures, and contact Medical Control for instructions.
- III. Refusal of Treatment: See Protocol O-6 Section V
- IV. Legal guardian: An adult who has been appointed or granted legal custody by the court. This person is legally responsible for the minor.

12/84; re 11/97, 9/99, 8/01, 1/02, 10/15, 11/21 (reviewed: 8/95, 5/18)

#### **DEATH AT THE SCENE**

- I. If a patient is pulseless and non-breathing and does not meet the criteria for initiation of resuscitative efforts, emergency personnel are to:
  - A. Contact Medical Control
  - 1) Communicate pertinent medical history, current assessment, interventions performed and response to those interventions.
  - B. Notify the coroner on all prehospital deaths (after contact with Medical Control)
    - 1) Contact dispatch and advise of need for coroner
- II. If a crime is suspected:
  - A. Disturb the body and scene as little as possible
  - B. Request presence of law enforcement personnel if not already at the scene
- III. In all instances, document as much pertinent information as may be obtained from bystanders and/or observed at the scene such as:
  - A. Time patient collapsed
  - B. Time patient became pulseless and non breathing
  - C. When patient was last seen
  - D. Recent medical history if available
  - E. Environmental observations
  - F. Pertinent physical findings

5/88; revised 11/97, 5/98, 10/15, 5/18, 11/21 (reviewed: 8/95, 8/01)

#### WITHHOLDING RESUSCITATION

- I. All pulseless and non-breathing patients are to receive full resuscitative efforts except when any of the following physical findings can be documented:
  - A. rigor mortis
  - B. tissue decomposition
  - C. extreme dependent lividity
  - D. injuries incompatible with life such as incineration, decapitation.

OR

- II. The duration of complete cessation of cardiovascular function can accurately be determined and documented to be greater than 15 minutes. To make the decision not to initiate CPR in this setting, the responder(s) must be confident that:
  - A. Bystanders at the scene are able to recognize cardiac arrest.
  - B. Bystanders at the scene are reliable in documenting the time elapsed.
  - C. Bystanders are acting in good faith.
  - D. No independent influences on central nervous system function, such as drugs or hypothermia are present.

OR

- III. A valid written DNR is received (see Policy O-9B)
- IV. It should be considered in all cases that the patient could have collapsed from a cardiac or non-cardiac cause, yet continued to have cardiac activity sufficient to sustain the brain until the arrival of emergency personnel. When doubt exists, assume the patient has not sustained irreversible cessation of circulatory and respiratory functions and initiate full resuscitative efforts.

5/88 re: 4/92, 11/97, 5/98, 10/15, 5/18, 11/21

(reviewed: 8/95, 8/01)

#### **DNR POLICY**

- I. Emergency Medical Responders/First Responders, EMT, Paramedic, and Prehospital RN are authorized to recognize a valid "Do Not Resuscitate" (DNR) policy. The role of the on-line Medical Control physician is to interpret policy and provide guidance and direction to field personnel as needed.
  - A. Confirm the written DNR order contains at least the following information:
    - A. name of patient
    - B. name and signature of attending physician
    - C. effective date
    - D. the words "Do Not Resuscitate"
    - E. evidence of consent either:
      - a) signature of patient; or
      - b) signature of legal guardian; or
      - c) signature of durable power of attorney for health care agent; or
      - d) signature of surrogate decision maker
  - B. Make a reasonable attempt to verify the identity of the patient.
  - C. Notify Medical Control of the DNR order and the existence or absence of items in section A.
  - D. Emergency Communication RN's (ECRN's) shall summon the EMS physician to the radio and that physician will advise the prehospital personnel to honor the DNR order or reject it based upon all information available at that time.
- II. A DNR order shall be revoked in one or more of the following ways:
  - A. By the patient, or
  - B. The order is physically destroyed or verbally rescinded by the physician who signed the order, or
  - C. The order is physically destroyed or verbally rescinded by the person who gave written consent to the order.
- III. The original or copy of the original written DNR order shall accompany the patient and be a permanent part of the EMS medical record.
- IV. General Information
  - A. DNR orders can affect the treatment of patients prior to or during a full cardiac arrest. Review section 2 of the DNR form.
  - B. In the absence of a valid DNR order, CPR may only be withheld in accordance with the Systems policies on O 9 Death At The Scene and/or O9-A withholding resuscitation
  - C. A living will by itself cannot be recognized by prehospital care provider.

- V. Education of the system personnel regarding this policy will be accomplished in one or more of the following manners:
  - A. Agency CME by Training Officer
  - B. System Wide Education Program
  - C. Distribution of copies of the policy
  - D. CME articles specific to DNR and this policy
- VI. Quality Measures Required
  - A. System personnel will submit a report regarding any difficulties experienced in complying with this policy.
  - B. Problems will be evaluated as necessary by the Region 3 Advisory Committee.

#### RESPONSIBILITY AT THE SCENE/LAW ENFORCEMENT PERSONNEL

- I. Law Enforcement personnel will be notified when the following circumstances occur:
  - A. Gunshot or knife wounds
- II. EMS obligations at the scene of a violent crime.
  - A. Immediately notify law enforcement.
  - B. If the patient is obviously dead, the body and surrounding scene shall remain undisturbed.
  - C. Do not touch, move, or relocate any item at the scene unless absolutely necessary to provide treatment to an injured victim. Mark location of any item that must be moved.
  - D. No onlookers or other unauthorized personnel on the premises of the crime scene.
  - E. Observe and note anything unusual, especially if the evidence may not be present when law enforcement arrives, i.e., smoke and odors.
  - F. Give immediate care to the victim.
  - G. Keep detailed records of the incident including observations of the victim at the scene
  - H. Once law enforcement arrives, do not hinder their work. Restrict your movements to those which relate to patient care.
  - I. Use caution not to violate HIPAA standards when providing information to law enforcement.
- III. The police have broad legal authority to enforce the law. They also have the equal right to control a situation to the degree that it does not needlessly hinder emergency care. Law enforcement may let EMS personnel perform their work unhampered if they understand the reason and need for treatment and are sure that the treatment will not delay them from their rights to enforce the law. If a conflict should exist between the EMS personnel and law enforcement the following guidelines shall apply:
  - A. Meet with law enforcement in private and try to agree on an approach that will satisfy their needs along with your own.
  - B. Explain why the treatment is needed, and how law enforcement work may hinder the treatment.
  - C. If they still refuse to let you start treatment, diplomatically advise that the incident will be noted in the run form.
  - D. Remember that they also have a duty to perform.
  - E. If an agreement cannot be reached, you must give in to their demands, continue the treatment allowed and never abandon the patient.
  - F. You are not required to perform services or treatment demanded by law enforcement.
  - G. You can advise the patient about limits placed on treatment by law enforcement.
  - H. Contact Medical Control and advise of the situation.
  - I. Document objectively and clearly.

#### **PATIENT CONFIDENTIALITY**

- I. Purpose: QAEMS providers at all levels are responsible for the protection of confidentiality regarding patients and patient care.
  - A. Breach of confidentiality is a serious issue that carries legal implications due to laws governing privacy (HIPAA)
- II. Confidential Information Guidelines
  - A. Written and electronic documentation
    - 1. Confidentiality is governed by the "need to know" concept.
    - Medical staff directly involved in the patient's care, personnel involved in the quality assurance process and authorized medical records and billing personnel are allowed access to the patient medical record and reports.
    - 3. Printed forms and records need to be maintained as confidential.
  - B. Radio Communications
    - 1. Sensitive patient information regarding diagnosis should not be discussed in transmission utilizing MERCI radio.
    - 2. Patient names should not be transmitted via MERCI radio. Patient initials can be included for direct admits.
  - C. Verbal Reports / Hand Off Reports:
    - 1. Avoid discussion of specific patient information in public areas.
    - 2. Information will be provided to law enforcement agencies or other governmental agencies as required by law in accordance with HIPAA standards.
- III. Patient Privacy on Scene
  - A. EMS personnel should limit bystanders at the scene of an emergency. Request law enforcement to assist at maintaining bystanders at a reasonable distance.
- IV. Potential violations of patient confidentiality will be taken seriously and fully investigated.

6/84, re: 7/86, 11/97, 5/98, 5/18, 11/21

(reviewed: 8/95, 8/01)

#### Major EMS Incident / Multiple Casualty Protocol

I. Purpose: This policy shall serve as a guide to the overall responsibilities of EMS providers at the scene of a major EMS incident or disaster.

#### II. Definitions:

- A. Major EMS Incident: can include both man-made and natural situations or disasters that could include but not be limited to:
  - 1. An incident with multiple patients requiring more than two ambulances for transport.
  - 2. An incident with special hazards such as chemical, biological, radiologic, nuclear, or explosive (CBRNE).
  - 3. A situation involving a difficult, prolonged rescue or extrication
  - 4. A situation in which EMS prehospital and/or hospital resources are overloaded
- B. Mass casualty incident / disaster: Generally, ten or more victims, or an unstable (open) incident that could likely escalate into more casualties. This type of event would be expected to greatly tax local providers. Note that smaller number of critical patients could tax available resources.
- C. Incident command system (ICS): designed to control field response operations by establishing functional areas under the direction of the Incident Commander.
- D. Incident Commander (IC): the person in overall control of the incident site. The person in charge may change, but the overall function does not.
- E. Unified command: the incident command system can be utilized across multi-jurisdictional boundaries. Realize that in a disaster situation you may be instructed to report to a person other than your usual supervisor.

#### III. EMS Responsibilities

- A. Incident commander: The senior EMS provider in the first responding unit should assume the role initially if incident command has not already been assumed by an authority having jurisdiction in the incident.
  - 1. Duties include:
    - a. Perform overall scene evaluation.
    - b. Identify yourself to dispatch and declare a major EMS incident / disaster NOTE: Notify the local hospital(s) via MERCI or phone of the incident.
    - c. Determine need for and request additional resources.
    - d. Begin scene organization keeping in mind any potential hazards at the site.
      - Set up command post may utilize the ambulance as a convenient initial command post
      - Designate a treatment area where all victims will be brought after triage while awaiting transport

- Designate vehicle/crew/equipment staging area in an area that does not hamper entrance and egress from the disaster site.
- e. Determine a plan of action for the event
- f. Assign EMS personnel to tasks
- g. Due to limited EMS resources, this person should consider transfer of command as soon as is feasible. This could be to an EMS person that is more experienced and/or a person with more advanced incident command training or to the authority having jurisdiction from another agency.
- B. Triage Officer: The person designated to oversee triage functions. The second senior EMS provider in the first responding unit will usually assume this role.
  - Duties include:
    - a. Perform primary triage to count the initial number of victims and severity.
    - b. Provide numbers and severity information to the Incident Commander
    - c. Make recommendations to the Incident Commander concerning additional resources needed
    - d. Coordinate secondary triage in the treatment area until all patients are cleared from the scene
    - e. Will use SMART tag as the approved triage tag (See 12-F)
- C. Medical Branch Officer: In a very large-scale operation, this person is responsible for all EMS functions. Designated by the Incident Commander.
- D. General responsibilities for other EMS providers responding to a disaster
  - 1. Response by personal vehicle
    - a. Be prepared to show medical provider identification to law enforcement to be allowed on scene.
    - b. Park personal vehicles in an area designated that will not hamper entrance and egress from the disaster site.
    - c. Report to the command post or to other designated areas for further instructions.
  - 2. Response by emergency vehicle
    - a. Check in and park emergency vehicles in designated staging areas.
    - b. You may be instructed to turn off emergency lights if doing so will not cause a hazard to you and the vehicle.
    - c. Report to the command post or to other designated areas for further instructions. You may be asked to remain with your vehicle.
  - 3. Response by aircraft
    - a. Will land in designated landing areas.
    - b. Staff will remain with the aircraft unless specifically instructed by the Incident Commander or designee.
  - 4. General duties of EMS providers
    - a. Assist with primary and ongoing triage
    - b. Assist with medical care on scene in the designated treatment area
    - c. Provide emergency care during transport
    - d. Provide emergency medical care to other personnel at the disaster site

#### IV. Declaration of a major EMS incident

- A. Enroute declaration: any EMS unit dispatched to a situation with the potential as a major EMS incident can declare a <u>possible</u> major EMS incident or disaster while enroute to the scene. The senior crew member should verify as soon as possible once they have arrived on scene whether a major EMS incident does or does not exist and relay this information to dispatch.
- B. On scene declaration: After arrival on scene the senior crew member determines in the scene size-up that a major EMS incident exists and makes the declaration.

#### C. Upon declaration:

- The senior crew member will notify dispatch and advise them to activate the disaster plan, giving them as many specifics as are available at the time. If possible, this will include:
  - a. Disaster situation
  - b. Estimated number of victims
  - c. Location of the incident
  - d. Potential for escalation
  - e. Requests for additional EMS units and other resources
  - f. Specifies hazards noted that could impact responding units
- 2. The senior crew member should also notify the local hospital(s) in order for the hospital to be prepared to receive patients.

#### V. Communications

- A. It should be noted that communications during a disaster is often a weak link due to overloading of radio frequencies.
- B. Communications between EMS providers/agencies should be conducted on MERCI radio frequency 155.340, by cell phone or on another specifically designated frequency.
- C. There should be no unnecessary radio traffic
- D. Patient report to the hospital: during transport communication should be through cell phone or MERCI and should be limited to the number of patients being transported in the vehicle, their severity based on the assigned SMART Tag color and estimated time of arrival to the Emergency Department. Do not attempt to give a full report as this may lead to overload of the communications system.
- VI. Coordinating this policy with your county or local emergency medical disaster plan:
  - A. The EMS Medical Director is responsible for medical oversight of EMS System personnel during routine and disaster operations.

- B. The Resource Hospital should be notified in the event of a major EMS Incident/Mass Casualty declaration in order for assistance with the overall EMS response to take place. Contact Blessing Hospital on the dedicated Medical Control phone line 217-224-7743 or on MERCI radio frequency 155.340. Advise of the type and location of the disaster and ask that the EMS System Coordinator be contacted.
  - 1. The EMS System Coordinator or designee will respond to the disaster site or to the Emergency Operations Center (EOC) if activated, to assist with overall EMS functions.

#### VII. EMS Disaster Resources

- A. Adams County Ambulance & EMS Mass Casualty Response Unit
  - Contents: Disaster supplies sufficient for 50-100 patients including backboards. (There
    are fifty backboards on the trailer if additional are needed be sure to specifically
    request.)
  - 2. Request by calling your local 9-1-1 dispatch center to relay the request. Be prepared to provide the following information:
    - a. Your name, agency and contact number
    - b. Name of incident commander and radio frequency to use
    - c. Type of disaster
    - d. Location of disaster
    - e. Time the incident occurred
    - f. Route for entry to the staging area or location that the Incident Commander is requesting the trailer be located.
    - g. Directions
- B. Blessing EMS Department maintains a master list of all approved agencies in the Quincy Area EMS System

(reviewed: 8/95, 8/01)

## **SMART TRIAGE TAG**



11/09, 5/18, 11/21

#### SIMPLE TRIAGE AND RAPID TREATMENT (START)

- I. Purpose: A standardized triage system provider guidance for EMS personnel to make objective decisions when faced with multiple casualties.
- II. Adult Procedure
  - A. Start where you stand and walk either clockwise or counterclockwise until the entire area has been triaged.
  - B. GREEN (Minor)
    - 1. Identify the uninjured or "walking wounded" by designating anyone who can walk to go to a designated location out of danger.
    - 2. As soon as additional help is available, designate someone to tag the patients as green.
  - C. Proceed to the victims that cannot move.

#### STEP I: Respiration's (breathing)

- 1. None, open airway, still no breathing, tag DECEASED (BLACK)
- 2. Respiration's greater than 30/min or less than 10/min, tag IMMEDIATE (RED)
- 3. Respiration between 10-30/min, go on to Step 2

#### STEP 2: Perfusion check (radial pulse)

- 1. If no radial pulse, tag IMMEDIATE (RED)
- 2. If radial pulse present go to Step 3

#### STEP 3: Mental Status

- 1. If unable to follow simple command or unconscious, tag IMMEDIATE (RED)
- 2. If able to follow commands, tag DELAYED (YELLOW)

#### III. JUMPSTART

Pediatric Procedure: designed for triaging infants and young children. If patient appears to be a child, use JUMPSTART.

- A. Direct all children able to walk to a designated area for secondary triage.
- B. Nonambulatory (RPMS)

#### STEP I: Respiration's (breathing)

- 1. No breathing, open the airway. It patient starts breathing, tag IMMEDIATE (RED)
- 2. If no breathing and no pulse, tag DECEASED (BLACK)
- If no breathing and pulse present, give 5 rescue breaths, if still no breathing tag DECEASED (BLACK)

- 4. If starts breathing after rescue breaths, tag IMMEDIATE (RED)
- 5. If respiratory rte <15 or >45, tag IMMEDIATE (RED)
- 6. If respiratory rate 15-45, go to Step 2.

#### STEP 2: Pulse

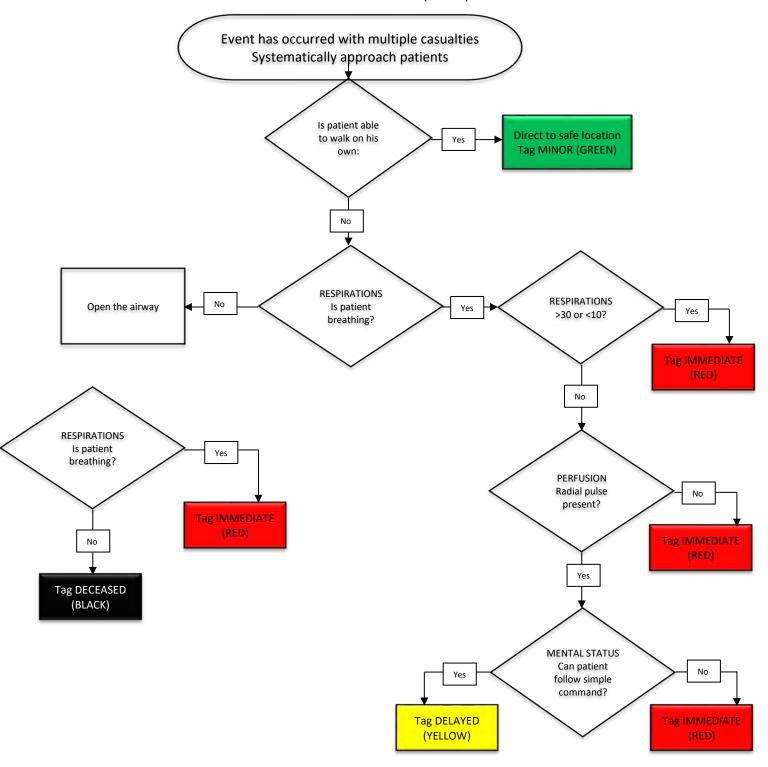
- 1. If breathing but no peripheral pulse (radial, brachial), tag IMMEDIATE (RED)
- 2. If pulse present, go to Step 3

#### STEP 3: Mental Status (AVPU)

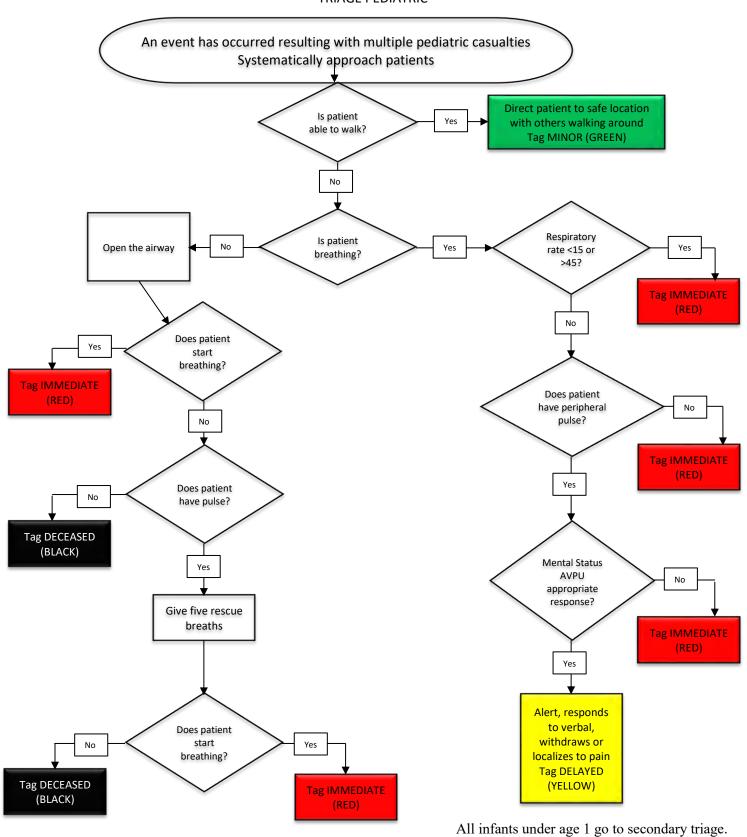
- 1. If unresponsive or responds inappropriately to pain (posturing), tag IMMEDIATE (RED)
- 2. If alert, responds to verbal stimuli or responds appropriately to painful stimuli, tag DELAYED (YELLOW)

12/03, re: 1/04, 5/18, 11/21

## QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE TRIAGE FOR ADULT (START)



### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE TRIAGE PEDIATRIC



#### **QUINCY AREA EMERGENCY MEDICAL SERVICE SYSTEM**

### RESTOCKING OF EMS DRUG BOXES

(non controlled substance medication)

- I. Purpose: Provides the procedure to be followed for restock of medications used during the care of the prehospital patient.
  - A. Facilitates restocking of the EMS drug box and assures compliance with Medicare and Illinois EMS rules and regulations regarding restocking.
  - B. The procedures for controlled substances are in policy O-13B.
- II. Responsibilities of the Resource/Associate Hospitals
  - A. Initial stock
    - 1. The Resource and Associate Hospitals will initially stock the EMS drug boxes with the medications listed in QAEMS System policy O-14 at a cost to the ALS agency of cost plus 10% if requested.
  - B. All medications utilized in prehospital patient care will be restocked on a 1:1 basis.
    - 1. The ALS ambulance agency will complete the charge sheet, present it to the pharmacy and receive the medications for restock.
    - 2. The agency will be billed for the medications restocked.
  - C. Replacement of Expired Medications
    - 1. All drugs, according to the FDA are dated with an expiration date on the outside of the box. If dated with month and year only, the drug will expire on the last day of the indicated month (example: 10/2020 would expire on 10/31/2020.
    - 2. Expired medication will be replaced at cost plus 10%.
    - 3. No medications stored in the EMS drug boxes may be exchanged for credit.
  - D. Replacement of Damaged/Soiled Medications
    - 1. All damaged or soiled medications will be replaced at cost plus 10%.
    - 2. A charge sheet for these medications must be completed by the ALS agency with information regarding the circumstances.
    - 3. Damaged or soiled medications must be disposed of properly by the ALS agency. Controlled substances require witnessed waste. (See Policy O-13B)
  - E. Maintenance of Records by the Resource (Blessing) and Associate (Illini) Hospitals
    - A copy of the Quincy Area EMS System Emergency Department Radio Log with the physician's name is verification of the order for the medication. The ER physician must sign the radio log.

#### F. Oversight/QA

- 1. Blessing Hospital EMS Department may complete EMS System audits for all calls in which a medication is given. Abnormal findings will be reported to the EMS Medical Director for follow-up.
- Oversight of agency outdate checks The ALS agency has the responsibility of checking outdates of medication in the EMS drug boxes on a monthly basis. The agency will maintain a written record of these checks. Copies shall be made available to the Blessing EMS Department upon request.
- III. Responsibilities of the ALS Provider Agency: Each ALS agency has the following responsibilities / accountabilities for the EMS Drug boxes assigned to their agency:

#### A. Securing the EMS Drug Boxes

- 1. In ambulances: medication and/or drug box should be secured to assure accountability (narcotics must be secured in a double lock system), i.e., example drug box stored in a locked compartment inside a locked vehicle.
- 2. Storage of extra EMS drug boxes: must be in a secure area, double locks are required. (Example drug boxes are stored in a locked cabinet inside a locked room or building.)
  - **NOTE A**: Drug boxes used for transfers do not need checked daily, however must be opened and checked before and after each time they are required for a transfer by a minimum of two (2) paramedics. If two paramedics are not available, the EMT on the transfer may count with the paramedic.
- 3. In some cases, medications (non-narcotic) may be stored in locations other than drug box (See O-14). These medications must be secured the same as in A.1.
- 4. **NOTE B:** While these medications do not have to be secured within a locked bag within a locked compartment, it will be the responsibility of the paramedic going on duty to assure medications are accounted for at the beginning of each shift.
- B. Restocking Medications Used on a Run
  - 1. Complete a charge sheet for all medications used.
  - 2. To restock a controlled substance, see Policy O-13B
  - 3. Take the charge sheet to pharmacy to obtain the medications needed for restock
  - 4. Replace the medications in the EMS drug box.
  - 5. Check the box against the inventory list.
  - 6. Obtain plastic lock tag and seal the box. (Note that plastic lock tags should be numbered, and the ALS agency should determine a method to purchase and maintain accountability of these tags.)

- C. Restock of Expired or Damaged/Soiled Medications
  - 1. Complete a charge sheet mark "Restock" and reason for restock.
  - 2. You may return outdated medications to the pharmacy for disposal.
  - 3. You may not return damaged/soiled medication to the pharmacy. They should be disposed of properly.
  - 4. Controlled substances require witnessed waste with documentation on the controlled substance usage form or radio log. Attach a copy of the log to the Restock form.
  - 5. Complete the restocking process as listed in III. B above.
  - 6. Replacement of damaged medications requires that a Quincy Area EMS System Event Report be completed. Send the event report to the Blessing EMS Department in care of the EMS System Coordinator. Send a copy to your agency director.
- D. Checking for Outdates: Each ALS agency will develop an internal policy for checking outdates and maintaining records of these checks.
- E. Discrepancies in Inventory: If a check of the EMS Drug box reveals that medications are missing or there is suspected tampering, the paramedic will take the following measures:
  - 1. Complete a charge sheet for all missing medications, noting on the charge sheet that restock is due to a discrepancy in stock.
  - 2. Present the charge sheet to the pharmacy.
  - 3. Receive medications to be restocked.
  - 4. Replace medications in the EMS drug box.
  - 5. Obtain plastic lock tag and seal box.
  - 6. A verbal/telephone report should be made immediately by the paramedic to the ALS agency director/administrator or designee.
  - Complete a QAEMS System event report regarding the discrepancy before the end
    of your shift send 1 copy to the EMS System Coordinator and 1 copy to your ALS
    agency director/administrator.
- F. Charging/Billing of Medications
  - 1. The ALS agency will be billed for the restocked medications by the Hospital pharmacy at cost plus 10%.
  - 2. The Hospital pharmacy will not bill patients for the medications used.
  - 3. The ALS agency can bill the patient for medications as per their own agency and regulatory policies.
- IV. Restocking from a pharmacy not at Blessing Hospital.
  - A. Specific procedure may vary. However, a paper trail must exist to assure auditing of medications given, wasted, outdated or in a case of a discrepancy.
    - 1. Minimum paperwork
      - a) Charge sheet

5/98

re: 8/01, 7/03, 8/04, 8/06, 7/08, 5/09, 11/09 re: 3/10, 8/11, 11/11, 12/11, 2/15, 5/18, 11/21 (reviewed 2/2016)

# QUINCY AREA EMSSYSTEM Controlled SubstancePolicy

- I. Purpose: To provide a comprehensive structure for obtaining, possessing, and administering controlled substances in the pre-hospital environment. Controlled substances currently approved for ALS ground crews include fentanyl, morphine, diazepam, midazolam and ketamine.
  - A. Facilitates restocking of the EMS drug box and assures compliance with Medicare and Illinois EMS rules and regulations regarding restocking.
  - B. The procedures for narcotics are based on the requirements set forth by the U.S. Department of Justice Drug Enforcement Agency (DEA) for accountability of all Schedule II controlled substances used by Advanced Life Support agencies.
- II. Scope: Applies to ALS EMS agencies that carry any of the controlled substances listed above.

#### III. Definitions

- A. **Controlled Substances**: those drugs that are classified into five schedules according to their abuse potential. The schedules range from schedule I, which have a high potential for abuse and no approved medical use, through schedule V, which have minimal abuse potential. All scheduled drugs will be treated as controlled.
- B. **Double lock**: Double lock means that there are two specific control locks to access the medications. One must be a key or combination lock and the other may be the numbered lock on the medication box. Preferred method would be to have the medications in a number sealed container in a cabinet with a key or combination lock inside a locked ambulance.

#### IV. Forms

- A. Controlled Substance Log (O-13B-F-2): This log is for the daily controlled substance counts. A new log should be started the first day of each month. The old log should be reviewed by the agency administration and filed with other required paperwork of the service. A copy of the log will be forwarded to the EMS System Coordinator by the 5<sup>th</sup> of the following month. Agencies may use an electronic alternative with system approval.
- B. Controlled Substance Usage Form (O-13B-F-1): This form will be used to document usage of controlled substances including waste and breakage and to receive Controlled Substance Narcotics from the Pharmacy. It will also be used to provide documentation to Pharmacy when a medication is used to allow for a replacement.

#### V. Controlled Substance Storage

- A. All controlled substances are to be left in the manufacturer's tamper proof packaging.
- B. Controlled Substance medications in EMS Drug Boxes are required to be secured through a double lock system. (see definition above)

- VI. Accountability for Controlled Substance Medications
  - A. Shift check of all medications will be done each time there is a crew change.
  - B. The counting of controlled substances in the EMS Drug boxes is the responsibility of all ALS crew members.
  - C. The count will be completed by two ALS staff each time there is a crew change.
  - D. Seal will be broken on the box and controlled substances counted and inspected for any signs of tampering.
  - E. Document the count on the controlled substance log (O-13B F-1), or system approved electronic alternative. Both ALS staff sign the log.
  - F. Reseal and secure the EMS Drug box.
  - G. Note: In some cases, controlled substances may not be stored in the EMS drug box but must be secured with a numbered lock and the procedure will be the same as noted above.
  - H. Drug boxes used for transfers do not need checked daily, however must be opened and checked before and after each time they are required for a transfer by a minimum of two (2) paramedics. If two medics are not available, the EMTB on the transfer may count with the medic.
- VII. Discrepancies in Inventory: If a check of an EMS Drug Box reveals that controlled substances are missing or there is suspected tampering the paramedic will take the following measures:
  - A. Verbal or telephone report immediately to the ALS agency director/administrator or designee. The director/administrator will notify the EMS System Coordinator.
  - B. Complete a QAEMS System event report regarding the discrepancy as soon as possible upon completion of the call. Send 1 copy to the EMS System Coordinator and 1 copy to the ALS agency Director/Administrator.
- VIII. Paramedic Responsibility: Each Paramedic is charged with the proper safeguarding and handling of controlled substances.
  - A. Review and sign a "Paramedic Contract for Controlled Substances" (O-13B F-3) which requires the paramedic to have read this policy in its entirety and agree to abide by it.
  - B. Ensure that the seal on the single use vial is intact.
  - C. Report any loss or discrepancies to agency director/administrator or designee and EMS System Coordinator immediately after finding a discrepancy.
  - D. Complete all required documentation related to use and administration or inventory of any controlled substance.

- E. Administer controlled substances pursuant to the direction of Medical Control or in accordance with QAEMS system protocols.
- F. While these medications do not have to be secured within a locked bag within a locked compartment, it will be the responsibility of the paramedic going on duty to assure medications are accounted for at the beginning of each shift

#### IX. Agency Responsibility

- A. Will assure that ALL crew members will follow this policy.
- B. Assure that controlled substances are secured using a double lock system.
- C. At least weekly, review the Controlled Substance Usage Form and ensure that the records of the usage correlate to ALS calls/PCR forms.
- D. Maintains all records related to obtaining, delivering and administering controlled substances for a period of 7 years.
- E. Forward documentation to the Blessing Hospital EMS System Coordinator by the 5<sup>th</sup> of each month.
  - 1) Documentation to be sent:
    - a) O-13B F-2 (Controlled Substance Log) for each unit (or system approved electronic alternate.)
    - b) O-13B-F1 (Controlled Substance Usage Form).

#### F. Securing the EMS Drug Boxes

- In ambulances: medication and/or drug box should be secured to assure accountability (controlled substances <u>must</u> be secured in a double lock system), i.e., example – drug box stored in a locked compartment inside a locked vehicle.
- Storage of extra EMS drug boxes: must be in a secure area, double locks are required. (Example – drug boxes are stored in a locked cabinet inside a locked room or building.)
- 3) In some case medication (non-narcotic) may be stored in various locations in a jump bag to facilitate a quicker response for the patient. While these medications do not have to be secured within a lock bag within a locked compartment, it will be the responsibility of the paramedic going on duty to assure the medication are present in the jump bag at the beginning of each shift.
- 4) Drug boxes stored to be used on transfers or as replacement boxes for daily activity must be stored in a secured locked compartment. These drug boxes will not require a daily check however each time a drug box is pulled from storage it must be opened and the narcotics checked by at least two ALS personnel. This can be two paramedics, a paramedic and RN or physician, or a paramedic and someone designated within your pharmacy that has the authority to sign that the medications are accounted for. If the drug boxes were used for a transfer, the drug box must be opened and re-checked in the same manner as when it was pulled for use to assure all narcotics are still present and accounted for, (See VI. H.)

#### X. Responsibilities of the Resource/Associate Hospitals

- A. Initial stock
  - The Resource and Associate Hospitals may initially stock the EMS drug boxes with the medications listed in QAEMS System policy O-14 at a cost to the ALS agency of cost plus 10%. Agencies may also purchase medications from other vendors.
- B. All medications utilized in prehospital patient care will be restocked on a 1:1 basis if resupply from Blessing or Illini.
  - 1) The ALS ambulance agency will complete retrieve and supply to pharmacy:
    - a) EMS Drug Box Restock List / Charge Sheet
    - b) Controlled substance usage form O-13B F-1
    - c) Copy of radio log for the call
  - 2) The agency will be billed for the medications restocked.

#### XI. EMS System Coordinator Responsibilities

- A. Shall function as a resource to agencies and assure that ALS agencies are adhering to the policy
- B. Review monthly usage reports and controlled substance logs.
- C. Conduct prompt follow up on any issues regarding discrepancies.
- D. Promptly report issues to the EMS Medical Director which will include a monthly report of controlled substance given.

#### XII. Restocking Controlled Substances Used on a Run

- A. Complete a charge sheet for all medications used.
- B. To restock Controlled Substances, you will also need a copy of the Emergency Department radio log signed by the ED physician. The copy of the radio log with physician name serves as the order for controlled medications (Morphine, Fentanyl, Valium, and Ketamine.) You will also complete a Controlled Substance Usage Form (O-13B F-1) showing which medication was used. This form will be signed by the Paramedic and Pharmacy personnel.
- C. Take the charge sheet, (and copy of radio log and Controlled Substance Usage Form (O-13B F-1) to pharmacy to obtain the medications needed for restock
- D. Replace the medications in the EMS drug box.
- E. Check the box against the inventory list.
- F. Obtain plastic lock tag and seal the box. (Note that plastic lock tags should be numbered, and the ALS agency should determine a method to purchase and maintain accountability of these tags.)
- G. Agency specific EMS Drug Box Restock Forms will be made available to agency leaders for distribution to their staff.

- XIII Wasting of narcotics: when the entire amount of a narcotic is not used, the remainder must be wasted in the presence of a witness and both persons should sign the Controlled Substance Usage Form (O-13B F-1)
  - A. For patients being transported to the facility that gave the Controlled Substance order (Blessing or Illini Hospital) sign the Narcotic Waste Log on the back of the Emergency Department Radio Log.
  - B. For patients transported to another facility, complete and sign a Narcotic Waste Log form (RN from receiving facility should also sign) and fax it to the QAEMS System Medical Control hospital that gave the Controlled Substance order. The form will be maintained with the radio log

#### XIV Replacement of Expired Medications

- A. All drugs, according to the FDA are dated with an expiration date on the outside of the box. If dated with month and year only, the drug will expire on the last day of the indicated month (example: 10/2020 would expire on 10/31/2020.)
- B. Expired medication will be replaced at cost plus 10% if purchasing from Blessing Hospital.
- C. No medications stored in the EMS drug boxes may be exchanged for credit.
- D. All medications utilized in prehospital patient care will be restocked on a 1:1 basis
  - 1) The ALS ambulance agency will provide the following to pharmacy:
    - a) charge sheet
    - b) controlled substance usage form (O-13B-F2)
    - c) copy of radio log for the call
  - 2) The agency will be billed for the medications restocked.

#### XV. Replacement of Damaged/Soiled Medications

- A. All damaged or soiled medications will be replaced at cost plus 10% if purchasing from Blessing Hospital.
- B. A charge sheet for these medications must be completed by the ALS agency with information regarding the circumstances.
- C. Damaged or soiled medications must be disposed of properly. Controlled substances require witnessed waste.
- D. The ALS ambulance agency will provide the following to pharmacy:
  - 1) charge sheet
  - 2) controlled substance usage form (O-13B F2)
  - 3) copy of radio log for the call

#### XVI. Charging/Billing of Medications

- The ALS agency will be billed for the restocked medications by Blessing or Illini pharmacy at A. cost plus 10%.
- B. The Hospital pharmacy will not bill patients for the medications used.
- C. The ALS agency can bill the patient for medications as per their own agency and regulatory policies.

#### XVII Maintenance of Records by the Resource (Blessing) and Associate (Illini) Hospitals

- A. A copy of the Emergency Department Radio Log with the physician's name is verification of the order for the medication. The ER physician must sign the radio log.
- В. The original Emergency Department Radio Log is maintained by the Blessing Hospital EMS Department for two months.

#### XVIII. Oversight/QA

- A. Blessing Hospital EMS Department may complete EMS System audits for all calls in which a controlled substance was given. Abnormal findings will be reported to the EMS Medical Director for follow-up.
- В. Oversight of agency outdate checks - The ALS agency has the responsibility of checking outdates of medication in the EMS drug boxes on a monthly basis. The agency will maintain a written record of these checks. Copies shall be made available to Blessing EMS Department upon request

8/2011

re: 12/11, 2/15, 2/16, 5/17, 5/18, 11/18,

11/2021

# QUINCY AREA EMS SYSTEM CONTROLLED SUBSTANCE USAGE FORM

DATE	TIME	MEDICATION	AMOUNT	AMOUNT	PATIENT NAME	ORDERING	PARAMEDIC	RN
			GIVEN	WASTED		PHYSICIAN	SIGNATURE	SIGNATURE

10/87, re: 11/97, 5/98, 1/99, 8/99, 5/09, 2/16, 4/17/18, 11/21

(reviewed: 8/95, 8/01

# QUINCY AREA EMS SYSTEM CONTROLLED SUBSTANCE LOG UNIT #\_\_\_\_\_\_

DATE	TIME	MORPHINE	KETAMINE	VALIUM (diazepam)	VERSED (midazolam)	FENTANYL	LOCK NUMBER	OFF-GOING PARAMEDIC	ON-GOING PARAMEDIC	COMMENTS

## **QUINCY AREA EMS SYSTEM**

#### PARAMEDIC CONTRACT FOR CONTROLLED SUBSTANCES

I have read policies O-13A Restocking of EMS Drug Boxes and O-13B Controlled Substance Policy and do
understand and will follow the policies on controlled substances to assure we meet or exceed the requirements
for all medications (including all necessary paperwork) while functioning in the Quincy Area EMS System.
Print Name
Signature
 Date

8/2011; re: 5/17/2018, 11/21 (reviewed 2/2016)

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE EMS DRUG BOXES SUPPLY LIST (ALS TRANSPORT)

1. Medications/solutions: It is expected that packaging/concentration of medications may vary according to the pharmacy which supplies the drug box. The total amount of the drug carried in each drug box should be consistent throughout the EMS System.

Albuterol Inhalation Solution (Proventil, Ventolin)  Aspirin 81 mg tablets 4 Atropine 1 mg/10 ml abboject 5 Calcium chloride 10% 100 mg/ml 10 ml abboject 1 Dextrose 50% 25 grams/50 ml abboject 2 Diazepam (valium) 10 mg/2 ml syringe 2 Diphenhydramine (Benadryl) 50 mg/ml injectable 1 Dopamine (intropin) 800 mg/500 ml bag (1600 mcg/ml) premix bag 1 Epinephrine 1:10,000 1 mg/10 ml abboject 6 Epinephrine 1:1000 1 mg/10 ml abboject 6 Epinephrine 1:1000 1 mg/ml ampule 3 Glucagon 1 mg (1 unit) 2 gm/500 ml bag (1600 mcg/ml) premix bag 1 Lidocaine 2% 100 mg/5 ml abboject 3 Lidocaine 27 100 mg/5 ml abboject 3 Magnesium sulfate 50% 500 mg/ml 1 ml abboject 1 Metoprolol 25 mg tablets 4 Morphine sulfate 2 mg/ml tubex 5 Methylprednisolone 125 mg vial 1 Naloxone (Narcan) 2 mg/2ml 2 Nitroglycerin ointment Unit dose with paper 3 Nitroglycerin iontment Unit dose with paper 3 Nitroglycerin 0.4 mg (1/150 gr) tablets 25/bottle 1 Oral glucose gel 30 gram tube 1 Oxytocin (pitocin) 10 USP units/ml vial 1 Phenergan 25 mg injectable 2 Sodium bicarbonate (pediatric) 0.5 mEq/ml 10 ml abboject 1 Sodium chloride 0.9% 50 or 100 ml bags 4 Sodium chloride 1 mg/ml I0 ml abboject 1 Sodium chloride 30 ml vial 2 Verapamil (calan) 5 mg/2 ml vial 2 Fentanyl 100mcg/2ml 2	Adenosine (Adenocard)	6 mg/2 ml vials	5
(Proventil, Ventolin)         81 mg tablets         4           Aspirin         81 mg tablets         4           Atropine         1 mg/10 ml abboject         5           Calcium chloride 10%         100 mg/ml 10 ml abboject         1           Dextrose 50%         25 grams/50 ml abboject         2           Diazepam (valium)         10 mg/2 ml syringe         2           Diphenhydramine (Benadryl)         50 mg/ml injectable         1           Dopamine (intropin)         800 mg/500 ml bag (1600 mcg/ml) premix bag         1           Epinephrine 1:100,000         1 mg/10 ml abboject         6           Epinephrine 1:1000         1 mg/ml ampule         3           Glucagon         1 mg (1 unit)         2           Ketamine         50 mg/ml         1           Lidocaine 2%         100 mg/5 ml abboject         3           Lidocaine premix         2 gm/500 ml premix bag         1           Magnesium sulfate 50%         500 mg/ml         10 ml abboject         1           Metoprolol         25 mg tablets         4           Morphine sulfate         2 mg/ml tubex         5           Methylprednisolone         125 mg vial         1           Nalcoxine (Narcan)         2 mg/2ml         2			
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Dopamine (intropin)800 mg/500 ml bag (1600 mcg/ml) premix bag1Epinephrine 1:10,0001 mg/10 ml abboject6Epinephrine 1:10001 mg/ml ampule3Glucagon1 mg (1 unit)2Ketamine50 mg/ml1Lidocaine 2%100 mg/5 ml abboject3Lidocaine premix2 gm/500 ml premix bag1Magnesium sulfate 50%500 mg/ml10 ml abboject1Metoprolol25 mg tablets4Morphine sulfate2 mg/ml tubex5Methylprednisolone125 mg vial1Naloxone (Narcan)2 mg/2ml2Nitroglycerin ointmentUnit dose with paper3Nitroglycerin ointmentUnit dose with paper3Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Diphenhydramine (Benadryl)	50 mg/ml injectable	1
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Glucagon         1 mg (1 unit)         2           Ketamine         50 mg/ml         1           Lidocaine 2%         100 mg/5 ml abboject         3           Lidocaine premix         2 gm/500 ml premix bag         1           Magnesium sulfate 50%         500 mg/ml 10 ml abboject         1           Metoprolol         25 mg tablets         4           Morphine sulfate         2 mg/ml tubex         5           Methylprednisolone         125 mg vial         1           Naloxone (Narcan)         2 mg/2ml         2           Nitroglycerin ointment         Unit dose with paper         3           Nitroglycerin ointment         Unit dose with paper         3           Nitroglycerin ointment         Unit dose with paper         3           Nitroglycerin         0.4 mg (1/150 gr) tablets 25/bottle         1           Oral glucose gel         30 gram tube         1           Oxytocin (pitocin)         10 USP units/ml vial         1           Phenergan         25 mg injectable         2           Sodium bicarbonate         1 mEq/ml 50 ml abboject         1           Sodium bicarbonate (pediatric)         0.5 mEq/ml 10 ml abboject         1           Sodium chloride         0.9% 50 or 100 ml bags <td< td=""><td>Epinephrine 1:10,000</td><td></td><td>6</td></td<>	Epinephrine 1:10,000		6
Ketamine50 mg/ml1Lidocaine 2%100 mg/5 ml abboject3Lidocaine premix2 gm/500 ml premix bag1Magnesium sulfate 50%500 mg/ml10 ml abboject1Metoprolol25 mg tablets4Morphine sulfate2 mg/ml tubex5Methylprednisolone125 mg vial1Naloxone (Narcan)2 mg/2ml2Nitroglycerin ointmentUnit dose with paper3Nitroglycerin0.4 mg (1/150 gr) tablets 25/bottle1Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Epinephrine 1:1000	1 mg/ml ampule	3
Lidocaine 2%  Lidocaine premix  2 gm/500 ml premix bag  1  Magnesium sulfate 50%  500 mg/ml 10 ml abboject  1  Metoprolol  25 mg tablets  4  Morphine sulfate  2 mg/ml tubex  5  Methylprednisolone  125 mg vial  1  Naloxone (Narcan)  2 mg/2ml  2  Nitroglycerin ointment  Unit dose with paper  3  Nitroglycerin  0.4 mg (1/150 gr) tablets 25/bottle  1  Oral glucose gel  30 gram tube  1  Oxytocin (pitocin)  10 USP units/ml vial  1  Phenergan  25 mg injectable  2  Sodium bicarbonate  1 mEq/ml 50 ml abboject  1  Sodium bicarbonate (pediatric)  0.5 mEq/ml 10 ml abboject  1  Sodium chloride  0.9% 50 or 100 ml bags  4  Sodium chloride  30 ml vial  2  Verapamil (calan)  5 mg/2 ml vial  2  2  2  2  2  2  2  2  2  2  2  2  2	Glucagon	1 mg (1 unit)	2
Lidocaine premix 2 gm/500 ml premix bag 1  Magnesium sulfate 50% 500 mg/ml 10 ml abboject 1  Metoprolol 25 mg tablets 4  Morphine sulfate 2 mg/ml tubex 5  Methylprednisolone 125 mg vial 1  Naloxone (Narcan) 2 mg/2ml 2  Nitroglycerin ointment Unit dose with paper 3  Nitroglycerin 0.4 mg (1/150 gr) tablets 25/bottle 1  Oral glucose gel 30 gram tube 1  Oxytocin (pitocin) 10 USP units/ml vial 1  Phenergan 25 mg injectable 2  Sodium bicarbonate 1 mEq/ml 50 ml abboject 1  Sodium chloride 0.9% 50 or 100 ml bags 4  Sodium chloride 30 ml vial 2  Verapamil (calan) 5 mg/2 ml vials 2  Zofran 2 mg/ml INJ 2ml vials 2	Ketamine	50 mg/ml	1
Magnesium sulfate 50%500 mg/ml10 ml abboject1Metoprolol25 mg tablets4Morphine sulfate2 mg/ml tubex5Methylprednisolone125 mg vial1Naloxone (Narcan)2 mg/2ml2Nitroglycerin ointmentUnit dose with paper3Nitroglycerin0.4 mg (1/150 gr) tablets 25/bottle1Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Lidocaine 2%	100 mg/5 ml abboject	3
Magnesium sulfate 50%500 mg/ml10 ml abboject1Metoprolol25 mg tablets4Morphine sulfate2 mg/ml tubex5Methylprednisolone125 mg vial1Naloxone (Narcan)2 mg/2ml2Nitroglycerin ointmentUnit dose with paper3Nitroglycerin0.4 mg (1/150 gr) tablets 25/bottle1Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Lidocaine premix	2 gm/500 ml premix bag	1
Morphine sulfate2 mg/ml tubex5Methylprednisolone125 mg vial1Naloxone (Narcan)2 mg/2ml2Nitroglycerin ointmentUnit dose with paper3Nitroglycerin0.4 mg (1/150 gr) tablets 25/bottle1Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Magnesium sulfate 50%		1
Methylprednisolone125 mg vial1Naloxone (Narcan)2 mg/2ml2Nitroglycerin ointmentUnit dose with paper3Nitroglycerin0.4 mg (1/150 gr) tablets 25/bottle1Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Metoprolol	25 mg tablets	4
Naloxone (Narcan)2 mg/2ml2Nitroglycerin ointmentUnit dose with paper3Nitroglycerin0.4 mg (1/150 gr) tablets 25/bottle1Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium chloride0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Morphine sulfate	2 mg/ml tubex	5
Nitroglycerin ointmentUnit dose with paper3Nitroglycerin0.4 mg (1/150 gr) tablets 25/bottle1Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Methylprednisolone	125 mg vial	1
Nitroglycerin0.4 mg (1/150 gr) tablets 25/bottle1Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Naloxone (Narcan)	2 mg/2ml	2
Oral glucose gel30 gram tube1Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Nitroglycerin ointment	Unit dose with paper	3
Oxytocin (pitocin)10 USP units/ml vial1Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Nitroglycerin	0.4 mg (1/150 gr) tablets 25/bottle	1
Phenergan25 mg injectable2Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Oral glucose gel	30 gram tube	1
Sodium bicarbonate1 mEq/ml 50 ml abboject1Sodium bicarbonate (pediatric)0.5 mEq/ml 10 ml abboject1Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Oxytocin (pitocin)	10 USP units/ml vial	1
Sodium bicarbonate (pediatric)  Sodium chloride  0.9% 50 or 100 ml bags  4  Sodium chloride  30 ml vial  Verapamil (calan)  5 mg/2 ml vial  2 mg/ml INJ 2ml vials  2	Phenergan	25 mg injectable	2
Sodium chloride0.9% 50 or 100 ml bags4Sodium chloride30 ml vial2Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Sodium bicarbonate	1 mEq/ml 50 ml abboject	1
Sodium chloride         30 ml vial         2           Verapamil (calan)         5 mg/2 ml vial         1           Zofran         2 mg/ml INJ 2ml vials         2	Sodium bicarbonate (pediatric)	0.5 mEq/ml 10 ml abboject	1
Verapamil (calan)5 mg/2 ml vial1Zofran2 mg/ml INJ 2ml vials2	Sodium chloride	0.9% 50 or 100 ml bags	4
Zofran 2 mg/ml INJ 2ml vials 2	Sodium chloride	30 ml vial	2
	Verapamil (calan)	5 mg/2 ml vial	1
	Zofran	2 mg/ml INJ 2ml vials	2
	Fentanyl		2

#### 2. Other:

Carpuject holder	1	
Tubex holder	1	
Syringes: 3 ml, 6 ml, 12 ml, 20 ml, 35 ml	2 each	
Needles: 22 or 23 gauge 1 inch (IM injection pediatric)	2	
22 or 23 gauge 1 ½ inch (IM injection adult)	2	
25 or 27 gauge 5/8 inch (SQ injection)	2	
Filter needle (draw up solution from ampule)	4	
18, 19, or 20 gauge 1 inch (IV push, draw up solution from vial)	2	
Clave needleless adapter (drug boxes supplied by Blessing Hospital)		
Microdrip IV tubing	2	
Alcohol prep pads		
Medication added labels		
3 way stop cock		
10 ml saline flushes		

Revised: :5/98, 8/01, 3/02, 4/05, 6/06, 1/07 12/07, 4/08, 6/08, 11/09,3/10,

9/10, 1/11, 2/11, 2/14, 1/15, 7/15. 2/16, 1/18, 3/18,

5/18, 2/19

Reviewed: 8/12/02, 5/09, 11/21

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE EMS DRUG BOXES SUPPLY LIST ALS NONTRANSPORT AND ARV VEHICLE

I. Medications/solutions: It is expected that packaging/concentration of medications may vary according to the pharmacy which supplies the drug box. The total amount of the drug carried in each drug box should be consistent throughout the EMS System.

adenosine (Adenocard)	6 mg/2 ml vials	5
albuterol inhalation solution	2.5 mg/3 ml unit dose	4
aspirin	81 mg tablets	4
atropine	1 mg/10 ml abboject	5
dextrose 50%	25 grams/50 ml abboject	2
diphenhydramine (Benadryl)	50 mg/ml injectable	1
epinephrine 1:10,000	1 mg/10 ml abboject	6
epinephrine 1:1000	1 mg/ml ampule	3
lidocaine 2%	100 mg/5 ml abboject	3
magnesium sulfate 50%	500 mg/ml 10 ml abboject	1
naloxone (Narcan)	0.4 mg/ml 10 ml vial	2
nitroglycerin	0.4 mg (1/150 gr) tablets 25/bottle	1
sodium bicarbonate	1 mEq/ml 50 ml abboject	1
sodium chloride	0.9% 50 or 100 ml bags	4
10 ml saline flushes	10ml flush	4

#### II. Other:

carpuject holder	1
tubex holder	1
syringes: 3 ml, 6 ml, 12 ml, 20 ml, 35 m	2 each
needles: 22 or 23 gauge 1 inch (IM injection pediatric)	2
22 or 23 gauge 1 ½ inch (IM injection adult)	2
25 or 27 gauge 5/8 inch (SQ injection)	2
Filter needle (draw up solution from ampule)	4
18,19, or 20 gauge 1 inch (IV push, draw up solution from vial)	2
clave needleless adapter (drug boxes supplied by Blessing Hospital) alcohol prep pads 3 way stop cock	1

4/2010. Re: 1/15, 7/15, 2/16, 3/18

Reviewed 2/9/2016, 5/18, 11/21

## QUINCY AREA EMERGENCY MEDICAL SERVICE SYSTEM DURABLE POWER OF ATTORNEY FOR HEALTH CARE

- I. Patients with prolonged illness may invoke the right to choose a person to make health care decisions for them in the event that their mental functions become impaired.
- II. A properly executed Durable Power of Attorney for Health Care is a legal document which formalizes the decision described in I.
- III. EMS personnel should honor patient request expressed through a valid Durable Power of Attorney for Health Care. If a question arises regarding this issue, contact Medical Control for further direction.

#### **INFECTION CONTROL**

- I. Purpose: To provide safe practices for EMS responders who render care to populations likely to have an infectious or emerging disease and who must clean and disinfect their work equipment and to prevent transmission of infectious agents.
- II. Agency Responsibility
  - a. Each agency will develop and maintain a policy or policies that address utilization of PPE; cleaning and disinfection of equipment and frequently touched surfaces in the patient care environment; procedures for staff reporting and follow up of significant exposures; education of staff on these procedures.
  - b. Agency leaders or designees are responsible for ongoing monitoring to ensure agency policy/policies and guidance in QAEMS Policy O-17 is being followed and will remediate with individuals who are not in compliance.
  - c. The EMS System Coordinator may request copies of agency policies for verification.
- III. Recommendations for application of standard precautions and procedures

ygiene	
ygiene	vashing should be performed after touching blood, body fluid, secretions, excretions, contaminated items; immediately after removing gloves; between patient contacts (if hand washing facilities are not available the crew members should use antibacterial hand gel).
	Sloves should be removed in the patient room after delivery of the patient and removal of soiled linens from the ambulance stretcher. Crew should hand wash before leaving the patient room. Fresh gloves should be donned to clean / decontaminate the ambulance stretcher and other equipment. After cleaning, remove second pair of gloves and hand wash or gel rub again.
al protective equipment (PPE	
	iching blood, body fluids, secretions, excretions, contaminated items; for touching mucous membranes and non-intact skin.
eye protection (cover front and side of eye), face shield	procedures and patient care activities likely to generate splashes or sprays of blood, body fluids, secretions, especially suctioning, endotracheal intubation
	procedures and patient-care activities when contact of clothing/exposed skin with blood/body fluids, secretions, and excretions is anticipated.
nmental	
s and laundry	in a manner that prevents transfer of microorganisms to others and to the environment. After removal of dirty linen, do not place clean items on the ambulance stretcher until it has been cleaned.
s and other sharps	recap, bend, break or hand-manipulate used needles; use safety features when available; place used sharps in rigid, puncture-resistant containers; do not hand off sharps to other crew.

nmental control	gency should develop procedures for routine care, cleaning and disinfection of environment surfaces, especially frequently touched surfaces in patient-care areas and for cleaning of equipment. Do not eat, drink, smoke or handle contact lenses or apply lip balm in areas of possible contamination, while cleaning equipment or on scene.
: care	
resuscitation	outhpiece, resuscitation bag, other ventilation devices to prevent contact with mouth and oral secretions.
itory hygiene/cough	t symptomatic patients to cover mouth/nose when sneezing/coughing; instruct patients to use tissues and dispose in no-touch receptacle
ne/droplet precautions	hould wear surgical masks in addition to regular PPE for known or suspected patients with influenza, chicken pox, measles, SARS, meningitis, pertussis, mumps, adenovirus, mycoplasma pneumonia or other suspected airborne/droplet transmitted diseases;
ted or known Tuberculosis	hould wear N95 mask or PAPR in addition to regular PPE for known or suspected Tuberculosis (TB) patient.

#### IV. Significant exposure

a. Crew members will follow agency policy regarding the reporting and follow up after a significant exposure. This could include but is not limited to needle sticks, mucous membrane exposures to blood or body fluids, skin exposure through a break in the skin by blood or body fluids, exposure to a patient with infectious disease.

8/89, re: 11/97, 5/98, 8/01, 5/17, 11/21 (reviewed: 8/95 and 11/1/18)

## QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM POLICY AND PROCEDURE

#### PHYSICIAN AT THE OPERATIONAL CONTROL POINT

#### I. PURPOSE

- A. Physician direction shall be provided from the operational control point of the Resource and Associate Hospitals. All medical orders / direction given shall be recorded.
- B. The operational control point must be staffed / maintained 24 hours a day.
- II. The ECRN at the Resource Hospital will call the EMS Medical Director or a designated physician to the operational control point (radio) whenever:
  - A. A decision regarding where a patient is to be transported needs to be made by the Resource Hospital. (see policy O-4)
  - B. Intervention by the resource hospital is indicated. (see policy O-5)
  - C. A major EMS incident is declared. (See Policy O-12)
  - D. When an ALS unit is requesting permission to respond to a request for assistance outside their normal response area.
  - E. When an ALS crew is requesting an infield service level downgrade.(See Policy O-27)
- III. The ECRN at the Resource or Associate Hospital will call the EMS Medical Director or a designated physician to the operational control point (radio) whenever:
  - A. A patient is reported to have no blood pressure, no pulse, and no spontaneous respirations.
  - B. Orders are requested by prehospital personnel that are inconsistent with system policy and procedure.
  - C. A physician is at the scene requesting medical responsibility for a patient. (see policy O-3)
  - D. A patient refusing care is incapable of making a rational or informed decision to refuse
  - E. A major EMS incident is declared. (see policy O-12)
  - F. Treatment/refusal by a minor (O-6 and O-7)

- *IV.* The physician is required to sign the radio log when:
  - A. any of the situations in II and III occur
  - B. narcotics are administered
  - C. patient is dead on scene

6/12/90, re: 9/91, 11/97, 8/01, 11/18

(reviewed: 8/95)

#### TRANSPORTING TO THE HOSPITAL

- I. The transportation of a patient from the scene to the hospital will be performed under COLD (10-40) conditions (no lights or sirens) except when the patient's condition, signs or symptoms indicate any of the following:
  - A. cardiac or respiratory arrest
  - B. diabetic ketoacidosis or insulin shock
  - C. acute respiratory distress
  - D. anaphylaxis
  - E. decreased level of consciousness
  - F. hypotension
  - G. hypertensive crisis
  - H. amputation
  - I. severe burn (partial thickness burn over 30% BSA, full thickness burns over 5% BSA, inhalation injury)
  - J. chest pain
  - K. O.B. with complications
  - L. status epilepticus
  - M. uncontrolled bleeding
  - N. open or penetrating chest or abdominal wound
  - O. emergency call pending requiring HOT (10-33) response
- II. Decisions regarding use of lights and sirens are at the discretion of the crew and may be based on more than the criteria in I.

9/95, re: 11/97, 4/04, 11/21 (reviewed 8/01 and 11/1/2018)

#### IN-FIELD SERVICE LEVEL UPGRADES FOR RURAL POPULATIONS

- I. ALS personnel may board a BLS vehicle in the field to render a higher level of prehospital emergency care thereby temporarily upgrading that BLS vehicle to the status of an ALS vehicle.
  - A. The appropriate ALS equipment, supplies and radios must be transferred to the BLS unit.
  - B. ALS personnel will assume responsibility for the patient during the remainder of the transport.

### **CANCELED AMBULANCES**

- I. An ambulance dispatched to the scene of an emergency may honor a request to cancel under the following circumstances
  - A. A request to cancel is received from an ambulance at the scene that is licensed and staffed at the same or higher level
  - B. A request to cancel is received from an ambulance crew or non-transport provider at a lower licensure level after an initial assessment is completed and it is recognized there is no need for transport.
    - 1. On scene responders are responsible for assessment, documentation, refusal procedure.
  - C. A request to cancel is received from the patient, patient's family, or original caller through dispatch.
- II. In all instances in which an ambulance honors a request to cancel, a Patient Care Report must be completed including documentation of who and under what circumstances the request for cancellation was made.

6/96, re: 11/97, 8/01, 2/04, 11/18, 11/21

### MINIMUM TRAUMA FIELD TRIAGE CRITERIA

CATEGORY I	7	
Any trauma with unstable vital signs and/or		
Hemodynamic compromise as evidenced by:		
- BP ≤ 90 systolic		
- Peds BP ≤ 80 systolic		
Respiratory compromise as evidenced by:		
- Respiratory rate < 10 or > 29		
<ul> <li>Infant &lt; 1 year old, respiratory rate &lt; 20</li> </ul>		
- Requires ventilator support (i.e. BVM)		
Altered mentation as evidenced by:	YES	• Initiate Field Trauma Treatment Protocols
- Glasgow Coma Scale <u>&lt;</u> 10		Rapid Transport to Trauma Center (1) (2)
Anatomical Injury		1
Penetrating injury of head, neck, torso, groin with suspicion of		
underlying injury		
Chest wall instability or deformity (i.e. flail)		
Two or more proximal long one fractures		
Crushed, degloved or pulseless extremity		
Amputation above the wrist or ankle		
Pelvic fractures		
Open or depressed skull fracture		
Paralysis		
NO		
CATEGORY II		
• Falls	YES	
- Adult > 20 feet		
- Peds > 10 feet or >/= 2-3 times body height		
High risk crash		
- Ejection or partial ejection from motor vehicle		
- Death in same passenger compartment		
- Auto vs pedestrian / bicycle (significant injury)		
- Motorcycle crash > 20 mph		
	J	
NO		Initiate Field Trauma Treatment Protocols
	<b></b>	and Transport to Closest Hospital

- (1) > 25 minutes from Trauma Center, transport to nearest participating trauma hospital.
  - > 30 minutes from Trauma Center or participating trauma hospital, transport to nearest hospital.
  - > 45 minutes from Trauma Center or participating trauma hospital in a rural area where there is no comprehensive emergency department available, transport to nearest hospital.
- (2) Unless delayed by extrication or other mitigating circumstances, the goal is to have a total on-scene time of

under 10 minutes. (See Policy O-23)

re: 4/98, 11/1/2018, 11/21 (reviewed 8/01)

### TRAUMA LOAD AND GO

- I. PURPOSE: defines situations requiring prompt transport of critical trauma patients.
- II. Indications for rapid transport
  - A. Traumatic arrest
  - B. Obstructed airway
  - C. Altered mentation with GCS <10
  - D. Respiratory compromise with rate < 10 or >29 or severe distress
  - E. Shock
  - F. Injuries that will rapidly lead to shock or respiratory difficulty:
    - \* flail chest
    - \* open pneumothorax
    - \* tension pneumothorax
    - \* tender abdomen
    - unstable pelvis
    - \* bilateral femur fractures
    - poorly controlled major bleeding
- III. Unless delayed by extrication or other mitigating circumstances, the goal is to have a total on-scene time of 10 minutes or less.
  - A. The following procedures are appropriate to provide on scene in a load and go situation.
    - 1. Airway management
    - 2. Oxygenation / ventilation
    - 3. Seal open pneumothorax
    - 4. Needle chest decompression
    - 5. Stabilize impaled objects
    - 6. Spinal motion restriction
    - 7. Hemorrhage control
  - B. All other procedures including IV therapy, splints, bandaging should be performed enroute unless the patient is entrapped, and the procedures can be done during extrication or there are other unavoidable reasons for delay

6/96, re: 11/97, 8/01, 11/2018, 11/21

# **DISTRIBUTION OF THE EMS SYSTEM MANUAL / POLICY UPDATES**

- 1. PURPOSE: A copy of the EMS System manual is available at <a href="www.blessinghealth.org">www.blessinghealth.org</a> to ensure each EMS provider has access to an up-to-date resource for system policies, procedures, and protocols.
- II. QAEMS System Policy Revisions
  - A. Upon revision of any portion of the EMS System Policy and Procedure manual, participating agencies will be notified.
    - 1. Minor revisions of the EMS system plan will be distributed to all providers in the form of a memorandum, letter, or email via the leader of each service.
    - 2. Major revisions may require further education / training as developed or approved by Blessing EMS Department.

III. Notifications regarding EMS System activities, policy updates, education will be provided to agency leaders with instructions regarding expected response.

### IN-FIELD SERVICE LEVEL DOWNGRADE AND DETERMINATION OF APPROPRIATE CARE LEVEL

- I. Purpose: This protocol may be utilized when an ALS crew is requesting to downgrade the level of care for transport from ALS to BLS or when an AEMT/ALS crew arrives to the scene where a patient is currently being treated at the BLS level and must determine the appropriate level of care for the patient.
- II. Indications for Downgrade:
  - A. To be utilized in a situation where transportation by the ALS crew would leave their county with only BLS resources

AND

B. The emergency being experienced by the patient is of a nature that does not require ALS procedures

#### III. Procedure:

- A. The paramedic will thoroughly assess the patient and obtain the history.
- B. Medical Control at the Resource Hospital will be contacted with a request that the EMS Physician be called to the operational control point (Medical Control radio).
- C. The paramedic will relay the physical assessment data, history, and the request to downgrade.
- D. The EMS Physician will determine whether the call can be downgraded and will relay that information to the paramedic or will delegate the ECRN to relay this information.
- E. If the downgrade was approved, the BLS crew will transport the patient. If <u>not</u> approved, the ALS crew will transport the patient and provide the ALS care ordered by Medical Control.
- F. If patient condition deteriorates at any time during the BLS transport, Medical Control will be contacted immediately and an ALS unit may be sent to assist.
- G. Document thoroughly.
- IV. If a patient is receiving initial BLS level care at the time of AEMT/ALS personnel arrival, the AEMT/ALS provider may follow the outlined steps in part III of this policy, to include a full ALS assessment, and making contact with Medical Control, to determine if the patient is safe to continue receiving care at the BLS level.
  - A. A Medical Control Physician must authorize this decision in real-time.
  - B. Neither the assessment nor the transfer of care may occur if it would jeopardize the patient's condition.

	8/01, 11/18, 11/21, 8/23

If the BLS entity is non-transport and the AEMT/ALS personnel are sent to the scene to

provide transport services the AEMT/ALS crew must take over patient care.

C.

# QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM POLICY AND PROCEDURE

### AIR AMBULANCE UTILIZATION PROTOCOL

### I. Purpose:

To assure a mechanism for ground ambulance crews and First Responders to request a scene response by a helicopter air ambulance when specific criteria exist. In all cases, the dispatch agency will be contacted to assure closest available aircraft is utilized.

### II. Criteria:

- A. Severe trauma (category 1, severe burns, pediatric, etc.)
- B. Seriously ill patient in remote or off-road locations not easily accessible to ground ambulances, or whose location may cause delay in transport time.
- C. MVC or incident with prolonged extrication time anticipated (> 20 minutes).
- D. Special environmental conditions such as extreme heat or cold which affect potential patient outcome or prohibit ground access to the hospital (road or bridge damage).
- E. No available trauma center within 20 minutes by ground transport time.
- F. Ground transport resources are exhausted or exceeded (multi-casualty or multiple calls).

### III. Procedure:

- A. Determination of need.
  - When dispatch information indicates existence of any of the previous criteria, the responder will initiate helicopter response by contacting the local dispatch agency.
  - 2. When preliminary information or mechanism of injury indicates any possibility that helicopter transport may be indicated, the closest available aircraft should be immediately placed on standby.
  - 3. After arrival at the scene and a full patient assessment by the ambulance crew, the closest available aircraft should be notified whether their response is indicated or if they may be canceled.

# IV. Patient Preparation

- A. Treat injuries/illnesses per protocol.
- B. Package all patients for transport on a long spine board, use spinal motion restriction procedures when indicated.
- C. Secure all loose objects.
- D. Provide a concise report to the helicopter crew.

# V. Landing Zone Criteria

A. Landing zone designation and preparation will usually be the responsibility of the responding fire department. If time permits, it is advisable to evaluate the landing zone yourself for safety.

# B. General

- 1. Solid, fairly flat surface
- 2. Free of potentially loose debris
- 3. Free of obstacles such as trees, power/telephone/light poles, wires, vehicles, animals, or people
- 4. Should be located approximately 100 yards from the scene.

# C. Dimensions:

Daylight: 100X100 foot area
 Night: 100X100 foot area

#### PROFESSIONAL CONDUCT & CODE OF ETHICS POLICY

- I. The following are guidelines for interaction with patients, other caregivers, and the community. They apply equally to agencies, providers, and students in the Quincy Area EMS System:
  - A. Respect for Human Dignity Respect all patients and provide services without discrimination.
  - B. Maintain confidentiality –Providers are expected to know and understand HIPAA regulations regarding the sharing of patient information in their professional practice. There should be no communication via social media of information that references patients, specific calls, agencies, or agency personnel without permission of those involved.
  - C. Professional Competency Provide the patient with the best possible care by continuously improving your knowledge base, skills, and maintaining required continuing education and certifications.
  - D. Safety Awareness & Practice Protect the health and well-being of the patient, yourself, your co-workers and the community by always following safety guidelines, principles and practice. This includes the use of appropriate personal protective equipment, hand hygiene, cleaning, and disinfecting of equipment.
  - E. Accountability Act within the scope of your practice and training, realize your individual limitations, and accept responsibility for your actions.
  - F. Loyalty & Cooperation Demonstrate loyalty to your profession by promoting a professional image. Strive to improve morale when possible and refrain from public criticism. Address issues through appropriate channels.
  - G. Personal conduct Maintain high moral and ethical standards. Communicate in a professional manner. Maintain good personal hygiene and grooming that adhere to your agency standards. Do not participate in behavior that would discredit you, your co-workers and the profession.
- II. EMS Code of Ethics (O-29 F1) was originally written by Charles B. Gillespie, M.D. and adopted by the National Association of EMTs, 1978. Revised and adopted by the National Association of EMTS 2014.
  - A. As with the guidelines for interaction, the EMS Code of Ethics applies equally to agencies providers and students in the Quincy Area EMS System.
  - B. QAEMS providers will be required to follow the EMS Code of Ethics upon System entry.

12/97; re 8/01; 11/2018, 11/21

#### **EMS CODE OF ETHICS**

Professional status as an Emergency Medical Services (EMS) Practitioner is maintained and enriched by the willingness of the individual practitioner to accept and fulfill obligations to society, other medical professionals, and the EMS profession. As an EMS practitioner, I solemnly pledge myself to the following code of professional ethics:

- To conserve life, alleviate suffering, promote health, do no harm, and encourage the quality and equal availability of emergency medical care.
- To provide services based on human need, with compassion and respect for human dignity, unrestricted by consideration of nationality, race, creed, color, or status; to not judge the merits of the patient's request for service, nor allow the patient's socioeconomic status to influence our demeanor or the care that we provide.
- To not use professional knowledge and skills in any enterprise detrimental to the public well-being.
- To respect and hold in confidence all information of a confidential nature obtained in the course of professional service unless required by law to divulge such information.
- To use social media in a responsible and professional manner that does not discredit, dishonor, or embarrass and EMS organization, co-workers, other health care practitioners, patients, individuals or the community at large.
- To maintain professional competence, striving always for clinical excellence in the delivery of patient care.
- To assume responsibility in upholding standards of professional practice and education.
- To assume responsibility for individual professional actions and judgment, both in dependent and independent emergency functions, and to know and uphold the laws which affect the practice of EMS.
- To be aware of and participate in manners of legislation and regulation affecting EMS.
- To work cooperatively with EMS associates and other allied healthcare professionals in the best interest of our patients.
- To refuse participation in unethical procedures and assume the responsibility to expose incompetence or unethical conduct of others to the appropriate authority in a proper and professional manner.

# **QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM**

# **EMS ASSISTANCE FUNDS**

- I. The EMS System Coordinator or designee will distribute information regarding available grants to all agencies participating in the system after being made aware that these funds are available.
- II. To determine eligibility, contact EMS System Coordinator or refer to Section 515.3000 EMS Assistance Fund Administration.

1/98, 11/18 (reviewed 8/01, 11/21)

### **QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM**

### PREPAREDNESS TO A SYSTEM-WIDE CRISIS

- I. **Purpose**: Natural and technological crises may place an intense demand on EMS and emergency department resources. The potential exists for these crises to occur or evolve with or without warning and to overload the resources of the EMS System. Recognition of an impending or active System-wide crisis will better prepare hospitals and ambulance providers within the System to handle the situation.
  - A. Examples of possible System-wide crises:
    - 1. Heat emergency
    - 2. Communicable disease
    - 3. Epidemic / Pandemic
    - 4. Terrorist act involving a nuclear, biological or chemical agent
- II. **Recognition**: The goal is recognition of a potential evolving trend that has the potential to lead to an overload of System resources.
  - A. Dispatch agencies may note an unusual increase in the number of calls in one geographic area or location with patients complaining of similar signs and symptoms
  - B. EMS providers might note an unusual increase in calls with patients complaining of similar signs and symptoms.
  - C. ED staff might note an unusual increase of patients with similar signs and symptoms.

### III. Notification

- A. If the Resource Hospital emergency department is notified of a potential trend, the ECRN will document the information on the back of the ED Radio Log. The ED radio log can be faxed to the EMS Department 217-223-2087 or sent via email.
- B. Depending on the level of concern, the ED will share information with Blessing EMS Department, either the manager or the EMS System Coordinator by phone or other means.
- C. The EMS System Coordinator may take additional actions such as:
  - Determining if other System agencies are seeing an increase in calls with similar signs and symptoms.
  - 2. Contacting Illinois Poison Control Center to determine if they are receiving additional calls for similar type problems.
  - Contacting other EMS System Coordinators to determine if they are also noting issues.

### IV. Plan of action for a verified trend

- A. The EMS System Coordinator will contact the EMS Medical Director, dispatch agencies, System hospitals and ambulance provider agencies to inform them of the situation.
  - 1. Dispatch agencies will be asked to closely monitor ambulance response and transport times and report delays to the EMS System Coordinator.
- B. Each hospital should take steps to closely monitor the situation to avoid emergency department overload which could lead to ambulance diversion / bypass. Hospitals may implement Hospital Incident Command System per facility policy. (System Bypass policy O-24)
- C. If ambulance response and transport times become excessive due to an increase in call volume or due to a hospital being on bypass, the EMS System Coordinator and EMS Medical Director will determine further actions.
- D. During an impending or actual System-wide crisis, ambulance agencies will be encouraged to implement their mutual aid agreements if beneficial in the situation.

10/01, 11/04, 3/05, 11/2018, 11/21

# EMS PROVIDER/ASSOCIATE & PARTICIPATING HOSPITAL WORK SHEET SYSTEM-WIDE CRISIS

Name of Hospital/Provider	Date	Time
Name	of Person Reporting	
HOSPITALS ONLY		
Number of Patients with Same/Like	Symptoms Seen in Last Six (	(6) Hours
PROVIDERS ONLY		
Number of Patients Transported to in Our Service with Same/Like Symp		All ambulances
Any Increase in Response Time	Yes	□ No
HOSPITALS AND PROVIDERS		
Common Like Complaints by Patients: _		
ANY OTHER PERTINENT INFORMATION	<u> </u>	-

# EMS PROVIDER/ASSOCIATE & PARTICIPATING HOSPITAL WORK SHEET SYSTEM-WIDE CRISIS (CONTINUED)

Resource Hospital Contacted	Yes	□ No	
Person Contacted at Resource Hospital:	Name	Title	_
How was Information Reported?	☐ Phone ☐ Fax Page ☐ Dedicated Phone Line ☐ Person to Person ☐ Other		
Names/Organizations and/or Titles of Other	Persons Contacted:		

#### **QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM**

#### **SYSTEM BYPASS POLICY**

- a) The Department (IDPH) shall investigate the circumstances that caused a hospital in an EMS System to go on bypass status to determine whether that hospital's decision to go on bypass status was reasonable. (Section 3.20(c) of the Act)
- b) The hospital shall notify the Illinois Department of Public Health, Division of Emergency Medical Services, of any bypass/resource limitation decision, at both the time of its initiation and the time of its termination, through status change updates entered into the Illinois EMResource application, accessed at https://emresource.juvare.com/login. The hospital shall document any inability to access EMResource by contacting IDPH Division of EMS during normal business hours.
- c) In determining whether a hospital's decision to go on bypass/resource limitation status was reasonable, the Department shall consider the following:
  - 1) The number of critical or monitored beds available in the hospital at the time that the decision to go on bypass status was made;
  - 2) Whether an internal disaster, including, but not limited to, a power failure, had occurred in the hospital at the time that the decision to go on bypass status was made;
  - 3) The number of staff after attempts have been made to call in additional staff, in accordance with facility policy; and
  - 4) The approved hospital protocols for peak census, surge, and bypass and diversion at the time that the decision to go on bypass status was made, provided that the Protocols include subsections (c)(1), (2) and (3).
  - 5) Bypass status may not be honored or deemed reasonable if three or more hospitals in a geographic area are on bypass status and/or transport time by an ambulance to the nearest facility is identified in the regional bypass plan to exceed 15 minutes.
- d) Hospital diversion should be based on a significant resource limitation and may be categorized as a System of Care (STEMI or Stroke), or other EMS transports. The decision to go on bypass (or resource limitation) status shall be based on meeting the following two criteria, and compliance with subsection (c)(3).
  - 1) Lack of an essential resource for a given type or class of patient (i.e. Stroke, STEMI, etc.) Examples include, but are not limited to:
    - A) No available or monitored beds within traditional patient care and surge patient care areas with appropriate monitoring for patient needs;

- B) Unavailability of trained staff appropriate for patient needs; and/or
- C) No available essential diagnostic and/or intervention equipment or facilities essential for patient needs.
- 2) All reasonable efforts to resolve the essential resource limitations have been exhausted including, but not limited to:
  - A) Consideration for using appropriately monitored beds in other areas of the hospital;
  - B) Limitation or cancellation of elective patient procedures and admissions to make available surge patient care space and redeploy clinical staff to surge patients;
  - Actual and substantial efforts to call in appropriately trained off-duty staff;
     and
  - D) Urgent and priority efforts have been undertaken to restore existing diagnostic and/or interventional equipment or backup equipment and/or facilities to availability, including but not limited to seeking emergency repair from outside vendors if in house capability is not rapidly available.
- The hospital will do constant monitoring to determine when the bypass condition can be lifted. Such monitoring and decision making shall include clinical and administrative personnel with adequate hospital authority. Efforts to resolve issues in subsection (d)(1) using all available resource under subsection (d)(2) to come off bypass as soon as such patients can be safely accommodated.
- e) For Trauma Centers only, the following situations would constitute a reasonable decision to go on bypass status:
  - 1) All staffed operating suites are in use or fully implemented with on-call teams, and at least one or more of the procedures is an operative trauma case;
  - 2) The CAT scan is not working; or
  - 3) The general bypass criteria in subsection (c).
- f) During a declared local or state disaster, hospitals may only go on bypass status if they have received prior approval from IDPH. Hospitals must complete or submit the following prior to seeking approval from IDPH for bypass status:
  - 1) EMResource must reflect current bed status;
  - Peak census policy must have been implemented 3 hours prior to the request of bypass;
  - 3) Hospital and staff surge plans must be implemented;

- 4) The following hospital information shall be provided to IDPH:
  - A) Number of hours for in-patient holds waiting for bed assignment;
  - B) Longest number of hours wait time in Emergency Department;
  - C) Number of patients in waiting area waiting to be seen;
  - D) In-house open beds that are not able to be staffed;
  - E) Percent of beds occupied by in-patient holds;
  - F) Number of potential in-patient discharges; and
  - G) Number of open ICU beds.
- The IDPH Regional EMS Coordinator will review the above information along with hospital status in the region and determine whether to approve bypass for 2 hours, 4 hours, or an appropriate length of time as determined by the DPH Regional EMS Coordinator, or to deny the bypass request. A by pass request may be extended based on continued assessment of the situation, including status of surrounding hospitals, with the DPH Regional EMS Coordinator and communication with the requesting hospital. A hospital may be denied bypass based on regional status or told to come off bypass if an additional hospital in the geographic area requests bypass.
- g) The Department may impose sanctions, as set forth in Section 3.140 of the Act, upon a Department determination that the hospital unreasonably went on bypass status in violation of the Act. (Section 3.20(c) of the Act)
- h) Each QAEMS member hospital will develop and maintain a surge plan for utilization during patient surges regardless of cause. Each member hospital will submit this to QAEMS on an annual basis and will update QAEMS with any mid-year changes.

# QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM EMERGENCY VEHICLE RESPONSE OPERATIONS

- I. PURPOSE: Ensures that each agency takes responsibility for safe emergency vehicle operations.
  - A. Each agency will develop and maintains a policy to be approved by the EMS Medical Director establishing standards of driving specific to response to and transport of patients in emergency and non-emergency modes. These standards will address at a minimum the following:
    - 1. Headlights
    - 2. Seatbelts
    - 3. Speed
    - 4. Passing
    - 5. Use of warning devices
    - 6. Approaching an intersection
    - 7. Lane control
    - 8. Transporting relatives and friends of patients
    - 9. Safe following distances
    - 10. Routes
    - 11. Pre-call preparation
    - 12. Distractions
    - 13. Securing of equipment in the front and patient compartment of ambulance.
    - 14. Sleep deprivation specifically on long distance transfers.
    - 15. Actions to take if an accident occurs.
- II. Any person driving an emergency vehicle must meet all state credentialing requirements.
- III. It is the agency leadership's responsibility to ensure employees understand and abide by their emergency vehicle operation policy.

12/03, 2/04, 11/2018, 11/21

# QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM HAZARDOUS MATERIALS INCIDENTS – EMS RESPONSE

#### I. General

- A. In general, EMS providers should remain uphill, upwind, upstream and up-grade of a hazardous materials incident. You should follow instructions of the Incident Commander regarding staging and treatment areas.
- B. Individuals who respond to and function within the Hot Zone and Warm Zone must be members of specifically trained HazMat teams, trained in the use of self-contained breathing apparatus, selection of appropriate chemical protective suits and how to function in these suits.
- C. Other EMS providers should be trained in HazMat Awareness in accordance with Federal OSHA standards identified in OSHA 29 CFR 1910.120.

#### II. Definitions

- A. Hot Zone (also known as the Exclusion Zone): is the area immediately around the spill or contamination.
- B. Warm Zone: the area between the Hot Zone and the Cold Zone. This area often includes a holding area for patients awaiting decontamination and the actual decontamination area.
- C. Cold Zone (also known as the Support Area): a clean area outside the contaminated areas. This is a safe area for EMS personnel to receive and begin treatment of contaminated patients. Secondary exposure to hazardous materials is not expected in this area and specialized suits are not required.

### III. EMS Interface with HazMat teams

- A. Unified command: in a hazardous materials incident EMS providers and agencies will operate within the unified command structure under the authority having jurisdiction. Due to limited HazMat training, EMS will not usually maintain overall command of the incident.
- B. In the event of multiple casualties, a designated Medical Branch Supervisor may be designated to oversee EMS operations. This should be the senior EMS crew member on site.
- C. EMS will operate in the designated Cold Zone to receive patients after decontamination and to provide treatment/transport.
- D. EMS will relay information regarding the type of chemical and exposure (ingestion, absorption through skin etc.) to Medical Control as soon as that information has been relayed to them from Incident Command.

- E. Medical Control can make recommendations regarding patient treatment based upon the exposure.
- F. The Bioterrorism Treatment Guidelines booklet supplied by IDPH may be helpful in the treatment or determination of exposure during an event.
- G. The Emergency Response Guidebook may be helpful in the treatment or determination of the chemical and exposure.

# IV. Patient management

- A. Contact Medical Control early in the incident for treatment regarding specific exposures.
- B. If a nerve agent or other WMD agent is suspected, follow policy O-36 Nerve Gas Auto-Injector Guidelines.
- C. Follow the major EMS incident plan, policy O-12 if appropriate.

#### **STATE OF ILLINOIS**

#### **NERVE GAS AUTO-INJECTOR GUIDELINES**

# I. Purpose

- A. To provide Illinois EMS agencies with guidelines on the appropriate use of Mark I/DuoDote kits.
- B. The Mark I/DuoDote kit contains antidotes to be used in instances of exposure to nerve agents such as Sarin, Soman, Tabun, VS or to organophosphate agents such as Lorsban, Cygon, Delnavmalathion, Supracide parathion and carbopenthion.

# II. Equipment

- A. Each Mark I/DuoDote kit consists of two auto-injectors:
  - 1. atropine sulfate 2 mg in 0.7 mL
  - 2. pralidoxime chloride (2PAM) 600 mg in 2 mL

#### III. Key provisions

- A. Only those licensed EMS providers governed by the State of Illinois EMS Act (210 ILCS 50/) are authorized by an EMS Medical Director to utilize the specialized equipment and medications needed in Weapons of Mass destruction (WMD) incidents including the Mark I/DuoDote auto-injectors.
  - 1. When appropriate conditions warrant, contact medical control.
  - Other organized response teams not governed by the EMS Act may use the Mark I/DuoDote auto-injectors on themselves or other team members when acting under the Illinois Emergency Management Agency Act. (20 ILCS 3305)
- IV. How to Access/Request Mark I/DuoDote Kits
  - A. MABAS
    - 1. Contact local dispatch and request the local fire department contact MABAS for kits available in our region.
  - B. IDPH
    - 1. Contact Medical Control by MERCI or phone and request CHEM PACKS
    - 2. Medical Control will contact Emergency Preparedness Coordinator and a request through EMA will be initiated.

### V. Guidelines

- A. The guidelines for the use of Mark I/DuoDote kits were developed by the EMS Committee of the Illinois College of Emergency Physicians (ICEP). They were then adopted by the Illinois Department of Public Health, the Illinois Terrorism Task Force, Illinois Medical Directors and Mutual Aid Box Alarm System (MABAS) to provide guidance to EMS agencies and providers who are part of an EMS system.
- B. There are ten provisions in the guidelines:
  - 1. To utilize these kits, you must be an EMS agency or EMS provider within an Illinois EMS System and participate within an EMS disaster preparedness plan.
  - 2. The decision to utilize the Mark I/DuoDote antidote kit is authorized by following

0-36.2

### this State protocol

- 3. You must be an Illinois First Responder or EMT at any level with additional training in the use of the auto-injector.
- 4. The kit is not used for prophylaxis. It is an antidote, not a preventive device. The Mark I/DuoDote kit can be self-administered if you are exposed and become symptomatic. You should exit immediately to the Safe Zone for further medical attention.
- 5. Use of the Mark I/DuoDote kit is based on signs and symptoms of the patient. The suspicious or identified presence of a nerve agent is not sufficient reason to administer these medications.
- 6. Atropine sulfate may be administered IV/IM in situations where Mark I/DuoDote kits are not available.
- Auto-injectors are NOT to be used on children under 88 pounds (40 kilograms).
   Pediatric Mark I/DuoDote injectors are currently under review by the FDA. (See O-36F for pediatric usage)
- 8. If available, a paramedic or prehospital RN may administer diazepam (Valium) cautiously if seizures are not controlled by the antidote.
- 9. If the nerve agent was ingested, exposure may continue for some time due to slow absorption from the lower bowel. Fatal relapses have been reported after initial improvement. Continued monitoring and transport is required.
- 10. If dermal exposure has occurred, decontamination is critical and should be done with standard decontamination procedures. Continued monitoring and transport is required.

# VI. Personal protection

- A. The first priority when encountering a potential nerve agent victim is self protection.
- B. Personal protective equipment (PPE) and decontamination are key elements in the successful management of exposed casualties.
- C. All persons entering a HOT Zone or working a decontamination station must wear full protective ensembles including full body and respiratory protection. Persons operating in these zones must be trained in the use of self-contained breathing apparatus, selection of appropriate chemical protective suits and how to function in these suits.
- D. Do not cross contaminate yourself when handling patients in triage, treatment and staging areas or if you have begun treatment in the Hot Zone.

### VII. Pre-hospital management

- A. Prehospital management for nerve agent or organophosphate poisoning is a two-pronged attack focusing on countering the poison with antidotes and preventing death by supporting respirations and controlling seizures.
  - 1. The primary cause of death from these agents is respiratory failure; therefore, aggressive airway control and ventilation are top priorities.
  - 2. With antidotal therapy, spontaneous respirations should resume within a short period of time.
- B. Notify receiving hospitals prior to transport so they can prepare the facility for your arrival and also consider activating local mass casualty protocols.

# **RECOGNITION OF EXPOSURE**

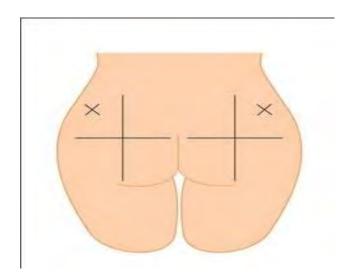
- 1) Signs and symptoms consistent with exposure to nerve or organophosphate agents = mnemonic SLUDGE BAM:
  - Salivation = excessive production of saliva
  - Lacrimation = excessive tearing of the eyes
  - Urination = uncontrolled urine production
  - Defecation = uncontrolled bowel movements
  - Gastrointestinal distress (cramps)
  - Emesis = excessive vomiting
  - Breathing difficulty / respiratory failure
  - Arrhythmias = irregular heart beat or cardiac abnormalities
  - Myosis = pinpoint pupils
  - Other neuromuscular and CNS effects: twitching, weakness, paralysis, seizures, confusion, slurred speech
- 2) Determining severity of exposure
  - Severe exposure: unconscious, cyanosis, seizures
  - Moderate exposure: vomiting, drooling, pinpoint pupils
  - Mild exposure: short of breath, wheezing, runny nose

B. EX POSURE	CLINICAL FINDINGS	TREATMENT
Unknown – possibly not exposed	No clinical signs/symptoms	Removal of patient to the Cold Zone, decontamination, observation & transport
Mild exposure	Short of breath, wheezing, runny nose	<ul> <li>Administer one Mark I/DuoDote kit or</li> <li>Atropine 2-4 mg IM/IV AND 2 PAM 600-1200 mg IM or 1 gram IV</li> </ul>
Moderate exposure	Vomiting, diarrhea, drooling, pinpoint pupils	<ul> <li>Administer one-two Mark</li> <li>I/DuoDote kits or</li> <li>Atropine 2-4 mg IM/IV AND 2PAM</li> <li>600-1200 mg IM or 1 gram IV</li> </ul>
Severe exposure	Unconsciousness, paralysis, cyanosis, seizures	<ul> <li>Administer three Mark I/DuoDote kits in rapid succession (stacked)         OR</li> <li>Atropine 6 mg IM/IV AND</li> <li>2 PAM 1800 mg IM or 1 gram IV repeated twice at hourly intervals.</li> <li>Valium per Medical Control for seizures</li> </ul>

### IX. Procedure

IMPORTANT: Do not remove gray safety release until ready to use. CAUTION: Never touch the green tip (needle end)

- A. Only those persons specifically trained and equipped with the appropriate personal protective equipment should enter the Warm or Hot Zones. (see policy –O-35 Hazardous Materials Incidents-EMS Response)
- B. Injection site selection: the injection site is normally in the outer thigh muscle. If the individual is very thin, the injection can be administered into the upper outer quadrant of the buttocks. See below.



- Immediately put on your protective mask
- Remove the antidote kit.
- With your non-dominant hand, hold the auto-injectors by the plastic clip so that the larger auto-injector is on top and both are positioned at eye level.
- C. Arming the auto-injector
  - 1. With your non-dominant hand, hold the auto-injector by the plastic clip so that the larger auto-injector is on top. Position at eye level.
  - 2. With your dominant hand, grasp the atropine auto-injector (the smaller of the two) with your thumb and first two fingers.
  - 3. Do NOT cover or hold the needle end with your hand, thumb or fingers you might accidentally inject yourself.
  - 4. Pull the auto-injector out of the clip with a smooth motion. It is now armed and ready to administer.
- D. Self-administration (You should immediately self-administer the nerve gas antidote if you experience any or all of the nerve agent poisoning symptoms).
  - 1. Hold the auto-injector with your thumb and two fingers (pencil writing position). Be careful not to inject your self in the hand as this will NOT administer an effective dose.
  - 2. Position the green (needle) end of the injector against your thigh.
  - 3. Apply firm even pressure to the injector until it pushes the needle into your thigh.
  - 4. Hold the injector in place for at least 10 seconds.

- 5. Carefully remove the auto-injector from the injection site.
- 6. Pull the 2PAM auto injector (the larger of the two) out of the clip
- 7. Now inject yourself in the same manner as above holding the black (needle) end against your outer thigh.
- 8. Wait 5-10 minutes, during which decontamination procedures should be started.

# E. Administration to a patient in the Hot Zone

- 1. Squat do NOT kneel next to the patient. (kneeling can force the chemical agent through your protective clothing).
- 2. Apply a mask to the patient
- 3. Position the patient on his side
- 4. Administer the Mark I/DuoDote kit as above in the self-administration section.
- 5. Mark, label or tag the patient in such a way that rescuers in the Warm Zone or triage areas can identify that medication has been administered.

# X. Signs and Symptoms of Nerve Agent Exposure

Exposure	(from mild to severe) Signs & Symptoms
MILD  MODERATE  SEVERE	<ul> <li>✓ Unexplained runny nose</li> <li>✓ Tightness in the chest</li> <li>✓ Difficulty breathing</li> <li>✓ Bronchospasm</li> <li>✓ Pinpoint pupils resulting in blurred vision</li> <li>✓ Drooling</li> <li>✓ Excessive sweating</li> <li>✓ Nausea and/or vomiting</li> <li>✓ Abdominal cramps</li> <li>✓ Involuntary urination and/or defecation</li> <li>✓ Jerking, twitching and staggering</li> <li>✓ Headache</li> <li>✓ Drowsiness</li> <li>✓ Coma Convulsions</li> <li>✓ Apnea</li> </ul>
▼	

# STATE OF ILLINOIS RECOMMENDATIONS\*FOR NERVE AGENT THERAPY PREHOSPITAL MANAGEMENT

### Antidotes<sup>1</sup>

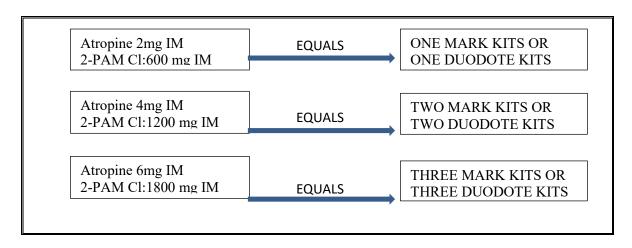
Patient Age		Mild/Moderate symptoms <sup>2</sup>	Severe Symptoms <sup>3</sup>		
		- Composition			
Infant	0-6 months	Atropine: 0.25 mg IM	Atropine: 0.5 mg IM		
	< 7kg	2-PAM Cl: 15 mg/kg IM	2-PAM Cl: 25 mg/kg IM		
Infant	7 months – 2 years	Atropine: 0.5 mg IM	Atropine: 1 mg IM		
l	7-13 kg	2-PAM Cl: 15 mg/kg IM	2-PAM Cl: 300 mg IM		
Child	3-7 years	Atropine: 1 mg IM	Atropine: 2 mg IM		
	14-25 kg	2-PAM CI: 300 mg IM	2-PAM CI: 600 mg IM		
Child	8 - 14 years	Atropine: 2 mg IM	Atropine: 4 mg IM		
	26-50 kg	2-PAM CI: 600 mg IM	2-PAM CI: 1200 mg IM		
Adolescent	>14 years	Atropine: 2-4 mg IM	Atropine: 4-6 mg IM		
	> 51 kg	2-PAM CI: 600-1200 mg	2-PAM CI: 1200-1800 mg IM		
		IM			
Adult		Atropine: 2-4 mg IM	Atropine: 6 mg IM		
		2-PAM CI: 600-1200 mg	2-PAM CI: 1800 mg IM		
		IM			
Elderly / Frail		Atropine: 1 mg IM	Atropine: 2-4 mg IM		
,,		2-PAM Cl: 10 mg/kg IM	2-PAM CI: 25 mg/kg IM		

# \*Weight based chart, then age of patient to determine closing category.

### Symptoms:

<sup>2</sup> Mild/Moderate: localized sweating, muscle fasciculations, nausea, vomiting, weakness, dyspnea

<sup>&</sup>lt;sup>3</sup> Severe: unconsciousness, convulsions, apnea, flaccid paralysis



<sup>&</sup>lt;sup>1</sup> 2-PAM CI solution needs to be prepared from the ampule containing 1 gram of desiccated 2-PAM CI: Inject 3 ml of saline, 5% distilled or sterile water into ampule and shake well. Resulting solution is 3.3 ml of 300 mg/ml.

# **Other Treatment**

- \*\* Assisted ventilation should be started after administration of antidotes for severe exposures.
- \*\* Repeat Atropine at 5-10 min intervals until secretions diminished, breathing comfortable or airway resistance near normal.

12/05, 7/10, 4/12, 11/2018, 11/21

#### **SCHOOL BUS INCIDENT**

# I. Purpose

This policy governs the handling of school bus accidents/incidents involving the presence of minors. It is meant to be implemented by EMS personnel in conjunction with System's policies including mass casualties. The goal of this policy is to eliminate the transport of uninjured children/students to the hospital and to reduce EMS scene time and utilization of resources.

Each ambulance service provider within the System is required to design and implement a procedure for discharging uninjured children/students to their parents/legal guardians or to local school officials. Such procedures will facilitate transferring custody of uninjured children/students to the parents/legal guardians or school officials consistent with System and Regional policies. It is recommended that these policies be developed in coordination with school officials and provider's legal counsel.

#### II. Procedure

- A. Determine the category of the accident/incident
  - Category I bus accident/incident significant injuries present in one or more children/students or there is a documented mechanism of injury that could reasonable be expected to cause significant injuries.
  - Category II bus accident/incident minor injuries only, present in one or more children/students and no documented mechanism of injury that could reasonably be expected to cause significant injuries. Uninjured children/students also present.
  - 3. Category III bus accident/incident no injuries present in any children/students and no significant mechanism of injury present.
- B. Category II or III bus accident/incident. **Do not implement this policy if the accident/incident is a Category I bus accident/incident** follow multiple victim and disaster preparedness policies for all Category I bus accident/incidents and transport all children/students to the hospital.
  - Contact Medical Control, advise of the existence of a Category II or III bus accident/incident and determine if a scene discharge of uninjured children/students by the emergency department physician in charge of the call is appropriate.
  - 2. Injured children/students by exam and/or complaint are treated and transported as deemed necessary and appropriate by EMS personnel or at the request of the child/student.
  - Implement provider procedures for contacting school officials or parent/legal guardians
    to receive custody of the uninjured children/students consistent with region III policy.
    Procedure may include option of ambulance service provider escorting bus, if operable,
    back to school of origin or other appropriate destination.
  - 4. Medical Control, after consulting with scene personnel, will discharge the uninjured children/students to the custody of the ambulance service provider who then will transfer the custody of the children/students, consistent with appropriate department and regional policies and procedures, to patient/legal guardians or school officials.

- 5. Authorized school representatives will sign the log sheet indicating acceptance of responsibility for the children/students after medical clearance by the EMS personnel finding NO evidence of injury. The school representative will then follow their own policies to include informing the parents/legal guardians as regards the accident/incident.
- 6. Any child/student having reached the age of 18 or older and any adult non-student present on the bus will initial the log sheet adjacent to their name and address when in agreement that they have suffered no injury and are not requesting medical care and/or transport to the hospital.
- 7. Complete one Prehospital Care Report Form in addition to the School Bus Incident

This policy addresses discharge disposition of uninjured children/students only. Thus, no release/AMA signatures are necessary. An isolated abrasion/superficial wound can be regarded as uninjured should the EMS personnel, Medical Control, and the child/student all concur.

This policy is also applicable for school/student incidents not involving a bus if deemed appropriate by the responding EMS Agency and evaluated and executed in a like manner.

# SCHOOL BUS INCIDENT LOG

All individuals on the bus age 18 and older should initial in the indicated space adjacent to their name when uninjured. Parent/legal guardian should initial in the indicated space adjacent to their child's name when uninjured. Initials indicate agreement that no injury has been suffered and no transportation is required to the hospital.

Date:	Location:		District N	District Name:		Bus Number:	
Time of Incident:							
Run Report #	Dept. Alarm #:	Total # o	f Persons	# Transported	# No	t Transported:	
Adult Name (Non-student)	Function Addre		Address 8	s & Telephone		Initials	
Child/student Name	Λσο		Address &	Talanhana		Initials if age	
Ciliu/student Name	Age Addr		Audress &	•		>18 or	
						parent/guardian	
The children/students liste and approved release to the				-			
Name of (EMS) Ambulance	Service Provider		ı	Name of School aut	horized	representative	
Signature	Date		- !	Signature		Date	

# **SCHOOL BUS INCIDENT LOG**

# **Notice of Emergency Medical Services Response to a Minor**

DATE:	
FROM: (Chief	or President of Provider Agency)
	(Provider Agency)
	(Address)
	(Phone number to contact)
CHILD'S NAME	

Members of our Emergency Medical Services agency were called to evaluate your son/daughter/ward today as a result of a bus collision/incident

After responding to the above incident, we evaluated the child. Based on our assessment and statements made by the child, it was determined that he or she did not require emergency care and/or transportation to an emergency department at that time

# QUINCY AREA EMERGENCY MEDICAL SERVICE SYSTEM POLICY AND PROCEDIRE

#### **CONCEAL CARRY POLICY**

#### Purpose

**A.** The purpose of this policy is to outline the responsibilities of EMS providers regarding the carrying, (concealed or not concealed) of a weapon.

# II. Policy:

- **A.** The Quincy Area Emergency Medical Service policy is that EMS personnel who have a Conceal Carry Weapon permit shall not knowingly bring any firearm onto any prohibited area.
- **B.** At no time shall open carry ("OC") &/or Conceal Carry weapon ("CCW") be permitted when on official EMS business, to include: meetings, emergency response, training or any other function of the QAEMS system or on any EMS organizations' properties.
  - The only exception to this is if the EMS provider is a sworn law enforcement officer that is on duty at the time or as allowed by State law. (If functioning as an EMS provider, the weapon should be secured at home or in their vehicle.)
- **C.** It is further the policy of QAEMS that patients and visitors shall not have weapons on their persons while on any and all EMS property which also includes transport and/or non-transport vehicles.
- **D.** If functioning as a TEMS "Tactical EMS", weapons may be carried if activated for a tactical response or training.

#### III. General Guidelines:

- **A.** EMS Agencies are encouraged to designate themselves as a weapons-free facility. No-carry signage should be clearly posted in emergency squads and EMS facilities. Law enforcement shall be called if patients insist on carrying weapons in emergency vehicles or in hospitals that have declared themselves as no-carry zones. If the patient is able and willing to secure the firearm within their vehicle or residence or in some other manner that prevents it from entering restricted areas EMS will not need to contact law enforcement.
- **B.** At no time shall open carry ("OC") &/or Conceal Carry weapon ("CCW") be permitted when on official EMS business, to include: meetings, emergency response, training or any other function of the Region 3 area or on any EMS organizations' properties. The only exception to this is if the EMS provider is a sworn law enforcement officer that is on duty at the time. (If functioning as an EMS provider, the weapon should be secured at home or in their vehicle.)
- **C.** Under no circumstances should an emergency responder or healthcare worker compromise his/her safety in regards to these guidelines. When in doubt about a patient with a weapon or the weapon itself, emergency responders and healthcare personnel should contact local law enforcement while treating your patient. Use "situational awareness" on all calls.

NOTE: Do not ask the patient whether he/she has the right to carry a weapon. If the person has no legal right, they may become alarmed and cause EMS personnel harm.

Until specific procedures have been approved, all EMS providers should assure a safe scene before treatment should begin.

#### **CRITICAL INCIDENT STRESS MANAGEMENT**

- I. Purpose: Critical Incident Stress Management (CISM) is a system developed to assist emergency workers in mitigating the negative effects of stress caused by significant stressful events. CISM is not a replacement for psychiatric services or counseling. It is a proven method to assist workers to deal with negative effects of stress and to recognize when they should seek additional assistance.
- II. CISM team: The Quincy Area EMS System has a multijurisdictional team with specialized training made up EMS, fire, law enforcement, chaplains, and hospital staff. The local team is part of the larger Heart of Illinois CISM team.

### **III.** Types of services

- a. Pre-incident education
- b. On scene support for major events (requested response to scene during event)
- c. One-on-one (one person, any time after event or when identified as needing assistance)
- d. Defusing (small group, usually one jurisdiction; ideal time frame 6-72 hours after event)
- e. Debriefings (larger groups, more than one jurisdiction; time frame 24-72 hours after event)

# IV. Types of events to consider team activation

- a. Traumatic events / death involving children
- b. Unusual stressful call
- c. Unexpected death of a patient
- d. Violence toward emergency workers
- e. On duty death or serious injury
- f. Multiple casualty / mass casualty
- g. Prolonged event or disaster

# **VI.** Procedure to request services

- a. Individuals should make the request through their agency leader.
- b. Agency leader or representative can request the team by calling Blessing EMS Department 217-223-8400 ext. 6590 or a CISM team member directly.
- c. CISM team member obtains information including the event, estimated number of emergency workers involved, jurisdictions involved (dispatch, EMS, fire, law enforcement, hospital), and desired timeframe for services and notifies a designated CISM team leader.
- d. CISM team leader contacts team members, finalizes date/ time / location, makes any necessary additional contacts with the agency leader that initiated the request and notifies the HOI CISM team contact of the request. On site will facilitate the requested service. Afterward provides documentation to the HOI CISM team contact and may contact the agency leader for additional feedback.

3/10/2018, 11/21

### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

#### **EMERGENCY VACCINATION POLICY**

Within QAEMS and by Scope of Practice EMT-P and PHRN license holders are credentialed for measured dose injections, including vaccinations. As such, in times of crisis, EMS providers may be asked to assist their local community/region with vaccinations. When directed, EMS providers and agencies may assist their local hospital and/or local health department with established vaccination clinics. In coordination with the local hospital and/or health department, credentialed providers may help vaccinate EMS/public safety personnel, hospital staff, health department staff, or community members. Vaccination activities will occur under the leadership and support of the local hospital, local health department, IDPH or CDC. EMR, EMT-B, and AEMT/EMT-I may assist in screening and observation roles within an established vaccination clinic. Any QAEMS affiliated EMS agency participating in vaccine administration must submit an action plan for approval by QAEMS.

Any agency assisting in vaccinations must ensure the following items are included in the action plan for the event.

- Delivery and appropriate storage of vaccine: Vaccines often have very specific storage and use requirements, with respect to both temperature and timing. Any EMS personnel participating in a vaccination clinic must be advised of storage requirements and plan for storage of any unused doses.
- Licensure and documentation: Any EMS provider participating in a vaccination clinic will be responsible
  for providing their own documentation of licensure. Providers should expect that clinic organizers will
  review procedures and observe their actions throughout the event(s). Any education material for
  providers must be provided with enough time to review and request additional details prior to assisting.
- Patient information: Information provided to patients, including follow up information, must be developed/ obtained by the organizing hospital/ health department. EMS providers can be expected to provide material to patients and direct patients to organizers when unable to address a patient's questions/concerns.
- Vaccination records: All records for the administration of vaccinations should be provided by the local hospital and/or health department and must include instruction on how to complete all required records.
- Quality Assurance: Agencies participating in vaccination events must coordinate with the local hospital
  and/or health department overseeing the event to develop and maintain a quality assurance program
  specifically designed to monitor EMS participation in such events.
- Security: Dependent on many factors at the time, it should be anticipated that some situations will
  require the assistance of security or law enforcement officers. Any EMS personnel participating in a
  vaccination clinic must be educated on the security plan of the clinic as well as be able to stop
  operations at any time if they feel the situation is becoming unsafe.
- EMS will not assist in vaccinations for children under the age of 6.

### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

#### 2023 System Plan Amendments - Misc.

#### **Private EMS Alternate Staffing Model**

- Quincy Area EMS is committed to working with any private-EMS member agency of QAEMS to allow for alternate staffing in accordance with IDPH EMS regulations.
  - At the time of this policy development QAEMS has no private EMS agency members.

#### **VA Hospital Participation**

- Quincy Area EMS will allow for the full participation of a VA hospital within the EMS
   System (at the level of participation they select associate or participating) should a VA
   hospital be established within our geographic area.
  - o At this time there exists no VA hospital within our geographic area.

#### **Treatment and Transport of Law Enforcement Animals**

- Quincy Area EMS commits to working with individual transport provider agencies to allow for the treatment and transport of law enforcement animals.
  - Plans would be approved on a case-by-case basis specific to the EMS transport agency and with the agreement and approval of the impacted law enforcement agency.
  - Prior to implementation the plan must be agreed upon by the EMS agency,
     the Law Enforcement agency, and approved by the EMS System and IDPH.

#### **Transport of a Service Animal**

- Service animals should remain with their partners/owners unless they are deemed to be in an uncontrolled state or present a direct threat to the health or safety of others. EMS should make an effort to secure the animal inside the vehicle using a crate, harness, seat belt, or other securement device at all times when possible however ultimately the EMS crew is not responsible for the care, comfort, or securement of the animal during transport. Unless a specific location is required for the dog's work, the service dog must be kept in a location in the ambulance (chosen by the EMS personnel) where they will not interfere with medical care or pose a danger to personnel or the patient.
  - o EMS may ask:
    - Is the dog a service animal that is required because of a disability?
    - What work or task has the dog been trained to perform?
  - Service animals may accompany the patient into the hospital.
  - EMS must alert the receiving facility to the presence of the service animal.
  - Additional cleaning and decontamination may be required after the transport of a service animal. EMS providers should follow their agency specific cleaning/decontamination procedures.

#### **EMAC or NAC Response Notification**

- In the event that QAEMS System members are deployed out-of-state to assist in emergency response (typically due to large-scale disasters) the employing agency must notify QAEMS with the following information.
  - The number of IDPH licensed EMS staff being sent on the deployment.
  - The expected duration of their deployment.
  - Any forecasted interruptions to local Illinois-based EMS operations based on the temporary loss of staff.

#### Notification of the IDPH EMS Division in cases of EMS personnel death

• In the event that a QAEMS EMS provider is killed in the line of duty QAEMS will notify the EMS Division of IDPH as soon as possible and no later than within 24 hours.

### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE

#### **Relinquished Newborn**

The Illinois Abandoned Newborn Infant Protection Act (325 ILCS 2/) recognizes that newborn infants have been abandoned to the environment or to other circumstances that may be unsafe to the newborn infant. This Act is intended to provide a mechanism for a newborn infant to be relinquished to a safe environment, for the parents of the infant to remain anonymous if they choose, and to avoid civil or criminal liability for the act of relinquishing the infant. Fire stations, police stations, and emergency medical facilities: Every fire station, police station, and emergency medical facility must accept and provide all necessary emergency services and care to a relinquished newborn infant, in accordance with this Act. The act of relinquishing a newborn infant serves as implied consent for the fire station, police station, or emergency medical facility and its emergency medical professionals to treat and provide care for the infant, to the extent that those emergency medical professionals are trained to provide those services.

After the relinquishment of a newborn infant, the fire station, police station, or emergency medical facility's personnel must arrange for the transportation of the infant to the nearest hospital as soon as transportation can be arranged. If the parent of a newborn infant returns to reclaim the child within 72 hours after relinquishing said child, staff must inform the parent of the name and location of the hospital to which the infant was transported.

"Newborn infant" is defined as a child who a licensed physician reasonably believes is 30 days old or less at the time the child is initially relinquished.

EMS will care for the child and transport to the closest appropriate facility regardless of suspected age.

The following link provides facility specific details such as signage, on-site packet requirements, and liability etc. http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1459&ChapterID=32

#### Care at all EMS license levels within QAEMS:

Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

- 1. Render initial care in accordance with the Routine Patient Care Protocol.
- 2. Maintain control of the scene and request law enforcement if they have not already been called.
- Assess the infant for signs of abuse.
- 4. Treat injuries and/or illness according to protocol.
- 5. Initiate transport as soon as possible.

# QUINCY AREA EMS SYSTEM ORGANIZATIONAL STRUCTURE

Revised 2/15/2022

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

Scott Hough, MD EMS Medical Director

Christopher R Solaro, MD, PHD Associate Medical Director

### QUINCY AREA EMS SYSTEM QAEMS ORGANIZATIONAL STRUCTURE

#### I. <u>MEDICAL FACILITIES</u>

#### **Resource Hospital**

- A. Name of Facility: Blessing Hospital, Broadway at 11th, PO 7005, Quincy, IL 62305-7005
- B. EMS Medical Director and SEMSV Medical Director: Scott Hough, M.D.
- C. Alternate EMS Medical Director and Alternate SEMSV Director: Christopher Solaro, M.D.
- D. EMS Administrative Director: Karla Paris, RN
- E. EMS Manager: Erin Hanks, RN
- F. EMS Secretary: April Ragan
- G. EMS System Coordinator: Michael McCarter, Paramedic
- H. Trauma Coordinator: Michael Richard, RN
- I. Trauma Registrar: Barbara Niemann
- J. EMS Education Coordinator: Donald Whitaker, Paramedic
- K. Emergency Preparedness Coordinator: Kate Rhoads
- L. Emergency Preparedness Specialist: Ryan Kamphaus, EMT

#### **Associate Hospital**

- A. Name of Facility: Illini Community Hospital
- B. CEO: Kathy Hull
- C. Emergency Department Medical Director: Darrin Thomas, MD.
- C. Emergency Department Manager: Lexy Damon, RN

#### **Participating Hospital**

A. Name of Facility: Carthage Memorial Hospital B. CEO: Ada Bair

C. Emergency Department Medical Director: Bashar Alzein, MD.D. Director Emergency & In Patient Services: Raigan Brown, RN

#### . PREHOSPITAL SERVICES

#### A. SEMSV: AIR EVAC HELICOPTERS

UNIT I	LOCATION	AGENCY	CONTACT
AE 03	Sikeston, MO	Air Evac Lifeteam	
AE 05	Quincy, IL	Air Evac Lifeteam	
AE 27	Jacksonville, IL	Air Evac Lifeteam	
AE 35	Marion, IL	Air Evac Lifeteam	
AE 39	Brazil, IN	Air Evac Lifeteam	
AE 46	Evansville, IN	Air Evac Lifeteam	
AE 59	Ft. Madison, IA	Air Evac Lifeteam	
AE 80	Perryville, MO	Air Evac Lifeteam	
AE 120	Crittendon County, KY	Air Evac Lifeteam	
AE 138	Harrisburg, IL	Air Evac Lifeteam	
AE 137	Greenville, IL	Air Evac Lifeteam	
AE 144	Macomb, IL	Air Evac Lifeteam	
AE-146	Louisiana, MO	Air Evac Lifeteam	

#### B. ALS TRANSPORT UNITS

UNIT ID	LOCATION	AGENCY	CONTACT
ADAMS COUNTY	,		
3A15	Quincy, IL	Adams County Ambulance & EMS	John Simon
3A16	Quincy, IL	Adams County Ambulance & EMS	John Simon
3A20	Quincy, IL	Adams County Ambulance & EMS	John Simon
3A17	Camp Point, IL	Adams County Ambulance & EMS	John Simon
3A18	Mendon, IL	Adams County Ambulance & EMS	John Simon
3A19	Liberty, IL	Adams County Ambulance & EMS	John Simon
BROWN COUNTY			
3B14	Mt. Sterling, IL	Brown County Ambulance Service	Brian Gallaher
3B16	Mt. Sterling, IL	Brown County Ambulance Service	Brian Gallaher
HANCOCK COUN	NTY		
3A30	Carthage, IL	Hancock County Ambulance	Jennifer Meeks
3A31	Carthage, IL	Hancock County Ambulance	Jennifer Meeks
PIKE COUNTY			
3G16	Pittsfield, IL	Pike County EMS	Kasey Kendall
3G17	Pittsfield, IL	Pike County EMS	Kasey Kendall
3G19	Pittsfield, IL	Pike County EMS	Kasey Kendall

#### C. ALS NON-TRANSPORT UNITS / ALTERNATE RESPONSE VEHICLES

UNIT ID	LOCATION	AGENCY	CONTACT
ADAMS COUNTY			
ARV ADAMS CO	Adams County, IL	Adams County Ambulance & EMS	John Simon
800			
ARV ADAMS CO	Adams County, IL	Adams County Ambulance & EMS	John Simon
898	-	-	
E5	Quincy, IL	Quincy Fire Department	Bernard Vahlkamp

#### D. BLS TRANSPORT UNITS

UNIT ID	LOCATION	AGENCY	CONTACT	
BROWN COUNTY				
3B19	Mt. Sterling, IL	Brown County Ambulance Service	Brian Gallaher	
3B15	Mt. Sterling, IL	Brown County Ambulance Service	Brian Gallaher	
HANCOCK COU	JNTY			
3A14	Warsaw, IL	Hancock County Ambulance	Jennifer Meeks	
3A22	Carthage, IL	Hancock County Ambulance	Jennifer Meeks	
3A28	Carthage, IL	Hancock County Ambulance	Jennifer Meeks	
PIKE COUNTY				
3G14	Pittsfield, IL	Pike County EMS	Kasey Kendall	
3G15	Pittsfield, IL	Pike County EMS	Kasey Kendall	

#### E. BLS NON-TRANSPORT UNITS

UNIT ID	LOCATION	AGENCY	CONTACT
E2, E3, E4, E6	Quincy, IL	Quincy Fire Department	Bernard Vahlkamp
TTFD	Quincy, IL	Tri-Township Fire Department	Tom Bentley
ARV ADAMS	Adams County, IL	Adams County Ambulance & EMS	John Simon
CO 899			

#### F. EMERGENCY MEDICAL RESPONDER UNITS (EMR)

UNIT ID	LOCATION	AGENCY	CONTACT
ADAMS COUNTY			
Payson-Fall	Payson, IL	Payson-Fall Creek Fire & Rescue	Ken Steffen
Creek FR			
BROWN COUNT	<b>TY</b>		
	Versailles, IL	Brown County Ambulance First	Brian Gallaher
		Responders	
HANCOCK COU	INTY		
Warsaw	Warsaw, IL	Warsaw Ambulance First Responders	Lisa Weeks
Ambulance FR			
Tri-County FR	Plymouth, IL	Tri-County Fire & Rescue	Mark Kelly
PIKE COUNTY			
Barry Fire	Barry, IL	Barry Fire Department	Clay Lister
Protection			
District FR			
Baylis FD First	Baylis, IL	Baylis Fire Department	Thomas Lewis
Responders			
North Pike EMS	Perry, IL / Griggsville, IL	North Pike EMS	Jeff Butler
FR			
South Pike EMS	Pleasant Hill, IL	Pleasant Hill-Spring Creek	Josh Martin
FR			
West Pike EMS	Hull, IL	West Pike EMS	Douglas Orr
FR			

#### G. DISPATCH AGENCIES

0, 5101	TI CII MOENCIES		
ADAMS COU	JNTY		
	Quincy, IL	Quincy-Adams County 911	Jessica Douglas
BROWN COU	UNTY		
	Mt. Sterling, IL	Brown County 911	Brian Gallaher
HANCOCK COUNTY			
	Carthage, IL	Hancock County 911	Maria Hopp
PIKE COUNTY			
	Pittsfield, IL	Pike county 911	Stephanie Reinhardt

#### III. Minimum Staffing Criteria

A. Resource Hospital

At least 1 ECRN and 1 EMS physician in-house 24 hours.

At least 1 ECRN and 1 EMS physician in-house 24 hours

C. Participating Hospital At least 1 RN 24 hours in-house and 1 physician available on call 24 hours.

D. ALS Transport Minimum of 1 Paramedic or PHRN and 1 other licensed EMS provider at EMT level or

above.

E. BLS Transport Minimum of 1 licensed EMT or above and 1 other licensed EMS provider at EMT level or

above.

F. ALS Non-transport Minimum of 1 Paramedic or PHRN and 1 other licensed EMS provider at EMT level or

above.

G. BLS Non-transport Minimum of 1 licensed EMT or above and 1 other licensed EMS provider at EMR level or

above. H. FR Non-transport

I. Alternate Response Vehicle (ARV) Minimum of 1 licensed provider at the vehicle license level

#### **QUINCY AREA EMS SYSTEM**

#### **Definitions and Utilization Within the EMS System**

Emergency Medical Responder (EMR) Services: a preliminary level of pre-hospital emergency care as outlined in Emergency Medical Responder curriculum of the National EMS Education Standards and any modifications to that curriculum standards specified by IDPH. Utilized in the System to provide EMR services to patients in need of care prior to the arrival of an ambulance or helicopter. (Section 3.10 of the EMS Act)

**BLS Non-Transport Services:** a basic level of pre-hospital emergency care and non-emergency medical care that includes airway management, cardiopulmonary resuscitation (CPR), control of shock and bleeding and splinting of fractures, as outlined in the National EMS Education Standards and any modifications to that curriculum standards as specified by IDPH. Utilized when a transporting ambulance is not readily available. No transport of patients. (Section 3.10 of the EMS Act)

**BLS-Transport Services**: a basic level of pre-hospital and inter-hospital emergency care and non-emergency medical services that includes airway management, cardiopulmonary resuscitation (CPR), control of shock and bleeding and splinting of fractures, as outlined in the National EMS Education Standards and any modifications to that curriculum standards specified by IDPH. (Section 3.10 of the EMS Act).

ALS and BLS Alternate Response Vehicles: Ambulance assistance vehicles are dispatched simultaneously with an ambulance and assist with patient care prior to the arrival of the ambulance. These assistance vehicles include fire engines, trucks, squad cars or chief's cars that contain the staff and equipment required by this Section. These vehicles shall not function as assist vehicles if staff and equipment required by this Section are not available. These vehicles shall be identified by the agency as a program plan amendment outlining the type and level of response that is planned. The vehicle shall not be a primary response vehicle but a supplementary vehicle to support EMS services. (Section 515.825) The vehicle shall be dispatched only if needed.

**ALS Non-Transport**: An advanced level of pre-hospital emergency care and non-emergency medical care that includes basic life support care, cardiac monitoring, cardiac defibrillation, electrocardiography, intravenous therapy, administration of medications, drugs and solutions, use of adjunctive medical devices, trauma care, and other authorized techniques and procedures as outlined in the National EMS Education Standards and any modifications to that curriculum standards specified by IDPH. Utilized when a transporting ambulance is not readily available. No transport of patients. (Section 3.10 of the Act).

**ALS Transport**: An advanced level of pre-hospital emergency care and non-emergency medical care that includes basic life support care, cardiac monitoring, cardiac defibrillation, electrocardiography, intravenous therapy, administration of medications, drugs and solutions, use of adjunctive medical devices, trauma care, and other authorized techniques and procedures as outlined in the National EMS Education Standards and any modifications to that curriculum standard specified by IDPH. Transport of patients in an ALS licensed vehicle. (Section 3.10 of the EMS Act).

Critical Care Transport - provides a level of care that includes skills and procedures during interfacility transport that goes beyond the normal paramedic scope of practice. Tier I Critical Care Transport includes the use of infusion pumps for maintenance of specified medication infusions, use of transport ventilators and monitoring of chest tubes/ chest tube drainage systems during interfacility transport. (Section 515.860)

**Interfacility Transfer Service** – An agency participating in the System that staffs licensed BLS or ALS ambulances for the purpose of interfacility transport. Not dispatched emergently by 9-1-1. Ambulances are licensed and equipped per System and IDPH requirements.

**Specialized Emergency Medical Services Vehicle or SEMSV** – a program operating within an EMS System, pursuant to a program plan submitted to and certified by the Department, using specialized emergency medical services vehicles to provide emergency transportation to sick and injured persons. Includes vehicles or conveyances, other than those owned or operated by the federal government, that are primarily intended for use in transporting the sick or injured by means of air, water, or ground transportation, that are not an ambulance as defined in the Act. The term includes watercraft, aircraft and special purpose ground transport vehicles not intended for use on public roads. (Section 3.85 of the Act)

Associate Hospital – a hospital participating in an approved EMS System in accordance with the EMS System Program Plan, fulfilling the same clinical and communications requirements as the Resource Hospital. This hospital has neither the primary responsibility for conducting training programs nor the responsibility for the overall operation of the EMS System program. The Associate Hospital must have a basic or comprehensive Emergency Department with 24-hour physician coverage. It shall have a functioning Intensive Care Unit and/or a Cardiac Care Unit. (Section 515.100)

**Participating Hospital** – a hospital participating in an approved EMS System in accordance with the EMS System Program Plan, which is not a Resource Hospital or an Associate Hospital. (Section 515.100)

**Resource Hospital** – the hospital with the authority and the responsibility for an EMS System as outlined in the Department-approved EMS System Program Plan. The Resource Hospital, through the EMS Medical Director, assumes responsibility for the entire program, including the clinical aspects, operations and educational programs. This hospital agrees to replace medical supplies and provide for equipment exchange for participating EMS vehicles. (Section 515.100)

#### QUINCY AREA EMS SYSTEM SYSTEM POLICIES & PROCEDURES

#### **AGENCY RESPONSIBILITIES**

- I. Purpose: Provider agencies that function within the Quincy Area EMS System have important responsibilities. These are broken down into the four categories of Operational, Notification, Training/Education and Quality Assurance / Quality Improvement.
- II. Operational Responsibilities (related to requirements as outlined in the EMS Act or in Title 77: Public Health, Chapter I: Department of Public Health, Subchapter f: Emergency Medical Services and Highway Safety, Part 515.)
  - a. Provider agencies must be in compliance with IDPH EMS rules in Section 515, Subpart F Vehicle Service Providers including completion and approval of an initial application demonstrating compliance with 515.830 and other applicable rules.
  - b. Provider agencies must comply with minimum staffing requirements for the level and type of vehicle. Staffing patterns must be in accordance with the provider agency's approved system plan and be in compliance with Section 515.830(f).
  - c. No agency shall employ or permit any member or employee to perform services for which he or she is not licensed, certified, or otherwise authorized to perform. (Section 515.170)
  - d. Any agency that employs or supervises a person's activities as an Emergency Medical Responder or Emergency Medical Dispatcher shall cooperate with the Department's (IDPH) efforts to monitor and enforce compliance by those individuals with the requirements of the EMS Act Section 3.160 (b) or this Part (Section 515.170).
  - e. Provider agencies must comply with requirements regarding submission of patient care report forms, acquiring refusals and any other required documentation.
  - f. Provider agencies authorized to carry controlled substances must abide by all provisions of the Controlled Substance policy including maintaining accurate daily count, usage and waste logs and reporting all discrepancies to the EMS System Coordinator as well as monthly submission of required documents.
  - g. Agencies will maintain an up to date staffing roster that includes the name and level of the provider, license number and expiration date, current address, phone number and date of birth. Maintain records of provider licenses and certifications and be able to provide that information upon System request.
- III. Notification Responsibilities (The following items require notification of the EMS System Coordinator)
  - a. Addition of new personnel
    - Upon intent to hire, verify with the EMS System Coordinator whether the individual
      is a current member of the QAEMS system. If the individual is already a member,
      the System can provide the agency with a letter regarding that individual's standing
      in the System.
    - ii. If the individual is NOT a current member of the System, complete the system provider checklist and submit with system application, copies of license and certifications to the EMS System Coordinator. A letter regarding permission to function will be provided to the agency leader and the individual upon completion of all system entry requirements. Until this is received, the provider cannot provide patient care.
  - b. Agency Resignations/ Terminations: notify the EMS System Coordinator within ten days.

- c. Event reports any incident or unusual occurrence that could or did adversely affect a patient, provider or other person must be reported via System Event Report Form, email or phone.
- d. Staffing shortages Any time an EMS agency lacks the appropriately licensed and System-certified personnel to provide 24-hour coverage. Transporting agencies must apply for an ambulance staffing waiver if the agency is aware of a staffing shortage interfering with their ability to provide such coverage on an ongoing basis.
- e. System Modifications including changes in vehicles, changes in agency address, changes in service response area, changes in service level. (Must complete IDPH sys mod form)
  - i. All vehicles must be inspected by the System and appropriate paperwork completed PRIOR to the vehicle being placed into service.
  - ii. Transport vehicles must also be inspected by IDPH prior to the vehicle being placed into service.
  - iii. Any vehicle that has been out of service for greater than 12 days CANNOT return to service without a scheduled IDPH inspection.
- f. Any intended addition of equipment or supplies not currently on the approved equipment lists.
- g. Changes in communication capacities or equipment, updated FCC licenses, updated mutual aid agreements.

#### IV. Training and Education Responsibilities

- Each agency should appoint a training officer. Ideally the training officer will have IDPH
  Lead Instructor credential. Contact information must be provided to Blessing EMS
  Department along with an up-to-date resume.
- b. If an agency intends to provide continuing education classes, a training application must be submitted to Blessing EMS Department annually for System and IDPH approval and designation of a site code. Training applications for annual education are due by October 15th for the following year. All other training applications must be submitted at least 75 days prior to the training date.
- c. Communicate changes to previously approved training applications including cancellations, change in topic/speaker/time or location.
- d. Maintain sign in rosters for all training conducted, provide participants with certificates of attendance. If a copy of the attendance record is submitted to Blessing EMS, it will be maintained in our records.
- e. Conduct any mandatory System education or training as per System notification.

#### V. Quality Assurance/Quality Improvement

- a. All agencies will participate in Quality Assurance and Improvement activities as requested or required.
- b. Transport agencies will provide specified Blessing EMS Department staff access to electronic patient care report system for QA purposes.
- c. Glucometers should be tested, coded, and/ or calibrated per the manufacturer's recommendation with records maintained as needed.

### Quincy Area EMS Pediatric Prehospital Protocols

These protocols were adopted from the Illinois Emergency Medical Services for Children Pediatric Prehospital Protocol Manual 2016.

These protocols approved by

EMS Medical Director: Dr. Antony Wollaston

Associate EMS Medical Director: Dr. Christopher Solaro

New 5/15/2018

Antony Wollaston, MD
EMS Medical Director

Christopher R Solaro, MD, PHD Associate Medical Director

#### QUINCY AREA EMS PEDIATRIC PREHOSPITAL PROTOCOLS

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### QUINCY AREA EMS SYSTEM PEDIATRIC ASSESSMENT ALS/BLS/EMR GUIDELINE

#### I. Scene size up

- Identify possible hazards.
- Assure safety for patient and responder.
- Observe for mechanism of injury/nature of illness.
- Note anything suspicious at the scene, i.e., medications, household chemicals, other ill familymembers.
- Assess any discrepancies between the history and the patient presentation, i.e., infant fell on hardwood floor; however, floor is carpeted.
- Initiate appropriate body substance isolation (BSI) precautions.
- Determine the number of patients.

#### II. General Approach to the Stable/Conscious Pediatric Patient

- A. Assessments and interventions must be tailored to each child in terms of age, size anddevelopment.
  - Make eye contact and smile at thechild.
  - Keep voice at even quiet tone, don'tyell.
  - Speak slowly; use simple, age appropriate terms.
  - Use toys or penlight as distractors; make a game of assessment.
  - Keep small children with their caregiver(s); encourage assessment while caregiver is holdingchild.
  - Kneel down to the level of the child if possible.
  - Be cautious in use of touch. In the stable child, make as many observations as possible before touching (and potentially upsetting) the child.
  - Adolescents may need to be interviewed without their caregivers present if accurate information is to be obtained regarding drug use, alcohol use, LMP, sexual activity, childabuse.
- B. While walking up to the patient, observe/inspect the following:
  - General appearance, age appropriate behavior. Does child have a malnourished appearance? Is child looking around, responding with curiosity or fear, playing, sucking on a pacifier or bottle, quiet, eyes open but not moving much or uninterested in environment?
  - Obvious respiratory distress/increased work of breathing: retractions, nasal flaring, accessory muscle use, head bobbing, grunting.
  - Color: pink, pale, flushed, cyanotic, mottled.
  - Position of the child. Are the head, neck or arms being held in a position suggestive of spinal injury? Is the patient sitting up or tripoding?
  - Level of consciousness, i.e., awake vs asleep or unresponsive.
  - Muscle tone: good vs limp.
  - Movement: spontaneous, purposeful, symmetrical.
  - Obvious injuries, bleeding, bruising, impaled objects or gross deformities.
  - Assess for pain.
  - Determine weight ask child or caretakers or use length/weight tape.

#### III. Initial Assessment

- A. Airway Access/Maintenance (with Spinal Motion Restriction if needed
  - Maintainable with assistance: positioning.
  - Maintainable with adjuncts: oral airway, nasal airway.
  - Maintainable with endotracheal tube.
  - Listen for any audible airway noises, i.e., stridor, snoring, gurgling, wheezing.
  - Patency: suction secretions as necessary.

#### B. Breathing

- Rate and rhythm of respirations. Compare to normal rate for age and situation.
- Chest expansion: symmetrical.
- Breath sounds: compare both sides and listen for sounds (present, absent, normal, abnormal).
- Positioning: sniffing position, tripod position.
- Work of breathing: retractions, nasal flaring, accessory muscle use, head bobbing, grunting.

#### C. Circulation

- Heart rate: compare to normal rate for age and situation.
- Central/truncal pulses (brachial, femoral, carotid): strong, weak or absent.
- Distal/peripheral pulses: present/absent, thready, weak, strong.
- Color: pink, pale, flushed, cyanotic, mottled.
- Skin temperature: hot, warm, cool.
- Blood pressure: compare to normal for age of child. Must use appropriately sized cuff.
- Hydration status: anterior fontanel in infants, mucous membranes, skin turgor, crying tears, urine output history.

#### D. Disability - Brief Neuro Examination

Assess Responsiveness

A Alert

V Responds to verbal stimuli P Responds to painful stimuli U Unresponsive

- Assess pupils.
- Assess for transient numbness/tingling.

#### E. Expose and Examine

- Expose the patient as appropriate based on age and severity of illness.
- Initiate measures to prevent heat loss and keep the child from becoming hypothermic.

#### IV. Focused History/Physical Assessment

Tailor assessment to the needs of the patient. Rapidly examine areas specific to the chief complaint.

- A. Patient History Acquire during/incorporate into physical exam.
  - S Signs & Symptoms as they relate to the chief complaint.
  - A Allergies to medications, foods, environment
  - M Medications: prescribed, over-the-counter, compliance with prescribed dosing regimen, time, date and amount of last dose

#### P Past Pertinent Medical History

- o Pertinent medical or surgical problems
- o Preexisting diseases/chronic illness
- o Previous hospitalizations
- o Currently under medical care
- o For infants, obtain a neonatal history (gestation, prematurity, congenital anomalies, was infant discharged home at the same time as the mother)
- L Last oral intake of liquid/foodingested.

#### E Events surrounding current problem

- o Onset, duration and precipitating factors
- o Associated factors such as toxic inhalants, drugs, alcohol
- o Injury scenario and mechanism of injury
- o Treatment given by caregiver

#### B. Responsive Medical Patients

 Perform rapid assessment based on chief complaint. A full review of systems may not be necessary. If chief complaint is vague, examine all systems.

- C. Unresponsive Medical Patients
  - Perform rapid assessment: ABC's, quick head-to-toe exam.
  - Emergency care is based on signs/symptoms, initial impressions and standard operating procedures
- D. Trauma patient with **NO** significant mechanism of injury.
  - Focused assessment is based on specific injury site.
  - E. Trauma patient **WITH** significant mechanism of injury
    - Perform rapid assessment of all body systems.

#### V. Detailed Assessment

- A. Performed to detect non-life-threatening conditions and to provide care for those conditions/injuries. Usually performed enroute. May be performed on scene if transport is delayed.
  - Inspect and palpate each of the major body systems for the following:
    - Deformities
    - Contusions
    - Abrasions
    - Penetrations/punctures
    - Burns
    - Lacerations
    - Swelling/edema
    - Tenderness
    - Instability
    - Crepitus
  - Auscultation of breath and heart sounds as well as blood pressure readings may be required in the field.

#### VI. Ongoing Assessment

To effectively maintain awareness of changes in the patient's condition, repeated assessments are essential and should be performed at least every 5 minutes on the unstable patient, and at least every 15 minutes on the stable patient.

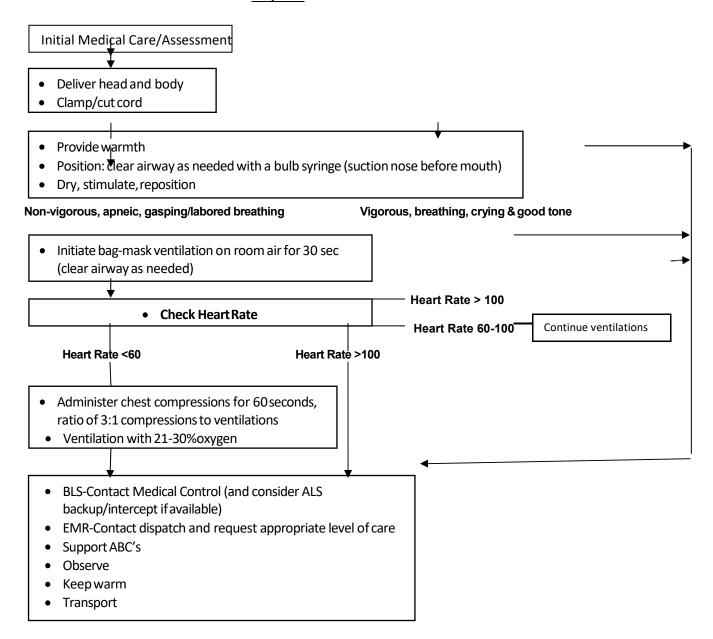
#### VII. Considerations for Children with Special HealthCare Needs (CSHCN)

- Track CSHCN in your service community and become familiar with both the child as well as their anticipated emergency care needs.
- Refer to child's emergency care plan formulated by their medical providers, if available. Understanding the child's baseline will assist in determining the significance of altered physical findings. Parents/caregivers are the best source of information on: medications, baseline vitals, functional level/normal mentation, likely medical complications, equipment operation and troubleshooting, emergency procedures.
- Regardless of underlying condition, assess in a systematic and thorough manner.
- Use parents/caregivers/home health nurses as medical resources at home and enroute.
- Be prepared for differences in airway anatomy, physical development, cognitive development and possibly existing surgical alterations or mechanical adjuncts. Common home therapies include: respiratory support (oxygen, apnea monitors, pulse oximeters, tracheostomies, mechanical ventilators), nutrition therapy (nasogastric or gastrostomy feeding tubes), intravenous therapy (central venous catheters), urinary catheterization or dialysis (continuous ambulatory peritoneal dialysis), ostomy care, orthotic devices, communication or mobility devices, or hospice care.
- Communicate with the child in an age appropriate manner. Maintain communication with and remain sensitive to the parents/caregivers and the child.
- The most common emergency encountered with these patients is respiratory related and so familiarity with respiratory emergency interventions/adjuncts/treatment is appropriate.

#### QUINCY AREA EMS SYSTEM STANDARD MEDICAL CARE EMR/BLS/ALS CARE GUIDELINE

- Assess scene safety
- Ensure body substance isolation (BLS)
- Assess Airway, Breathing, and Circulation (ABCs)
- Assess mental status
- Administer O<sub>2</sub> per appropriate method
- Support with bag mask ventilation as indicated
- Test blood glucose as indicated
- Apply cardiac monitor as indicated (ALS)
- Apply pulse oximetry as indicated

## QUINCY AREA EMS SYSTEM NEONATAL RESUSCITATION BLS/EMR CARE GUIDELINE

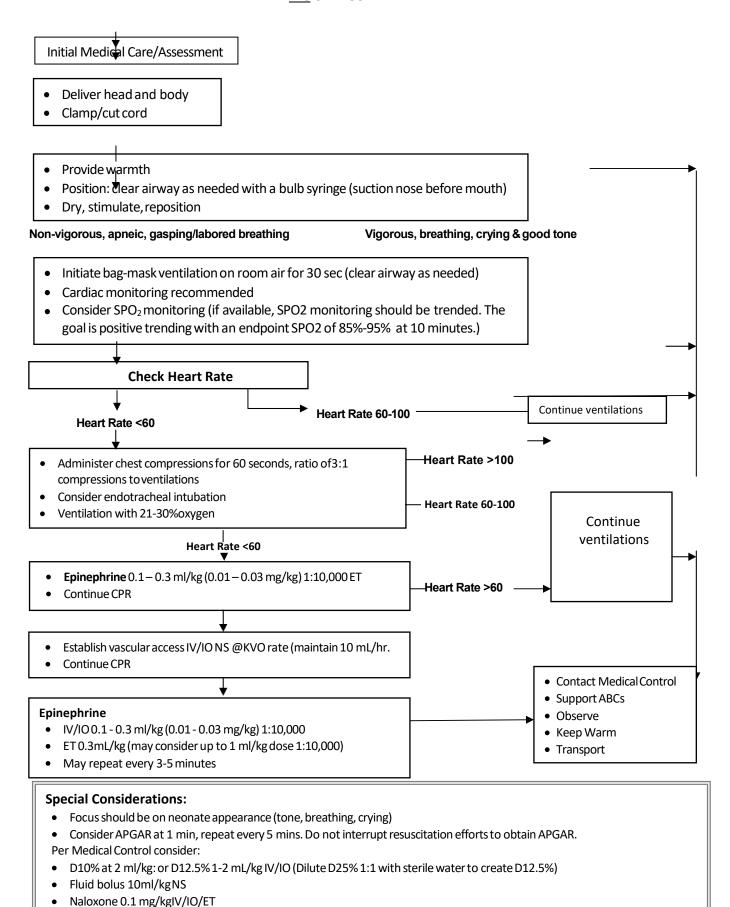


#### **Special Considerations:**

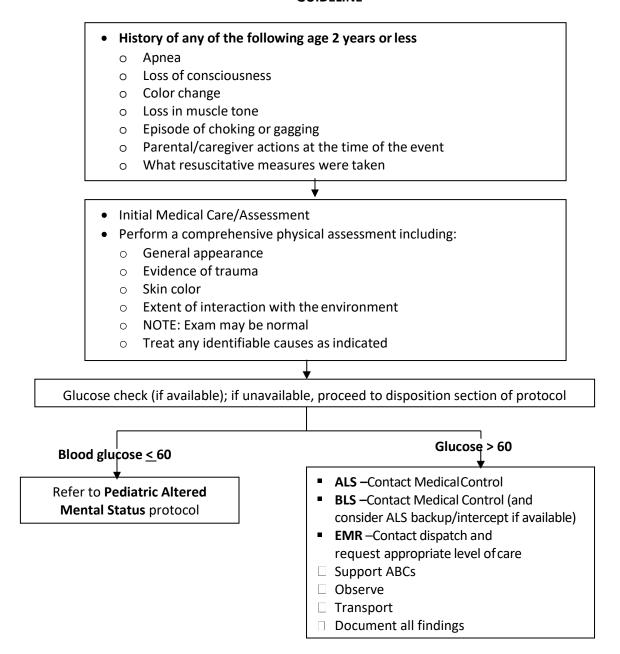
- Focus should be on neonate appearance (tone, breathing, crying)
- Consider APGAR at 1 min, repeat every 5 mins. Do not interrupt resuscitation efforts to obtain APGAR.

08/01, Re: 7/08,5/18 (reviewed 5/11)

#### QUINCY AREA EMS SYSTEM NEONATAL RESUSCITATION ALS CARE GUIDELINE



## QUINCY AREA EMS SYSTEM PEDIATRIC APPARENT LIFE-THREATENING EVENT (ALTE) <u>ALS/BLS/EMR</u> CARE GUIDELINE



#### **Special Considerations:**

- All ALTE patients should be transported for medical evaluation, even the well appearing child.
- Assume the history give inaccurate

DEFINITION: An apparent Life-threatening Event (AELT) is an episode that is frightening to the observer and involves some combination of apnea, color change, marked change in tone, choking or gagging. It may be a presentation for a variety of different pediatric conditions including seizures, upper airway obstruction, gastroesophageal reflux, metabolic problems, anemia and cardiac disease. ALTEs usually occur in infants under 12 months however any child less than 2 years of age who exhibits any of the above symptoms should be considered an ALTE.

## QUINCY AREA EMS SYSTEM PEDIATRIC RESPIRATORY DISTRESS PROTOCOL BLS/EMR CARE GUIDELINE

Initial Medical Care/Assessment Complete initial assessment. Assess for: **Complete Airway Obstruction Partial Airway Obstruction Lower Airway Disease** Suspected foreign body Croup Asthma **Epiglottitis** Suspected foreign body **Bronchiolitis** anaphylaxis **Epiglottitis** Pneumonia Anaphylaxis wheezing o stridor grunting 0 o history of choking episode retractions 0 drooling tachypnea 0 o hoarseness decreased respiratory 0 o retractions rate, effort, aeration or tripod position breath sounds tripod position Refer to Respiratory Distress with a Tracheostomy Protocol as indicated. Upper Lower Complete Airway Obstruction **Airway Disease Airway Disease** If foreign body suspected, Avoid any agitation Position of comfort open mouth and remove Position of comfort Per Medical Control, assist foreign body if visible Consider alternate 0<sub>2</sub> methods, with prescribed Beta-Reposition airway i.e. blow by 0<sub>2</sub> agonist MDI inhaler\* if Consider back slaps, Per Medical Control, consider assist of available chest/abdominal thrusts patient with prescribed Beta-agonist MDI\* Reassess. If still in distress (age dependent) if available repeat For Suspected Epiglottitis, DO NOT Beta-agonist. If in severe distress, BLS: attempt invasive airway maneuvers For Anaphylaxis, see Anaphylaxis/Allergic IM epinephrine Reaction protocol autoinjector, If available or per epinephrine protocol **Contact Medical Control** If condition worsens see (and consider ALS Respiratory Failure Protocol backup/intercept if available) **Bradycardia Protocol as indicated EMR-Contact dispatch and** request appropriate level of care Support ABCs Continually assess respiratory effort Keep warm Transport

#### **Special Considerations:**

\*Per Medical Control, severe upper airway obstruction secondary to croup may be relieved with Beta-agonists.

\*Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex).

\*An inhaler should be administered through a holding chamber or spacer device, if available.

## QUINCY AREA EMS SYSTEM PEDIATRIC RESPIRATORY DISTRESS PROTOCOL ALS CARE GUIDELINE

Initial Medical Care/Assessment

Complete initial assessment. Assess for:

#### **Complete Airway Obstruction**

- Suspected foreign body
- Epiglottitis
  - Anaphylaxis

#### **Partial Airway Obstruction**

- Croup
- Suspected foreign body
- Epiglottitis
- Anaphylaxis
  - o stridor
  - o history of choking episode
  - drooling
  - o hoarseness
  - o retractions
  - tripod position

#### **Reactive Airway Disease**

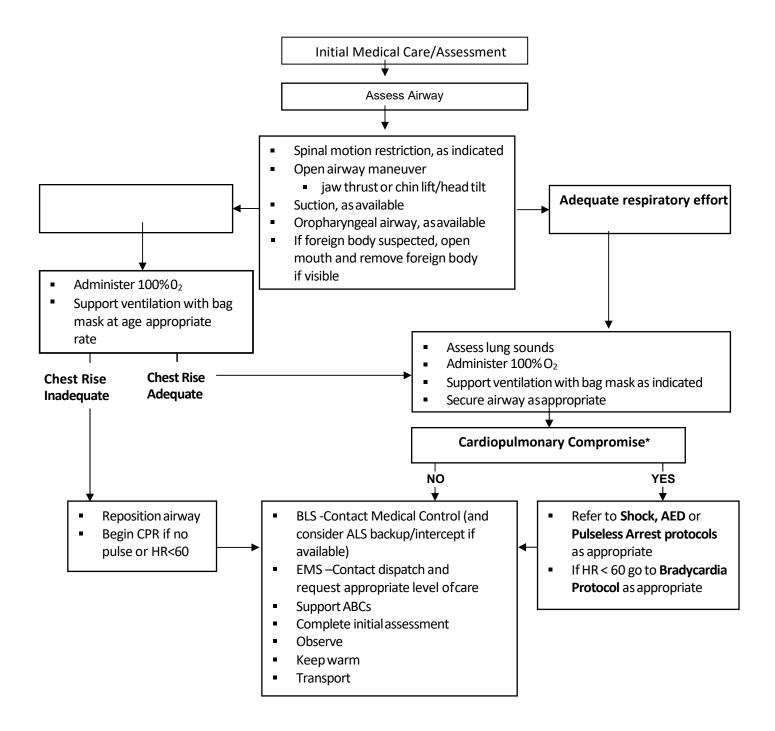
- Asthma
- Bronchiolitis
- Pneumonia
  - wheezing
  - o grunting
  - o retractions
  - o tachypnea
  - decreased respiratory rate, effort, aeration or breath sounds
  - tripod position

Refer to **Respiratory Distress with a Tracheostomy Protocol** as indicated.

#### **Airway Obstruction** Upper Lower **Airway Disease** Airway Disease Avoid any agitation Position of comfort Position of comfort For wheezing, short-Consider alternate 02 methods, acting Beta-agonist If foreign body suspected, i.e. blow by 02 (nebulized or MDI) \*\* Per Medical Control, consider open mouth and remove Reassess. If still in nebulized Racemic Epinephrine\* or distress repeat foreign body if visible Beta-agonist. short-acting Beta-agonist (nebulized Reposition airway or MDI) \* If in severe distress, Consider back slaps, For Anaphylaxis, see consider IM Epinephrine chest/abdominal thrusts Anaphylaxis/Allergic Reaction Consider CPAP, as (age dependent) protocol available Direct laryngoscopy, foreign body removal with Magill forceps if indicated Contact Medical Control Secure airway as If condition worsens (altered mental Support ABCs appropriate status, bradycardia) see Respiratory Continually assess Consider needle Failure Protocol or Bradycardia respiratory effort cricothyrotomy Protocol as indicated Keep warm Transport

- For Suspected Epiglottitis, DO NOT attempt intubation, invasive glottis visualization, or IV access
- \* If Racemic Epinephrine is not available, consider: Epinephrine (1:1000) 0.25 0.5 mg/kg in 3mL Normal Saline and administer by inhalation (max 5mL/dose)
- \* Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex).
- \* An inhaler should be administered through a holding chamber or spacer device, if available.

#### QUINCY AREA EMS SYSTEM PEDIATRIC RESPIRATORY FAILURE <u>BLS/EMR</u> CARE GUIDELINE

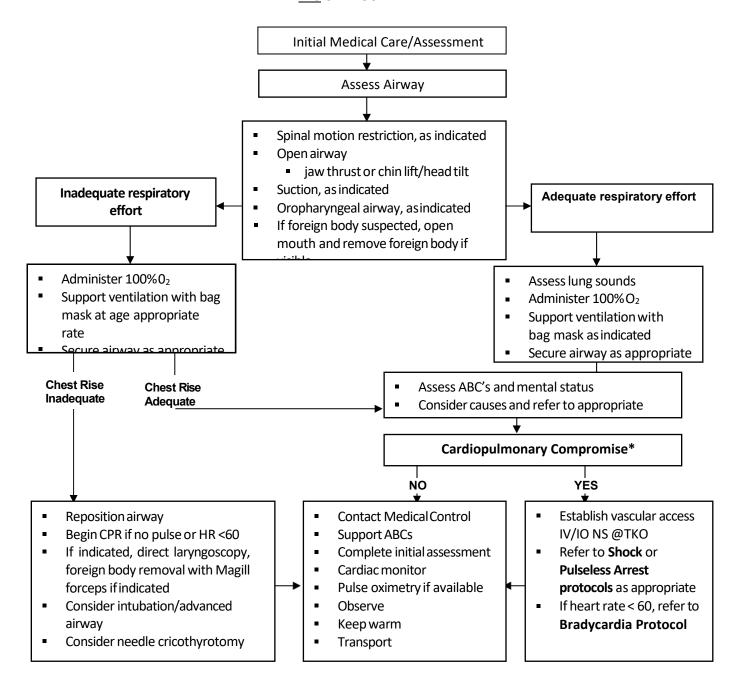


#### **Special Considerations:**

- Respiratory arrest may be a presenting sign of a toxic ingestion, metabolic disorder or anaphylaxis.
- Refer to Respiratory Distress Protocol as appropriate.

\*Refer to Vital Signs and Cardiopulmonary Compromise Resource for signs and symptoms of decreased perfusion in children.

## QUINCY AREA EMS SYSTEM PEDIATRIC RESPIRATORY FAILURE PROTOCOL ALS CARE GUIDELINE

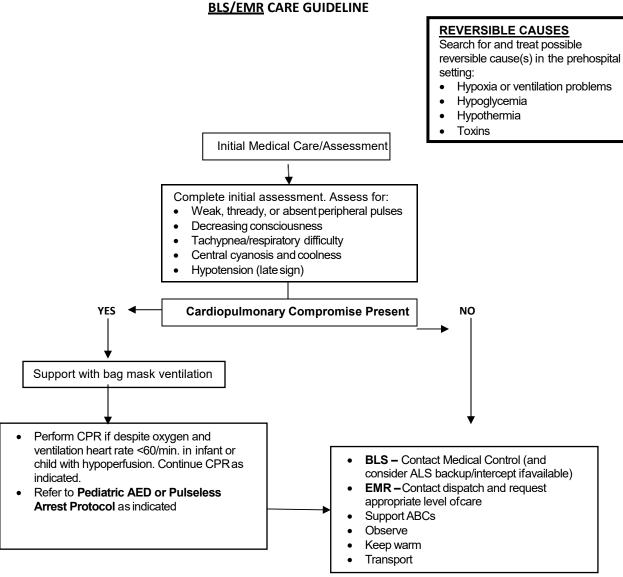


#### **Special Considerations:**

- Respiratory arrest may be a presenting sign of a toxic ingestion, metabolic disorder or anaphylaxis.
- Consider naloxone or glucose per protocol.

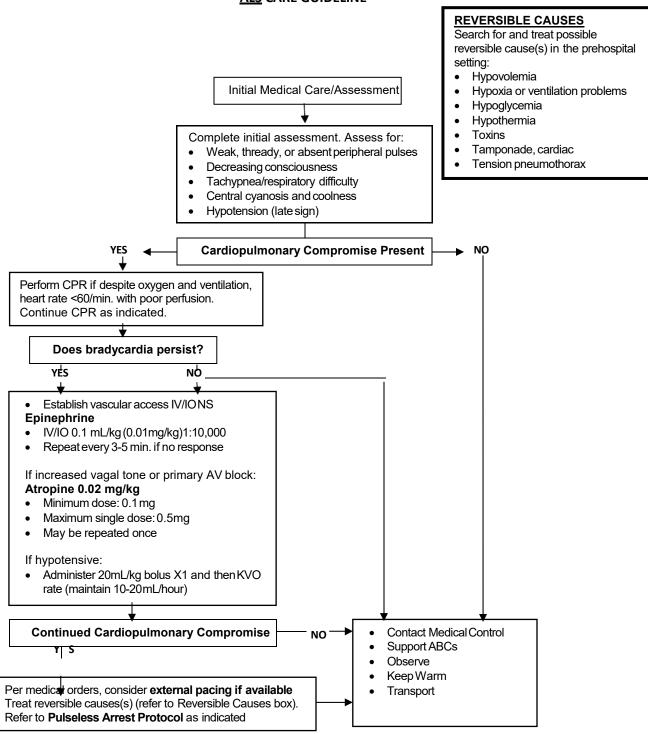
\*Refer to Vital Signs and Cardiopulmonary Compromise Resource for signs and symptoms of decreased perfusion in children.

### QUINCY AREA EMS SYSTEM PEDIATRIC BRADYCARDIA PROTOCOL BIS/FMR CARE GUIDELINE



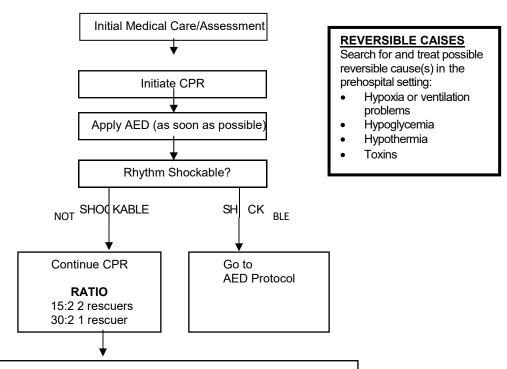
- Hypoglycemia has been known to cause bradycardia in infants and children.
- Special conditions may apply in the presence of severe hypothermia. Refer to **Hypothermia Protocol** as indicated.
- If toxins suspected or known, contact Poison Control 1-800-222-1222

### QUINCY AREA EMS SYSTEM PEDIATRIC BRADYCARDIA PROTOCOL ALS CARE GUIDELINE



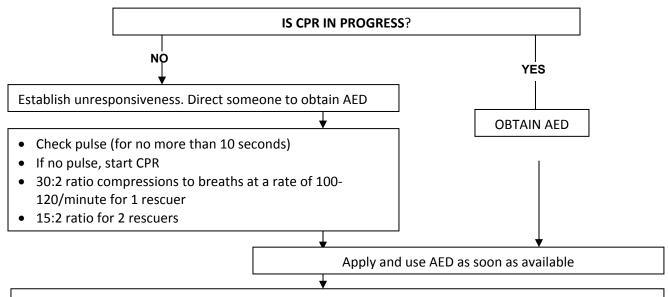
- Special conditions may apply in the presence of severe hypothermia. Refer to Hypothermia Protocol as indicated.
- If IV/IO access not available, consider ET drug administration (Epinephrine 0.1mL/kg ().1mg/kg) 1:1000).
- Monitor IO fluid administration closely when using pressure bag or manual pressure.
- If toxins suspected or known, contact Poison Control 1-800-222-1222

#### QUINCY AREA EMSSYSTEM PEDIATRIC PULSELESS ARREST BLS/EMR CARE GUIDELINE



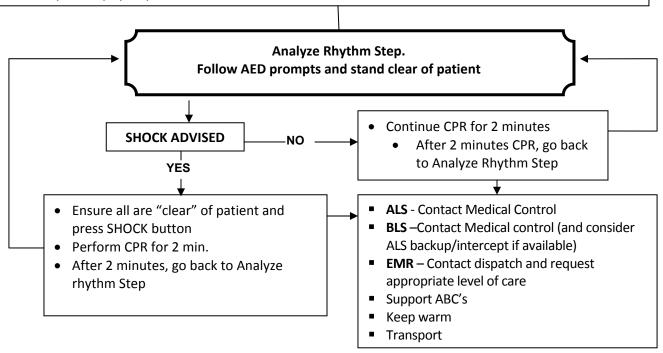
- BLS-Contact Medical Control (and consider ALS backup/intercept if available)
- EMR-Contact dispatch and request appropriate level of care
- Support ABC's
- Keep warm
- Transport

#### QUINCY AREA EMS SYSTEM PEDIATRIC AED PROTOCOL ALS, BLS, EMR CARE GUIDELINE



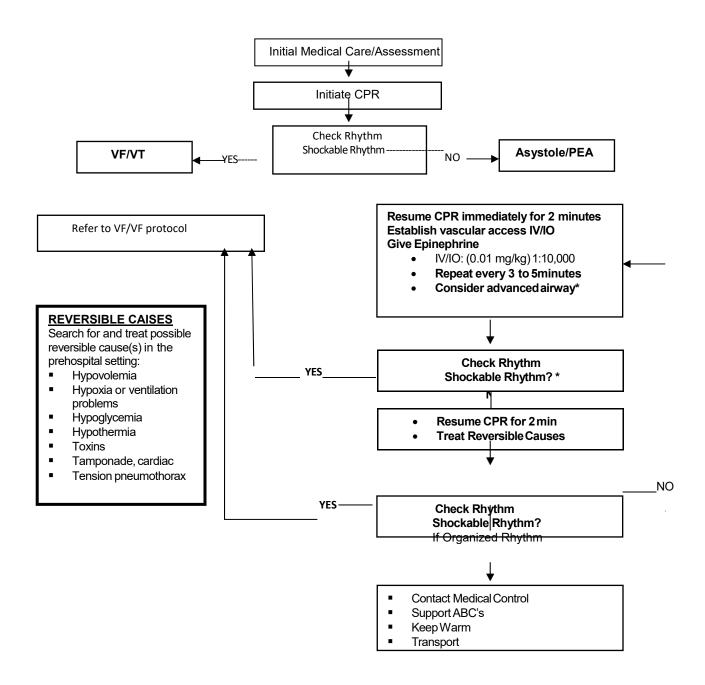
Turn AED ON and attach pads to bare dry skin in proper position. (**NOTE**: It is always desirable to utilize an AED with pediatric capabilities and pads. If unavailable, use of any AED is appropriate)

- If **PEDS** pads available apply as pictured on each of the AED electrodes with proper contact and no overlap of pads. If overlap of pads (or within one inch of each other) use anterior (front) and posterior (back) placement with cervical spine precautions if neck/back injury suspected.
- If ADULT pads only apply anterior (front) and posterior (back) with cervical-spine precautions if neck/back injury suspected.



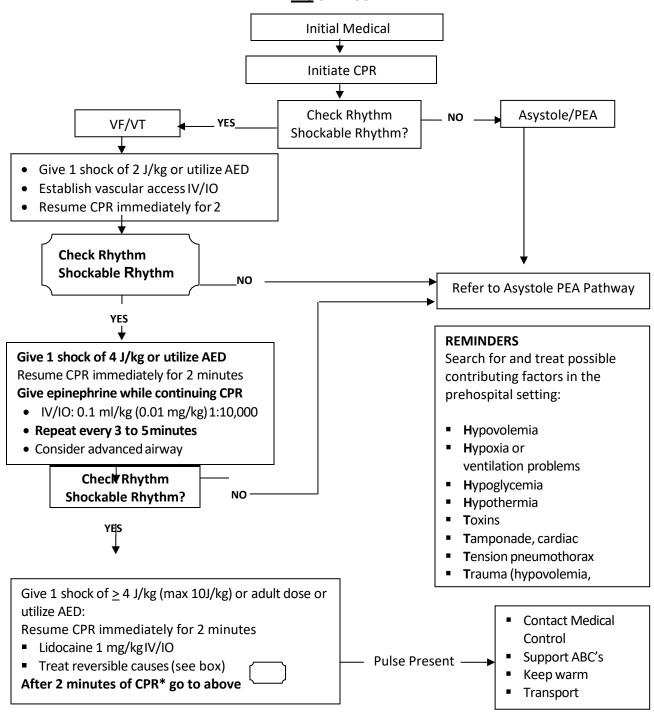
- If injury or neck/back trauma suspected, maintain spinal motion restriction.
- Remove patient from hazardous environment or standing water prior to use of AED.
- If AED in place, EMS personnel should let AED complete rhythm analysis prior to switching to manual defibrillator.

## QUINCY AREA EMS SYSTEM PEDIATRIC PULSELESS ARREST (ASYSTOLE / PEA PATHWAY) ALS CARE GUIDELINE

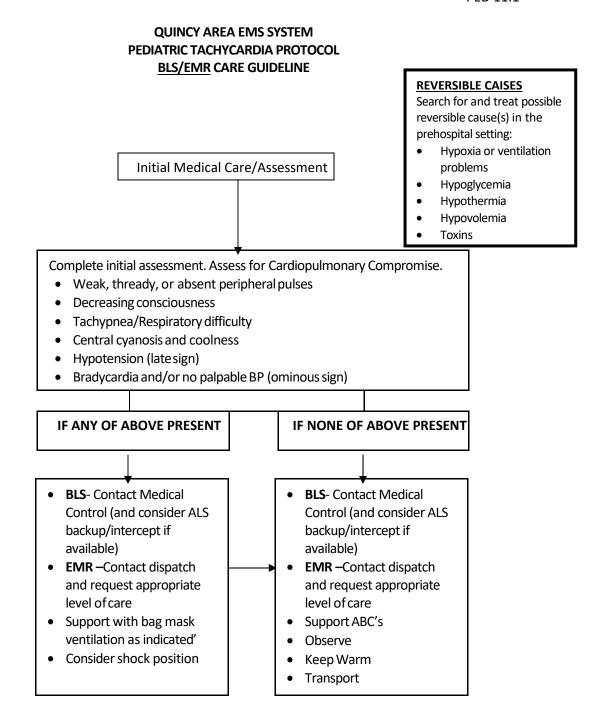


- \* İf advanced airway is present, give continuous chest compressions without pauses for breaths per current AHA/ARC guidelines. Check rhythm every 2 minutes. Contact medical control or refer to system protocol for termination of resuscitation
- If IV/IO access not available consider ET drug administration (Epinephrine 0.1 mL/kg (0.1 mg/kg) 1:1000)
- Refer to length/weight-based tool to identify specific dosages (if available)

## QUINCY AREA EMS SYSTEM PEDIATRIC PULSELESS ARREST (VF/VTPATHWAY) ALS CARE GUIDELINE



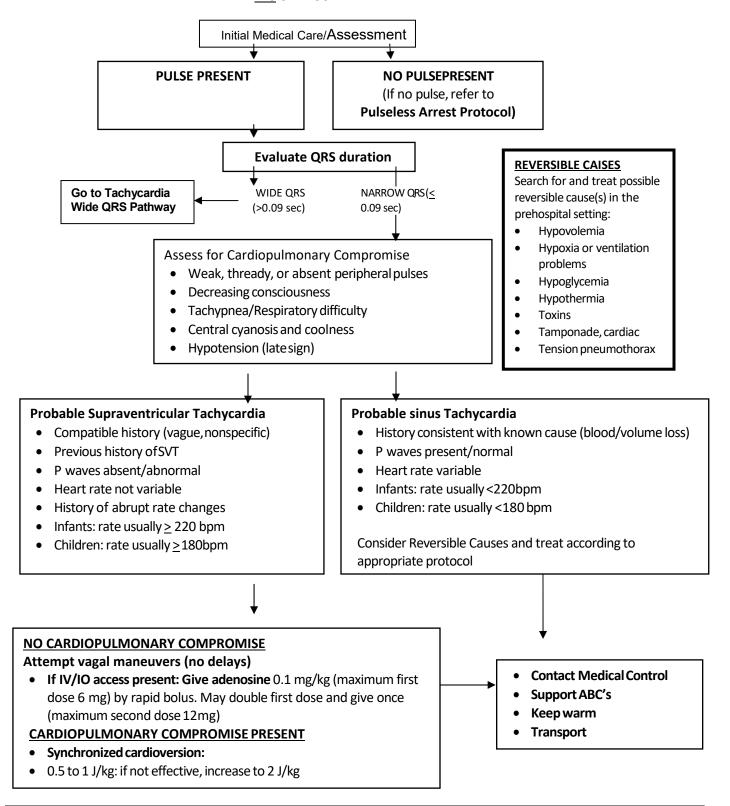
- \*If advanced airway is placed, give continuous chest compressions without pauses for breaths per current AHA/ARC guidelines. Check rhythm every 2 minutes.
- If IV/IO access not available, consider ET administration (Epinephrine 0.1 mlL/kg (0.1mg/kg) !:1000)
- Consider therapeutic hypothermia if system protocol exists



#### **Special Considerations:**

Be prepared for respiratory or cardiac arrest. Consider AED, Pulseless Arrest or Respiratory Arrest protocols.

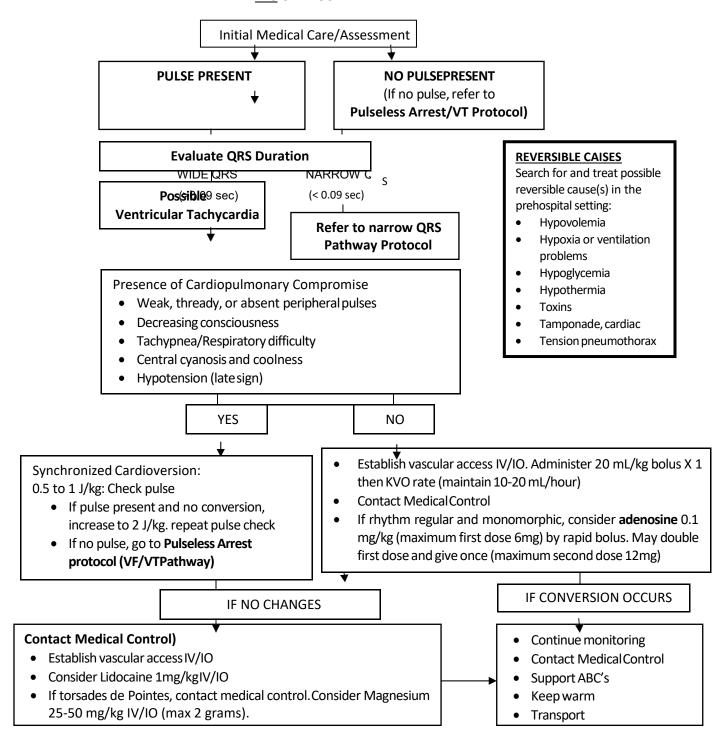
## QUINCY AREA EMS SYSTEM PEDIATRIC TACHYCARDIA (NARROW QRS PATHWAY) ALS CARE GUIDELINE



#### **Special Considerations:**

Attempt vagal maneuvers first unless cardiopulmonary compromise present and it does not delay chemical or electrical cardioversion. In infants and young children, apply ice to the face without occluding the airway. In older children, Valsalva maneuvers are acceptable.

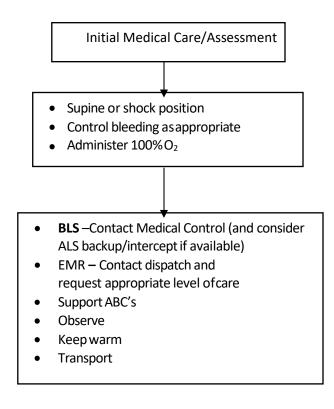
### QUINCY AREA EMS SYSTEM PEDIATRIC TACHYCARDIA (WIDE QRS PATHWAY) ALS CARE GUIDELINE



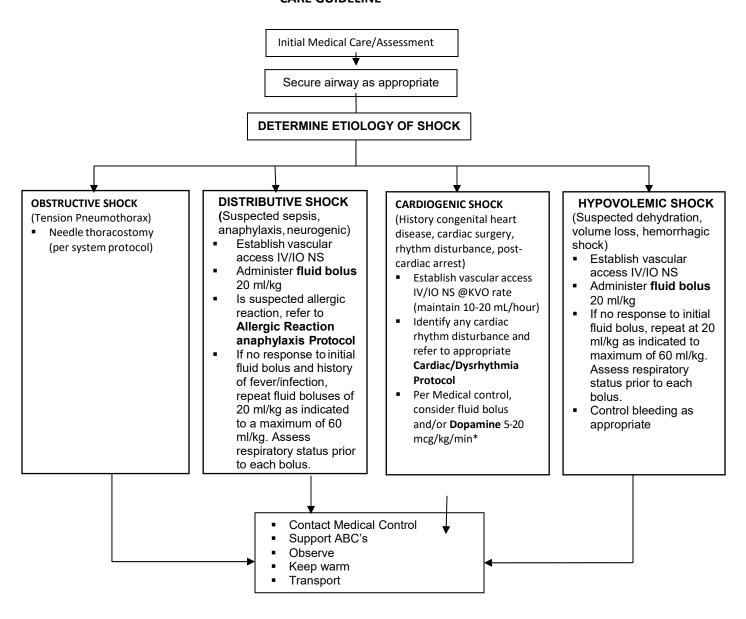
#### **Special Considerations:**

Attempt vagal maneuvers first unless cardiopulmonary compromise present and it does not delay chemical or electrical cardioversion. In infants and young children, apply ice to the face without occluding the airway. In older children, Valsalva maneuvers are acceptable.

## QUINCY AREA EMSSYSTEM PEDIATRIC SHOCK BLS/EMR CAREGUIDELINE



## QUINCY AREA EMS SYSTEM PEDIATRIC SHOCK <u>ALS</u> CARE GUIDELINE

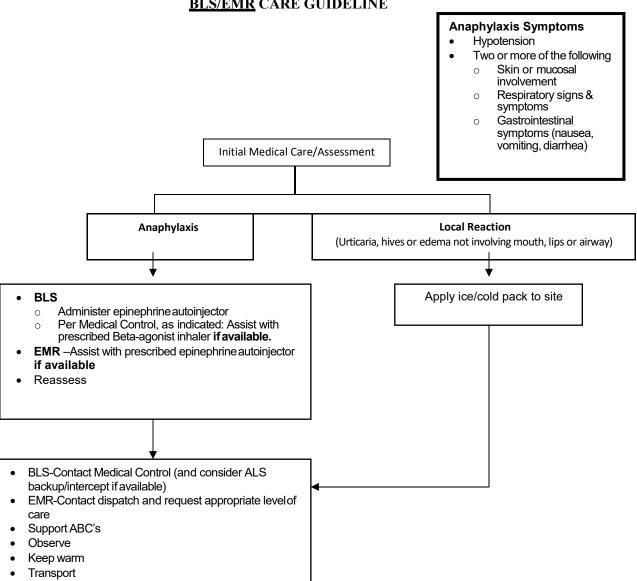


#### **Special Considerations:**

**Caution –** fluids may need to be restricted in Cardiogenic shock.

**Dopamine** must be administered per system protocol.

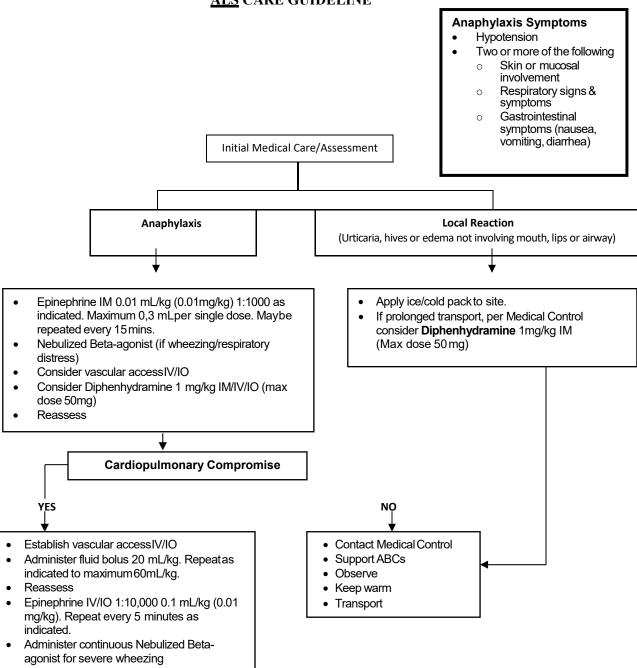
### QUINCY AREA EMS SYSTEM PEDIATRIC ALLERGIC REATION/ANAPHYLAXIS BLS/EMR CARE GUIDELINE



#### **Special Considerations:**

- Epinephrine autoinjector (i.e. Epi-Pen/Epi-Pen Jr/AUVI-Q) -use a 0.3mg auto-injector for children over 30kg and 0.15mg auto-injector for children less than 30kg
- Consider use of patient's personal epinephrine autoinjector if additional doses needed.
- Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex). An inhaler should be administered through a holding chamber or spacer device if available.
- Combination beta-agonist/corticosteroid inhaler can be used per medical director.

## QUINCY AREA EMS SYSTEM PEDIATRIC ALLERGIC REATION/ANAPHYLAXIS <u>ALS</u> CARE GUIDELINE



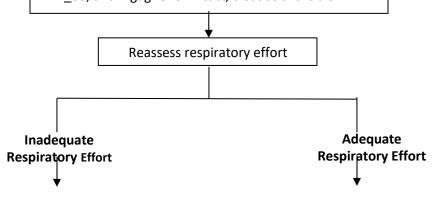
#### **Special Considerations:**

- Epinephrine autoinjector (i.e. Epi-Pen/Epi-Pen Jr/AUVI-Q) -use a 0.3mg auto-injector for children over 30kg and 0.15mg auto-injector for children less than 30kg
- Consider use of patient's personal epinephrine autoinjector if additional doses needed.
- □ Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex). An inhaler should be administered through a holding chamber or spacer device if available.
- Combination beta-agonist/corticosteroid inhaler can be used per medical director.
  - Consider IV steroids per Medical Control if available

### QUINCY AREA EMS SYSTEM PEDIATRIC ALTERED MENTALSTATUS <u>BLS/EMR</u> CARE GUIDELINE

Initial Medical Care/Assessment

- Spinal motion restriction, as indicated
- Consider other causes of altered mental status and refer to indicated protocol(s)
- Test blood glucose, if available. If blood glucose
   ≤60, and if gag reflex intact, treat as available\*



- Initiate bag mask ventilation
- If opioid overdose suspected, consider opioid antagonist as per medical direction: Naloxone (maximum dose 2 mg)
- BLS –Contact Medical Control (and consider ALS backup//intercept if available)
- EMR –Contact dispatch and request appropriate level of care
- Support ABCs
- Observe
- Keep warm
- Transport

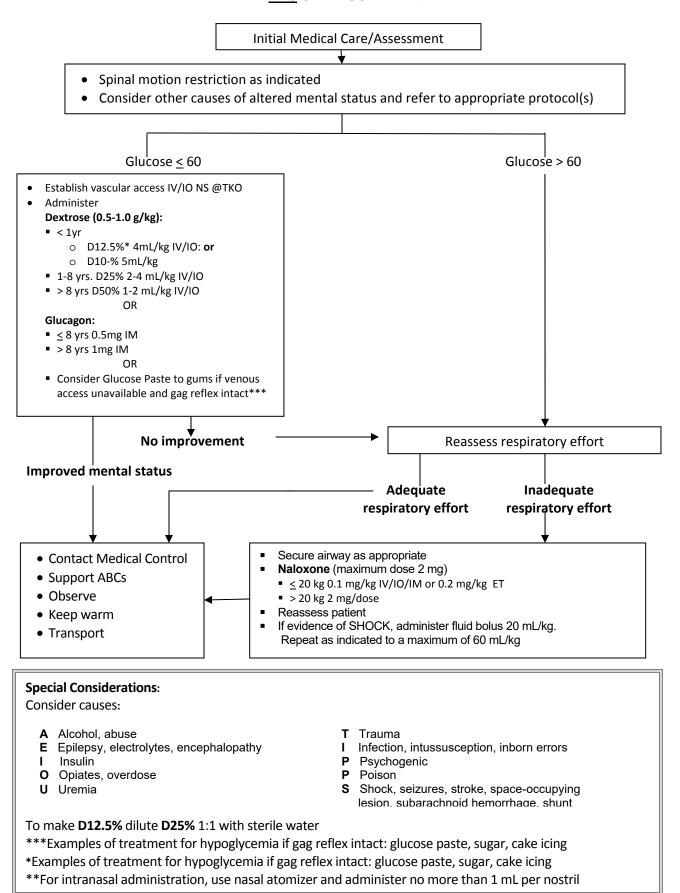
#### **Special Considerations:**

#### **Consider causes:**

- A Alcohol, abuse
- **E** Epilepsy, electrolytes, encephalopathy
- I Insulin
- O Opiates, overdose
- **U** Uremia

- **T** Trauma, temperature
- I Infection, intussusception, inborn errors
- P Psychogenic
- P Poison
- **S** Shock, seizures, stroke, space-occupying lesion, subarachnoid hemorrhage, shunt
- \*Examples of treatment for hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing

### QUINCY AREA EMS SYSTEM PEDIATRIC ALTERED MENTAL STATUS ALS CARE GUIDELINE



## QUINCY AREA EMS SYSTEM PEDIATRIC SEIZURES BLS/EMR CARE GUIDELINE

Initial Medical Care/Assessment
 Protect frominjury
 Vomiting and aspiration precautions
 Consider hypoglycemia (or glucose ≤60) and treat as available if gag reflex intact\*
 Administer 100%O<sub>2</sub>

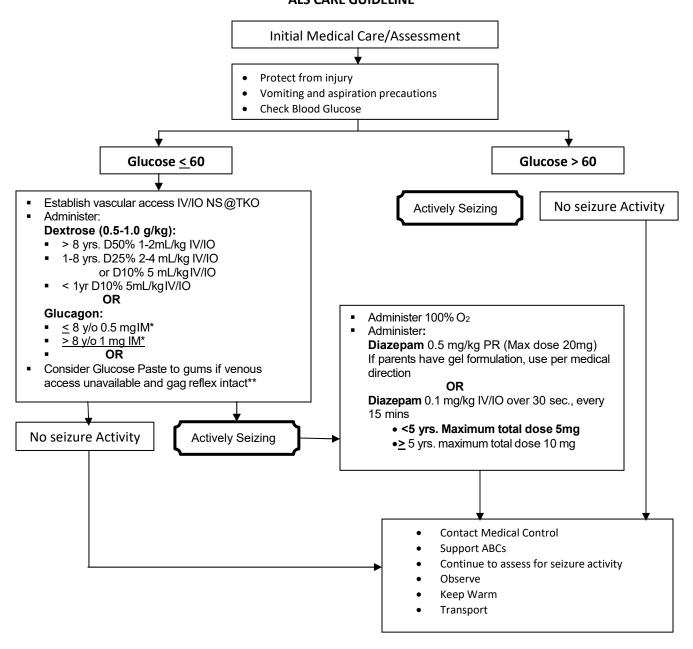
- BLS-Contact Medical Control (and consider ALS backup/intercept if available)
- EMR-Contact dispatch and request appropriate level of care
- Support ABC's
- Observe
- Transport

#### **Special Considerations**

- \* Examples of treatment for hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing.
- Refer to Respiratory Failure Protocol as indicated.
- Parents may have given medication prior to EMS arrival, so watch for respiratory depression.
- Document medications administered prior to transport.

08/01, Re: 7/08,5/18 (reviewed 5/11)

### QUINCY AREA EMS SYSTEM PEDIATRIC SEIZURES ALS CARE GUIDELINE



#### **Special Considerations:**

- Anticipate respiratory depression if **Diazepam** is administered
- Refer to Respiratory Failure Protocol as indicated
- Parents may have given medication prior to EMS arrival, so watch for respiratory depression

<sup>\*\*</sup>Examples of treatment for Hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing

### QUINCY AREA EMS SYSTEM PEDIATRIC TOXIC EXPOSURES/INGESTIONS BLS/EMR CARE GUIDELINE

Assess scene safety as indicated:

- Appropriate body substance isolation
- Refer to System/Department Haz/MatProtocol
- Stop exposure

Initial Medical Care/Assessment

- **BLS** Contact medical control (and consider ALS backup/intercept if available)
- EMR –Contact dispatch and request appropriate level of care.
- Initial interventions per Medical Control as indicated for identified exposure\*
- For altered mental status or seizures, refer to appropriate protocol\*\*
- Support ABC's
- Keep warm
- Observe
- Bring container(s) of drug or substance to the emergency department
- Transport

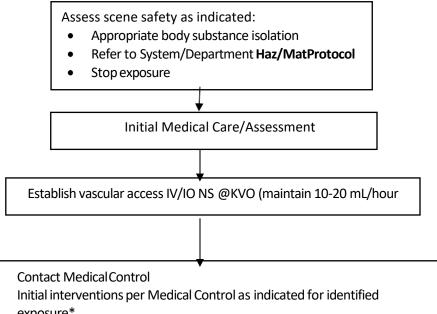
#### **Special Considerations:**

- Do not induce vomiting, especially in cases where caustic substance ingestion is suspected
- Consider DCFS methamphetamine protocol
- Poison Center phone#1-800-222-1222

#### \*REFER TO NEXT PAGE FOR LIST OF POTENTIAL ANTIDOTES, INGESTIONS AND EXPOSURES

\*\*Anticipate vomiting, respiratory arrest, seizure, dysrhythmias and refer to indicated protocols

#### **QUINCY AREA EMS SYSTEM** PEDIATRIC TOXIC EXPOSURES/INGESTIONS **ALS CARE GUIDELINE**



- exposure\*
- For altered mental status or seizures, refer to appropriate protocol\*\*
- Support ABC's
- Keep warm
- Observe
- Bring container(s) of drug or substance to the emergency department
- Transport

#### **Special Considerations:**

- Secure airway per protocol for GCS <8</li>
- Do not induce vomiting, especially in cases where caustic substance ingestion is suspected.
- Consider DCFS methamphetamine protocol
- Poison Center phone#1-800-222-1222

#### \*REFER TO NEXT PAGE FOR LIST OF POTENTIAL ANTIDOTES, INGESTIONS AND EXPOSURES

\*\*Anticipate vomiting, respiratory arrest, seizure, dysrhythmias and refer to indicated protocols

## QUINCY AREA EMS SYSTEM EXPOSURE TO OR INGESTION OF NARCOTICS OR UNKNOWN SUBSTANCES FOR <u>ALS</u>

#### **POTENTIAL TREATMENT**

- Contact direct medical oversight for specific information about individual toxic exposures and treatments.
- DO NOT INDUCE VOMITING, ESPECIALLY IN CASES WHERE CAUSTIC SUBSTANCE INGESTION IS SUSPECTED.
- Use of an opioid antagonist in the treatment of a suspected or known opioid overdose (with altered mental status and/or respiratory depression) as directed per EMS Medical Control:
  - Weight <20 kg, administer Naloxone 0.1 mg/kg, IV/IO/SQ/IM, or 0.2 mg/kg ET
  - Weight > 20kg, administer Naloxone 2.0 mg/dose
- Treatment for toxic exposures may be instituted as permitted by medical direction, including the following:
  - High-dose atropine for organophosphates
  - Sodium bicarbonate for tricyclic antidepressants
  - Glucagon for calcium channel blockers or beta-blockers
  - Diphenhydramine for dystonic reactions
  - Dextrose for insulin overdose

#### **POTENTIAL EXPOSURES**

Burning overstuffed furniture = Cyanide

Old burning buildings
 = Lead fumes and Carbon Monoxide

Bismuth subsalicylate (e.g. Pepto-Bismo<sup>™)</sup> \* =Aspirin

Pesticides = Organophosphates & Carbamates

Topical benzocaine for dental/gum pain (e.g. = Methemoglobinemia Orajel $^{\text{TM}}$ ) \*

Common Plants
 = Treat symptoms and bring plant/flowers to ED

#### **SMELLS**

Almond = CyanideFruit = Alcohol

Garlic =Arsenic, parathion, DMSO

Mothballs =Camphor

Natural gas = Carbon monoxideRotten eggs = Hydrogen sulfide

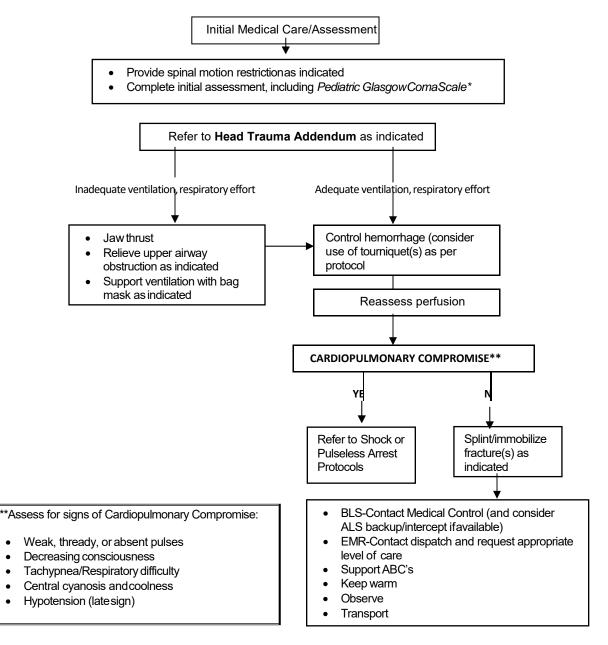
Silver polish =Cyanide

Stove gas =Think CO (CO and methane are odorless)

Wintergreen = Methyl salicylate

<sup>\*</sup>Pepto -Bismo™ children's formulation is aspirin-free

### QUINCY AREA EMS SYSTEM PEDIATRIC TRAUMA BLS/EMR CARE GUIDELINE



<sup>\*</sup>Refer to next page for Pediatric head Trauma Addendum and for Pediatric Glasgow coma scale

## QUINCY AREA EMS SYSTEM PEDIATRIC HEAD TRAUMA ADDENDUM BLS/EMR CARE GUIDELINE

Initial Medical Care/Assessment

- Maintain supine position
- Provide spinal motion restriction as indicated
- Assess Pediatric Glasgow ComaScale (PGCS)

PGCS < 8 (Severe)

- Contact Medical control (and consider ALS backup/interceptif available)
- Support ventilation with bag mask
- Control hemorrhage
- Reassess PGCS
- Observe
- Refer to Seizure Protocol as indicated
- Transport

 Contact Medical Control (and consider ALS backup/interceptif available)

PGCS 9-12 (Moderate)

- Administer 100%O<sub>2</sub>
- Support ventilation with bag mask as indicated
- Control hemorrhage
- Reassess PGCS
- Observe

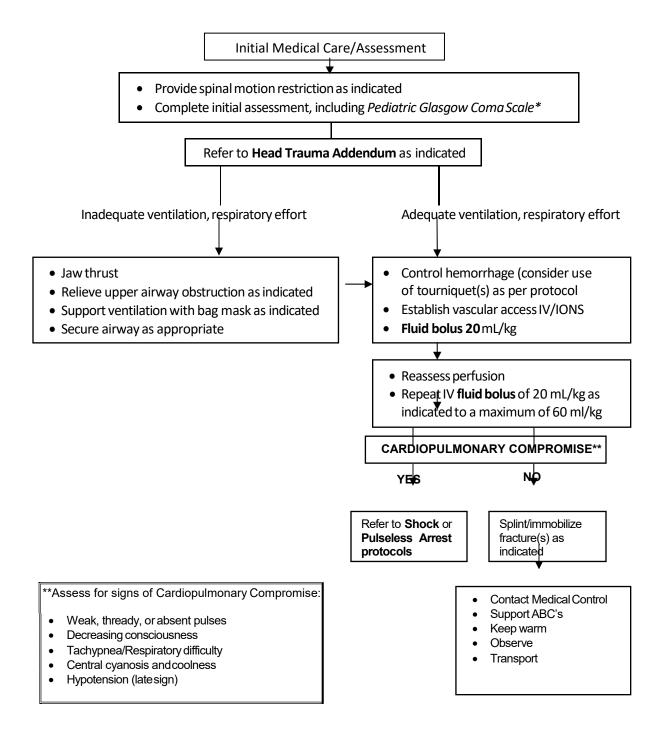
 Control Medical control (and consider ALS backup/intercept if available)

PGCS 13-15 (Mild)

- Administer 100%O<sub>2</sub>
- Control hemorrhage
- Reassess PGCS
- Observe
- Transport

	< 2 Years	> 2 Years	Score
EYE	Spontaneous	Spontaneous	4
OPENING	To speech	To speech	3
	To pain	To pain	2
	No response	No response	1
VERBAL	Coos, babbles, appropriate words	Oriented/appropriate words	5
RESPONSE	Irritable, cries but consolable	Confused	4
	Cries to pain, inconsolable	Inappropriate words/persistent cry	3
	Moans to pain	Incomprehensible sounds	2
	No response	No response	1
MOTOR	Normal spontaneous movements	Oriented/appropriate words	5
RESPONSE	Withdraws from touch	Localizes to pain	5
	Withdraws from pain	Withdraws from pain	4
	Abnormal flexion (decorticate)	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	Abnormal extension (decerebrate)	2
	No response	No response	1
ΤΟΤΔΙ ΡΕΝΙΔΤ	RIC GLASGOWCOMA SCORE:	•	(3-15)

## QUINCY AREA EMSSYSTEM PEDIATRIC TRAUMA ALS CARE GUIDELINE



<sup>\*</sup>Refer to next page for Pediatric head Trauma Addendum and for Pediatric Glasgow coma scale

## QUINCY AREA EMS SYSTEM PEDIATRIC HEAD TRAUMAADDENDUM <u>ALS</u> CARE GUIDELINE

Initial Medical Care/Assessment

- Maintain supine position
- Provide spinal motion restriction as indicated
- Assess Pediatric Glasgow ComaScale (PGCS)
- Contact Medical Control

### PGCS < 8 (Severe) PGCS 9-12 (Moderate)

- Administer 100%O<sub>2</sub>
- Support ventilation with bagmask
- Provide hyperventilation only for impending herniation (nonreactive/unequal pupils or posturing) \*
- Intubate orally as indicated
- Control hemorrhage
- Reassess PGCS
- Observe
- Refer to **Seizure Protocol**as indicated
- Transport

- Administer 100O<sub>2</sub>
- Support ventilation with bag mask as indicated\*
- Control hemorrhage
- Reassess PGCS
- Observe
- Transport

Administer 100%O<sub>2</sub>

PGCS 13-15 (Mild)

- Control hemorrhage
- Reassess PGCS
- Observe
- Transport

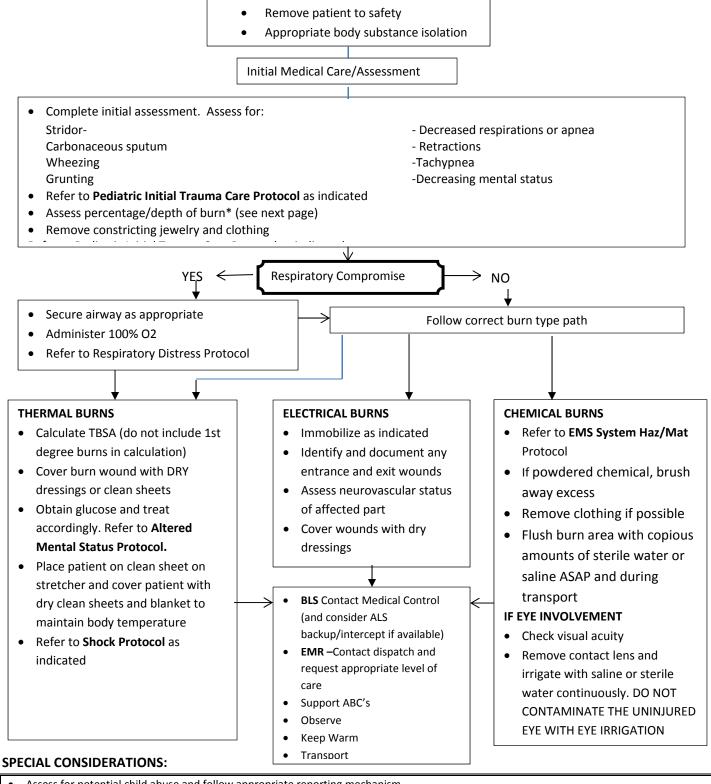
#### **Special Consideration:**

• Consider performing hyperventilation ONLY IF suspected impending herniation (non-reactive/unequal pupils or posturing), and must be guided by capnography (aim for PaCO<sub>2</sub> of 35 when there is a perfusing rhythm).

	< 2 Years	>2 Years	Score
EYE	Spontaneous	Spontaneous	4
OPENING	To speech	To speech	3
	To pain	To pain	2
	No response	No response	1
VERBAL	Coos, babbles, appropriate words	Oriented/appropriate words	5
RESPONSE	Irritable, cries but consolable	Confused	4
	Cries to pain, inconsolable	Inappropriate words/persistent cry	3
	Moans to pain	Incomprehensible sounds	2
	No response	No response	1
MOTOR	Normal spontaneous movements	Oriented/appropriate words	5
RESPONSE	Withdraws from touch	Localizes to pain	5
	Withdraws from pain	Withdraws from pain	4
	Abnormal flexion (decorticate)	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	Abnormal extension (decerebrate)	2
	No response	No response	1
TOTAL PEDIAT	RIC GLASGOWCOMA SCORE:	•	(3-15)

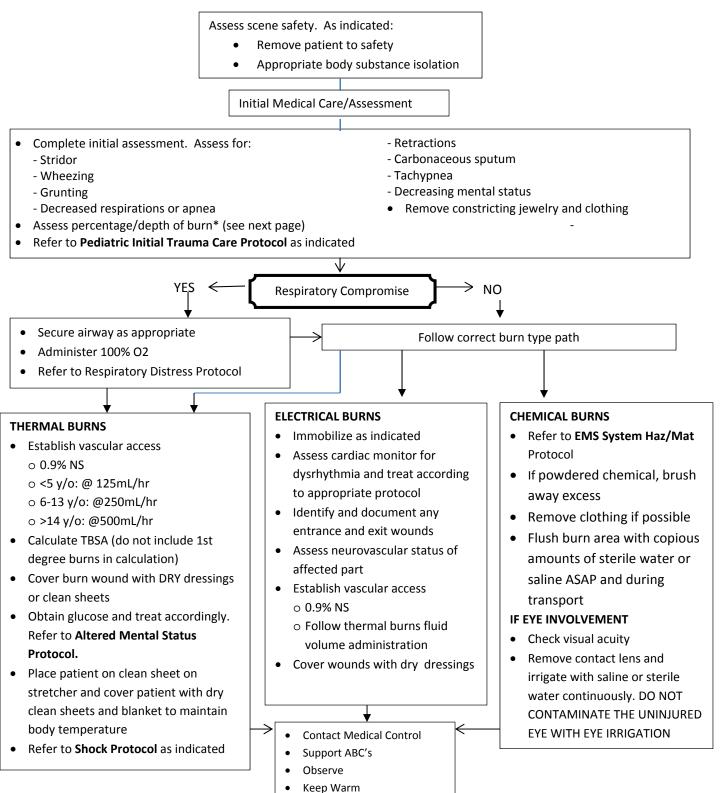
#### **QUINCY AREA EMS SYSTEM** PEDIATRIC BURNS (THERMAL, ELECTRICAL, CHEMICAL) **BLS/EMR CARE GUIDELINE**

Assess scene safety. As indicated:



- Assess for potential child abuse and follow appropriate reporting mechanism
- Keep the child warm and protect from hypothermia. Be cautious with cool dressings.
- Consider transport to a Burn Center\*(see next page)

### QUINCY AREA EMS SYSTEM PEDIATRIC BURNS (THERMAL, ELECTRICAL, CHEMICAL) <u>ALS</u> CARE GUIDELINE



Transport

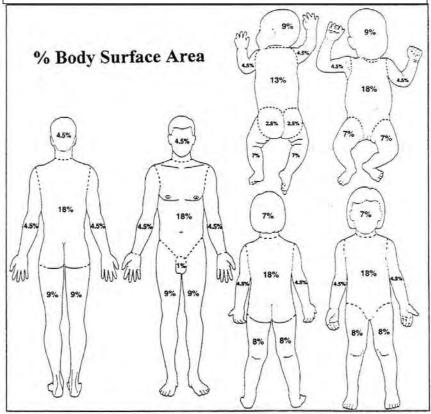
#### **SPECIAL CONSIDERATIONS:**

- · Assess for potential child abuse and follow appropriate reporting mechanism
- Keep the child warm and protect from hypothermia. Be cautious with cool dressings.
- Consider pain management
- Consider transport to a Burn Center\* (see next page)

### QUINCY AREA EMS SYSTEM PEDIATRIC BURNS (THERMAL, ELECTRICAL, CHEMICAL) ALS/BLS/EMR CARE GUIDELINE

#### % BSA by anatomical area

## RULE OF NINES % Partial thickness + % Full thickness = % Total burn Surface Area (TBSA)





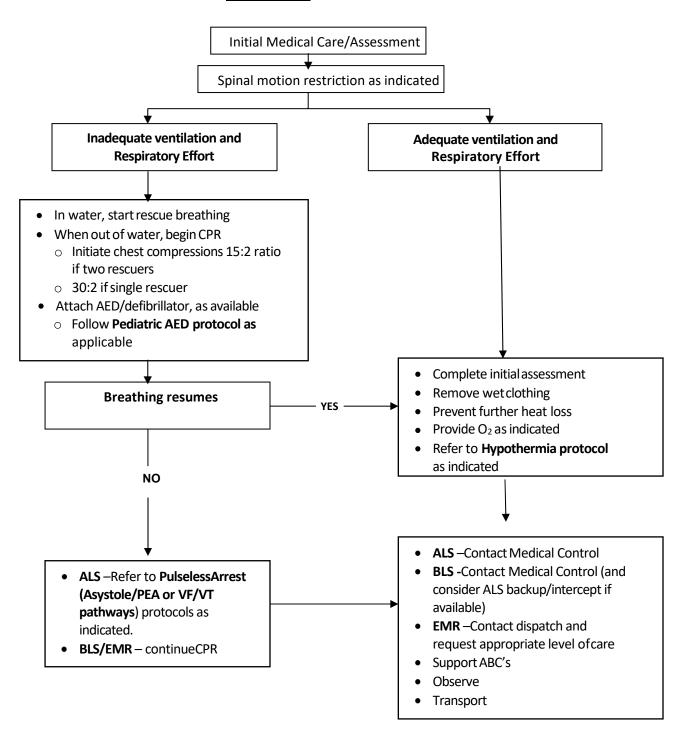
Palm of hand (including fingers) of infant or child = 1% of the total body surface

#### **Burn Center Referral Criteria**

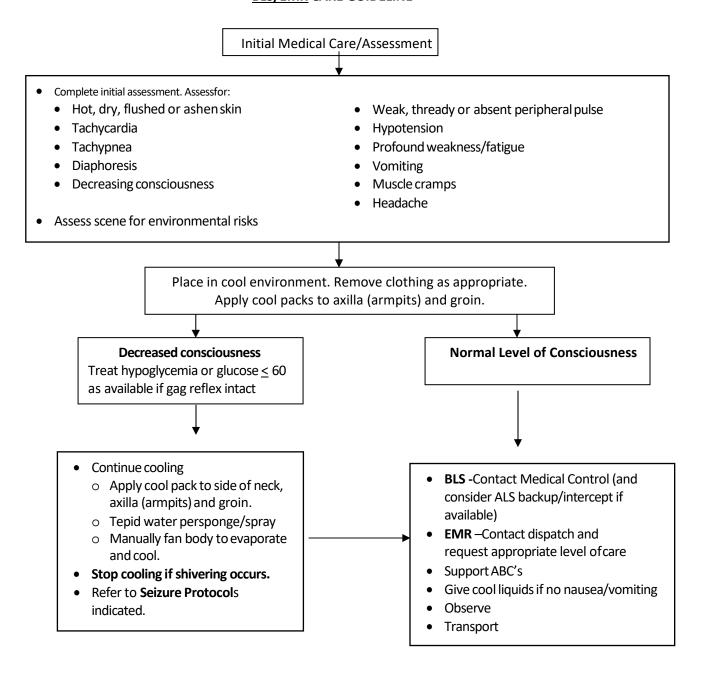
Any patient with a life-threatening condition should be treated until stable at the nearest appropriate facility before being transferred to a burn center. According to the American Burn Association, burn injuries that should be referred to a burn center include:

- 1. Partial thickness burns greater than 10% total body surface area (TBSA)
- 2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints
- 3. Third-degree burns in any age group
- 4. Electrical burns, including lightning injury
- 5. Chemical burns
- 6. Inhalation injury
- 7. Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
- 8. Any patients with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be initially stabilized in a trauma center before being transferred to a burn unit. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols.
- 9. Burned children in hospitals without qualified personnel or equipment for the care of children
- 10. Burn injury in patients who will require special social, emotional, or rehabilitative intervention.

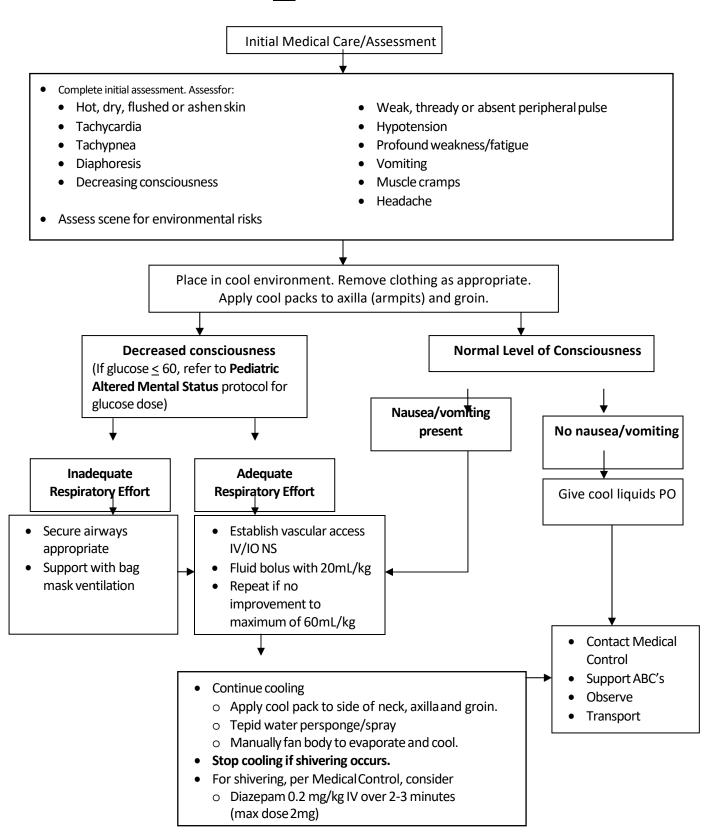
### QUINCY AREA EMS SYSTEM PEDIATRIC DROWNING ALS/BLS/EMR CARE GUIDELINE



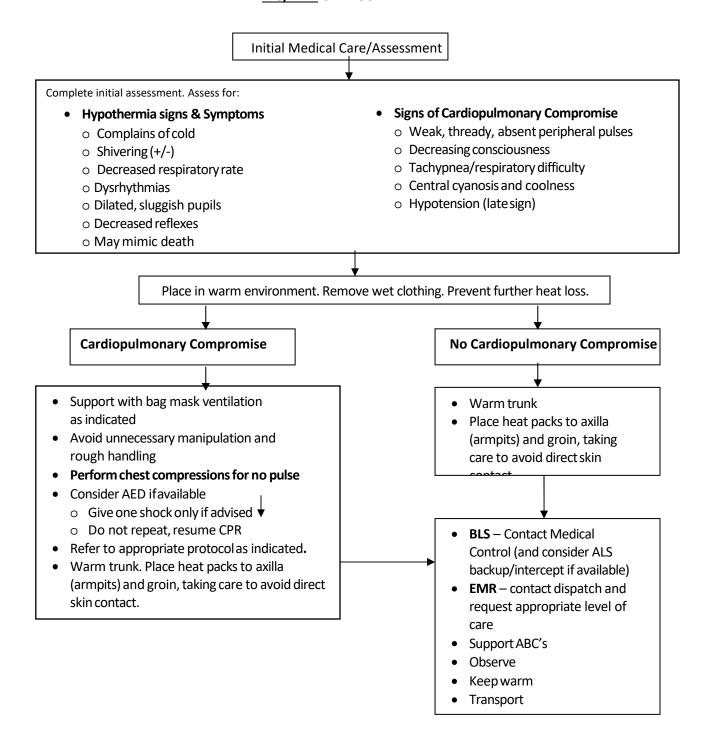
### QUINCY AREA EMS SYSTEM PEDIATRIC ENVIRONMENTAL HYPERTHERMIA BLS/EMR CARE GUIDELINE



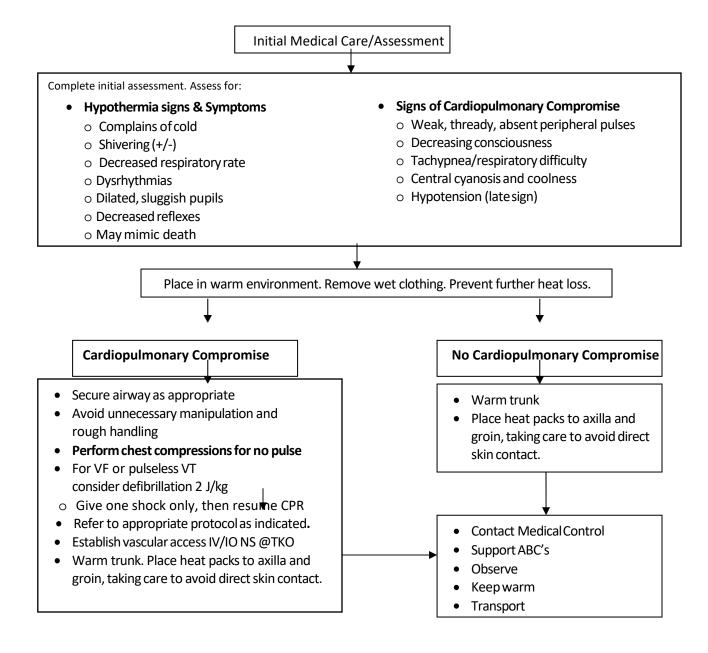
### QUINCY AREA EMS SYSTEM PEDIATRIC ENVIRONMENTAL HYPERTHERMIA ALS CARE GUIDELINE



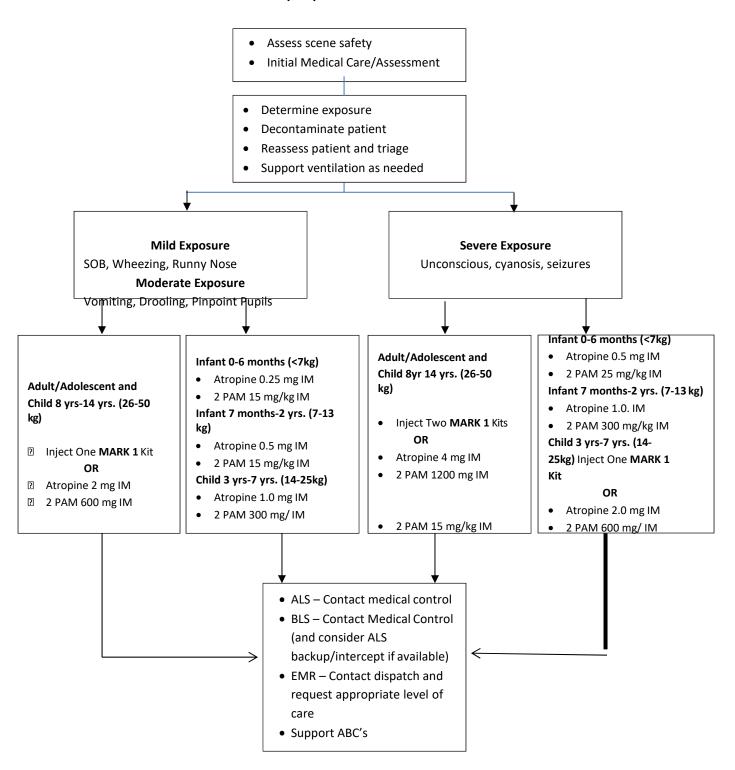
### QUINCY AREA EMS SYSTEM PEDIATRIC HYPOTHERMIA BLS/EMR CARE GUIDELINE



### QUINCY AREA EMS SYSTEM PEDIATRIC HYPOTHERMIA ALS CARE GUIDELINE



### QUINCY AREA EMS SYSTEM PEDIATRIC NERVE AGENT/ORGANOPHOSPHATE ANTIDOTE GUIDELINES ALS/BLS/EMR CARE GUIDELINE



#### SPECIAL CONSIDERATIONS:

- Repeat Atropine at 5-10-minute intervals to control excess secretions
- MARK 1 Kits, 2 PAM, may be available if Mass Casualty due to nerve agents through local fire department

## QUINCY AREA EMS SYSTEM PEDIATRIC NERVE AGENT/ORGANOPHOSPHATE ANTIDOTE GUIDELINE <u>ALS/BLS/EMR</u> CARE GUIDELINE

Mild Exposure	Moderate Exposure	Severe Exposure
SOB, Wheezing, Runny Nose	Vomiting, Drooling, Pinpoint Pupils	Unconscious, cyanosis, seizures

		ANTIDOTES (IM)	
	PATIENT AGE	MILD/MODERATE	SEVERE
INFANT	0-6 months	Atropine 0.25mg	Atropine* 0.5mg
	(<7 kg)	2 PAM <sup>+</sup> 15 mg/kg	2 PAM <sup>+</sup> 25 mg/kg
INFANT	7 months-2 years	Atropine* 0.5mg	Atropine* 1mg
	(7-13 kg)	2 PAM <sup>+</sup> 15 mg/kg	2 PAM <sup>+</sup> 300 mg
CHILD	3-7 years	Atropine* 1mg	Atropine 2mg
	(14-25 kg)	2 PAM <sup>+</sup> 300 mg	2 PAM <sup>+</sup> 600 mg
CHILD	8-14 years	Atropine 2mg	- Atropine 4mg
	(26-50 kg)	2 PAM <sup>+</sup> 600 mg	2 PAM <sup>+</sup> 1200 mg
ADOLESCENT	>14 years	Atropine 2mg	Atropine 4mg
	(> 51 kg)	2 PAM <sup>+</sup> 600 mg	2 PAM <sup>+</sup> 1200 mg

<sup>\*</sup>Appropriate dose atropine auto injector can be used if available

#### DENOTES ONE MARK 1 KIT DENOTES TWO MARK 1 KITS

Atropine 2mg		
2 PAM <sup>+</sup> 600mg		

Atropine 4mg 2 PAM<sup>+</sup> 1200 mg

#### **NOTES:**

For nerve agents the doses are:

Atropine dose 0.05 mg/kg 2 PAM+ dose 25 mg/kg

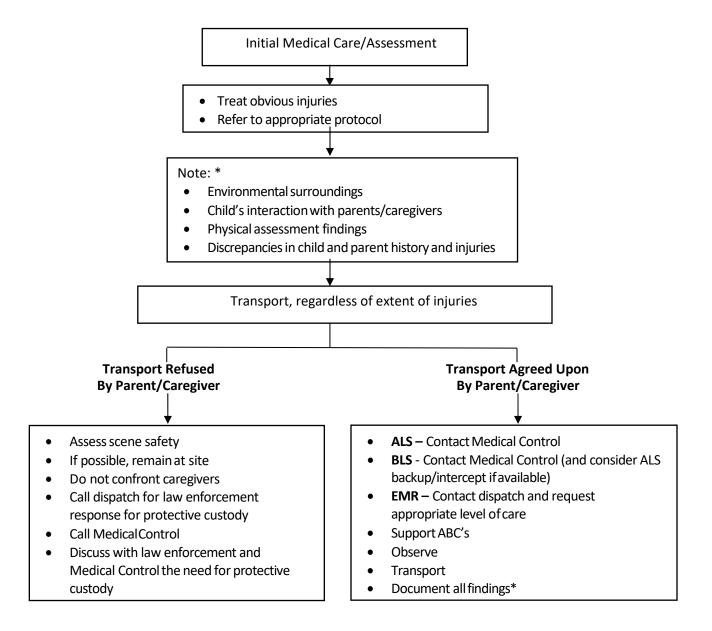
For children > 3 years with severe symptoms:

- 1 MARK 1 Kit will give Atropine 0.08 0.13 mg/kg
- 2 PAM+ 24-46 mg/kg

2 PAM<sup>+</sup> solution can be prepared from the vial containing 1 gram of desiccated 2 PAM<sup>+</sup>. Inject 3 mL<sup>-</sup> of NS or sterile water into the vial and shake well. This results in 3.3mL (1mL = 300mg 2 PAM)

<sup>&</sup>lt;sup>+</sup> 2PAM=Pralidoxime

## QUINCY AREA EMS SYSTEM PEDIATRIC SUSPECTED CHILD ABUSE ANDNEGLECT ALS/BLS/EMR CARE GUIDELINE



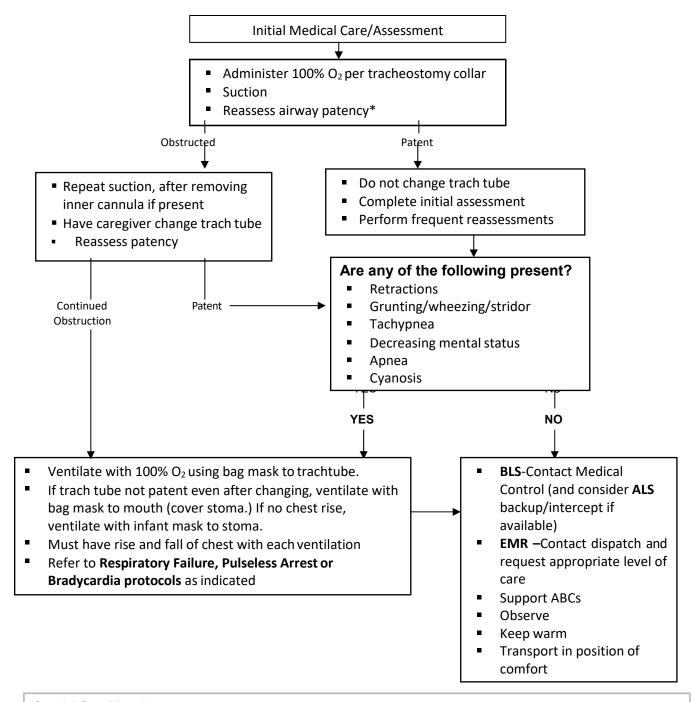
REPORT TO ED PHYSICIAN, ED CHARGE NURSE AND DCFS (1-800-25-ABUSE). WHEN CONTACTING DCFS, IDENTIFY SELF AS A STATE MANDATED REPORTED TO EXPEDITE PROCESS

<sup>\*</sup>Refer to next page for special considerations.

#### **SPECIAL CONSIDERATIONS:**

- 1. You are required by law to report your suspicions.
- 2. Document findings objectively:
  - Body location of the injury
  - Severity of the injury
  - Patterns of similar injury over time
  - Include verbatim statements offered by the child
  - Note verbatim statements from the parent/caregiver.
- 3. Suspect battered or abused child if any of the following is found:
  - A discrepancy exists between history of injury and physical exam.
  - Caregiver provides a changing or inconsistent history.
  - There is a prolonged interval between injury and the seeking of medical help.
  - Child has a history of repeated trauma
  - Caregiver responds inappropriately or does not comply with medical advice.
  - Suspicious injuries are present, such as:
    - Injuries of soft tissue areas, including the face, neck, and abdomen
    - Injuries of body areas that are normally shielded, including the back and chest
    - Fractures of long bones in children under 3 years of age
    - Old scars, or injuries in different stages of healing
    - Bizarre injuries, such as bites, cigarette burns, rope marks, imprint of belt or other object
    - Trauma of genital or perianal areas
    - Sharply demarcated burns in unusual areas
    - Scalds that suggest child was dipped into hot water
- 4. The following are some common forms of neglect:
  - Environment is dangerous to the child (e.g., weapons within reach, playing near open windows without screen/guards, perilously unsanitary conditions.).
  - Caretaker has not provided, or refuses to permit medical treatment of child's acute or chronic lifethreatening illness, or of chronic illness, or fails to seek necessary and timely medical care for child.
  - Child under the age of 10 has been left unattended or unsupervised. (Although in some situations children
    under 10 years of age may be left alone without endangerment, EMS personnel cannot make such
    determinations.) All instances should be reported for DCFS investigation.
  - Abandonment
  - Caretaker appears to be incapacitated (e.g., extreme drug/alcohol intoxication, disabling psychiatric symptoms, severe illness) and cannot meet child's care requirements.
  - Child appears inadequately fed (e.g., seriously underweight, emaciated, or dehydrated) inadequately clothed, or inadequately sheltered.
  - Child is found to be intoxicated or under the influence of an illicit substance(s).

### ILLINOIS EMSC PEDIATRIC RESPIRATORY DISTRESS WITH A TRACHEOSTOMY TUBE BLS/EMR CARE GUIDELINE



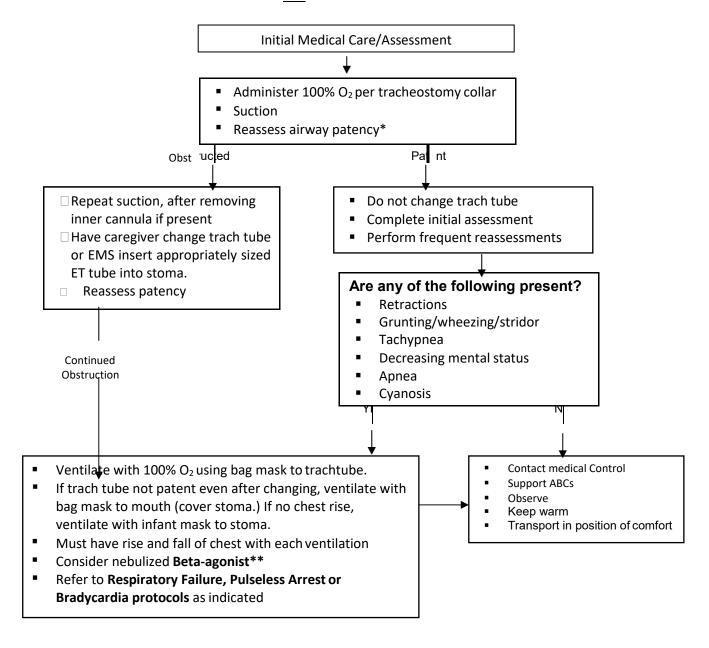
#### **Special Considerations:**

\*If chest rise is inadequate:

- Reposition the airway.
- If using mask to stoma, consider inadequate volume delivered. Compress bag further and/or depress pop-off valve.

Consider allowing caregiver to remain with child regardless of child's level of responsiveness

### ILLINOIS EMSC PEDIATRIC RESPIRATORY DISTRESS WITH A TRACHEOSTOMY TUBE ALS CARE GUIDELINE



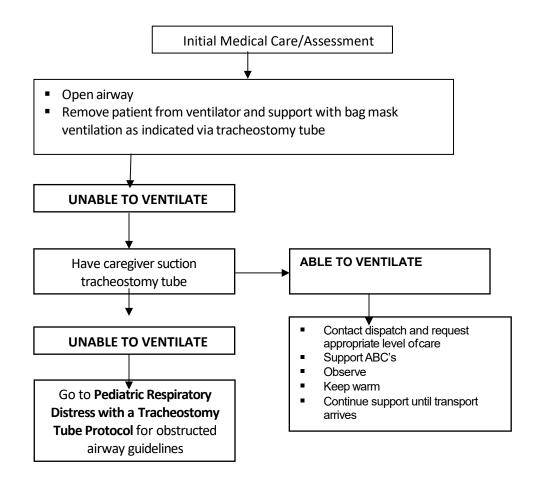
#### **Special Considerations:**

\*If chest rise is inadequate:

- Reposition the airway.
- If using mask to stoma, consider inadequate volume delivered. Compress bag further and/or depress pop-off valve.
- \*\*Only nebulized bronchodilator (Beta-agonist) should be administered. **Beta-agonists** include, among others: **Albuterol (Proventil, Ventolin)** and **Levalbuterol (Xopenex)**.

Consider allowing caregiver to remain with child regardless of child's level of responsiveness

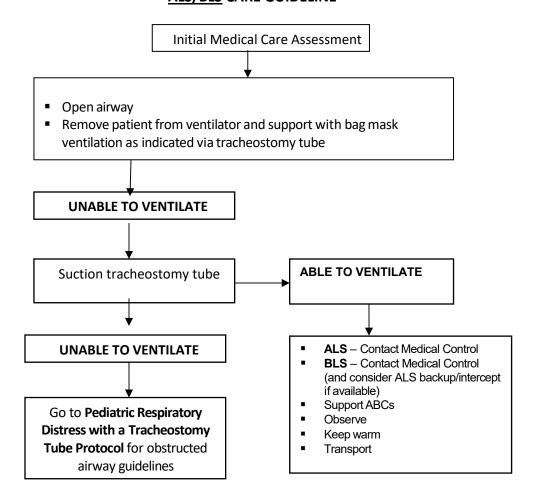
## QUINCY AREA EMS SYSTEM PEDIATRIC RESPIRATORY DISTRESS WITH A VENTILATOR EMR CARE GUIDELINE



#### **Special Considerations:**

- Consider using parents/caregivers/home health nurses as medical resources at home and enroute.
- Consider alerting Medical control of parent/caregiver participation in care.
- Consider allowing caregiver to remain with child regardless of child's level of responsiveness
- Bring ventilator to the hospital or have parents/caregivers bring the ventilator to the hospital.

## QUINCY AREA EMS SYSTEM PEDIATRIC RESPIRATORY DISTRESS WITH A VENTILATOR ALS/BLS CARE GUIDELINE



#### **Special Considerations:**

- Consider using parents/caregivers/home health nurses as medical resources at home and enroute.
- Consider alerting Medical control of parent/caregiver participation in care.
- Consider allowing caregiver to remain with child regardless of child's level of responsiveness
- Bring ventilator to the hospital or have parents/caregivers bring the ventilator to the hospital.

#### **Vital Sign/Age Parameters**

7. tau. 0.8.17.180 . a. a			
AGE	PULSE	SYSTOLIC BLOOD PRESSURE	RESPIRATORY RATE
Newborn	100-180	>60	30-60
3 months	100-160	>70	30-60
6 months	110-160	>70	30-60
9 months	110-160	>70	30-60
12 months	110-160	>70	30-60
2 years	90-150	>70	24-40
4 years	90-150	>75	22-34
6 years	70-120	>80	18-30
8 years	70-120	>80	18-30
10 years	PED7AT <del>R1</del> 0 RESPIRAT	ORY DISTRESS OITH A VENTILA	ATOR 18-30
12 years	ALS <b>/60_3 100</b> ARE GUIDE		12-16

#### **Indicators of Cardiopulmonary Compromise in Children**

- Weak, thready, or absent peripheral pulses
- Decreasing consciousness
- Tachypnea/Respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)

# QUINCY AREA EMS SYSTEM PERSONNEL PROTOCOLS

### Revised 11/2023

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

Scott Hough, MD EMS Medical Director

Christopher R Solaro, MD, PHD Associate Medical Director

## QUINCY AREA EMS SYSTEM PERSONNEL

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#### **QUINCY AREA EMS SYSTEM**

#### POLICY AND PROCEDURE

#### **LICENSURE**

#### I. <u>INITIAL EMS LICENSURE</u>

Initial EMS licensure must be obtained through the EMS System in which the educational program was completed. QAEMS Instructors must provide program graduates with the following information; if unable to obtain this information from your EMS Instructor, graduates may contact the EMS System coordinator of the System in which their program took place for this information. Illinois requires EMS license candidates to meet the following requirements:

- A. Possess a current AHA or equivalent healthcare provider CPR certification.
- B. Have graduated from an IDPH approved EMS educational course.
- C. Have no felony criminal convictions (certain felony charges may be eligible for a waiver per IDPH JCAR 515.190 contact the QAEMS EMS System Coordinator for additional information).
- D. Be current on all child support payments (if applicable).
- E. Pay an initial license fee to IDPH.

#### II. LICENSE RENEWAL

#### A. General information

- 1. IDPH and QAEMS allow EMS licenses to be renewed up to 90 days prior to the date of license expiration
- 2. IDPH requires EMS license holders to submit for license renewal no later than 30 days prior to license expiration to allow time for processing.
- 3. QAEMS requires an additional 15 days for license processing. This means that QAEMS EMS license holders that wish to renew their EMS license(s) through QAEMS must submit no later than 45 days prior to the license expiration date.
- 4. Failure to do so may result in license expiration, inability to function with no active EMS license, and additional fees as a result of having allowed the license to expire.

#### B. Two step renewal process

- 1. Pay Illinois licensing fee
  - a. IDPH will mail a renewal reminder to your address on file with them. If you did not receive a PIN number, contact Blessing EMS Department.
  - b. Go to the IDPH EMS Licensing website located at https://emslic.dph.illinois.gov/GLSuiteWeb/clients/ildohems/private/Sha red/OnlineServices.aspx, pay the license renewal fee using the PIN number you received in the mail and answer the questions regarding child support and felonies.
- 2. Verify continuing education requirements (see requirements in II. C)
  - a. Contact QAEMS to request a QAEMS license renewal form or locate the form on line on the QAEMS webpage of the Blessing Health System website where the system protocols are maintained.

b. You must submit the completed QAEMS license renewal form to QAEMS at least 45 days prior to license expiration.

#### C. Continuing education requirements

- 1. All EMS licenses require a valid AHA or equivalent healthcare provider CPR card.
- **2.** Applicants for license renewal should review CET-1 or CET-2 policies to ensure compliance with specific continuing education requirements.
- **3.** If an EMS provider holds multiple licenses, such as an Emergency Medical Dispatcher who is also an Emergency Medical Technician, the same CE may be counted towards the renewal of both licenses in most cases.

### a. EMERGENCY MEDICAL DISPATCHER (EMD) (IDPH JCAR 515.710)

- i. Must have a valid AHA or equivalent healthcare provider CPR certification.
- ii. Must show proof of completion of <u>48 hours</u> of medical dispatch continuing education.

### b. EMERGENCY MEDICAL RESPONDER (EMR) (IDPH JCAR 515.725)

- i. Must have a valid AHA or equivalent healthcare provider CPR certification.
- ii. Must show proof of completion of <u>24 hours</u> of medical continuing education.

### c. EMERGENCY MEDICAL TECHNICIAN (EMT) (IDPH JCAR 515.590)

- i. Must have a valid AHA or equivalent healthcare provider CPR certification.
- ii. Must have a valid PHTLS or ITLS certificate.
- iii. Must have a valid PEPP or PALS certificate.
- iv. Must show proof of completion of <u>60 hours</u> of medical continuing education.

### d. ADVANCED EMT / EMT-INTERMEDIATE (AEMT / EMT-I) (IDPH JCAR 515.590)

- i. Must have a valid AHA or equivalent healthcare provider CPR certification.
- ii. Must have a valid PHTLS or ITLS certificate.
- iii. Must have a valid PEPP or PALS certificate.
- iv. Must show proof of completion of <u>80 hours</u> of medical continuing education.

#### e. PARAMEDIC (IDPH JCAR 515.590)

- i. Must have a valid AHA or equivalent healthcare provider CPR certification.
- ii. Must have a valid PHTLS or ITLS certificate.
- iii. Must have a valid PEPP or PALS certificate.

- iv. Must have a valid ACLS certificate.
- v. Show proof of completion of <u>100 hours</u> of medical continuing education.

### f. PRE-HOSPITAL REGISTERED NURSE (PHRN) (IDPH JCAR 515.590)

- i. Must have a valid AHA or equivalent healthcare provider CPR certification.
- ii. Must have a valid PHTLS or ITLS certificate.
- iii. Must have a valid PEPP or PALS certificate.
- iv. Must have a valid ACLS certificate.
- v. Must show proof of completion of <u>100 hours</u> of medical continuing education.

#### g. EMERGENCY COMMUNICATIONS RADIO NURSE (ECRN)

- i. Must have a valid AHA or equivalent healthcare provider CPR certification.
- ii. Must have a valid PALS certificate.
- iii. Must have a valid ACLS certificate.
- iv. Must show proof of completion of <u>48 hours</u> of medical continuing education.

#### h.TRAUMA NURSE SPECIALIST (TNS) (IDPH JCAR 515.750)

- i. A TNS may be relicensed by either submitting approved traumaspecific CE or taking the current TNS final written examination as provided in this Section.
- ii. Documentation of <u>64 hours</u> of approved trauma-specific CE/activities for nursing or CME acquired over four years, using the TNS CE Summary Submission form. CE approval will be granted, provided that the application is complete and the content of the program educational activity is based on topics listed in the TNS program in place at the time the CE is acquired;
- iii. TNS relicensure candidates must contact the QAEMS Trauma Coordinator no later than 45 days prior to license expiration to ensure all requirements are met.

#### i. EMS LEAD INSTRUCTOR (LI) (IDPH JCAR 515.700)

- i. Must have a valid AHA or equivalent healthcare provider CPR certification.
- ii. Must have the express support of the EMS System Medical Director.
- iii. Must show proof of completion of <u>40 hours of medical continuing</u> education of which 20 hours shall be related to the development, <u>delivery</u>, and evaluation of education programs.
- iv. Must show documentation of attendance at an IDPH approved national EMS education standards update course, if applicable.

#### III. REINSTATEMENT OF EXPIRED EMS LICENSE (IDPH JCAR 515.590)

- A. EMS Personnel whose licenses have expired may, within 60 days after license expiration, submit all relicensure requirements and submit the required relicensure fees (see Section 515.460), including a late fee, online or by certified check or money order. Cash or personal check will not be accepted. If all relicensure requirements have been met, and no disciplinary actions are pending against the EMS Personnel, the Department will relicense the EMS Personnel.
- B. EMS Personnel whose licenses have expired for a period of more than 60 days shall be required to reapply for licensure, complete the education program, pass a Department-approved licensure examination, and pay the fees as required for initial licensure (see Section 515.460). Within 36 months after expiration of a license, an individual may qualify for reinstatement under Section 515.640.

#### IV. LICENSE EXTENSIONS (IDPH JCAR 515.150)

- A. EMS license extensions are rare and not to be requested lightly.
- B. The following conditions must be met for an individual to be granted a license extension (this is done in the form of a waiver from the IDPH EMS Division granted to a requesting EMS MD)
  - 1. The waiver will not reduce the quality of medical care established by the Act and this Part;
  - 2. An explanation of how the waiver will not reduce the quality of medical care established by the Act and this Part; and
  - 3. Full compliance with the statutory or regulatory requirement at issue is or would be a unique hardship on the applicant;
  - 4. The EMS Personnel has previously received no more than one extension since his or her last relicensure; and
  - 5. The EMS Personnel has not established a pattern of seeking extensions (e.g., waivers sought based on the same type of hardship in two or more previous license periods);
  - 6. The period of time for which the waiver is being sought;
  - 7. If the applicant is a System Participant, the applicant's EMS MD shall state in writing whether he or she recommends or opposes the application for waiver, the reason for the recommendation or opposition, and how the waiver will or will not reduce the quality of medical care established by the Act and this Part. The applicant shall submit the EMS MD's statements along with the application for waiver. If the EMS MD does not provide written statements within 30 days after the applicant's request, the EMS MD will be determined to be in support of the application, and the application may be submitted to the Department.
  - 8. An EMS MD may apply to the Department for a waiver on behalf of a System Participant by submitting an application that contains all of the information required by subsection (b), along with a statement signed by the System Participant requesting or authorizing the EMS MD to make the application.

#### V. PLACING A LICENSE ON INACTIVE STATUS (IDPH JCAR 515.600)

- A. Request license inactive status on a form prescribed by IDPH available on the IDPH EMS website: http://dph.illinois.gov/sites/default/files/forms/ems-inactive-request-062116.pdf. The application shall contain the following information:
  - 1. Name of individual and contact information

- 2. Applicant's current original license
- 3. Level of licensure
- 4. License number
- 5. Circumstances requiring inactive status
- 6. Confirmation from the EMS MD of the System of primary affiliation or the Department for independent licensees that relicensure requirements have been met by the date of the application for inactive status. (This means that continuing education requirements must be up to date at the time of the request)
- B. During inactive status, the individual shall not perform at the level of any EMS provider.

### VI. <u>REACTIVATION OF INACTIVE LICENSE</u> (IDPH JCAR 515.600)

- A. For EMS Personnel to return to active status, the EMS MD shall make application to IDPH on a form prescribed by IDPH EMS Division available on the IDPH EMS website: http://dph.illinois.gov/sites/ default/files/forms/ems-reactivation-request-061416.pdf.
  - 1. The EMS MD shall confirm that the applicant has been examined (physically and mentally) and found capable of functioning within the EMS System; that the applicant's knowledge and psychomotor skills are at the active EMT level for that individual's license; and that the applicant has completed any education and evaluation deemed necessary by the EMS MD and approved by the Department.
  - 2. If the inactive status was based on a disability, the EMS MD shall also verify that the applicant can perform all critical functions of the requested license level.
- B. EMS Personnel whose inactive status period exceeds 48 months shall pass a Department-approved licensure examination for the requested level of license upon recommendation of an EMS MD.

### VII. VOLUNTARY REDUCTION OF LICENSURE (IDPH JCAR 515.590)

- A. At any time prior to the expiration of the current license, an EMT, A-EMT, EMT-I or Paramedic may downgrade to EMT or EMR status for the remainder of the license period.
- B. The EMT, A-EMT, EMT-I or Paramedic shall make this request in writing to the EMS MD of his or her System of primary affiliation along with his or her original EMS license and duplicate license fee.
- C. The EMS MD or designee shall verify that the license is current with CE hours and forward the approved applications to the IDPH.
- D. To relicense at the EMT or EMR level, the individual must meet the relicensure requirements for that downgraded level.
- E. EMS Personnel who have downgraded to EMT, A-EMT or EMT-I status may subsequently upgrade to his or her original level of licensure held at the time of the downgrade upon the recommendation of an EMS MD who has verified that the individual's knowledge and psychomotor skills are at the level of the licensure being requested. The individual shall complete any education or testing deemed necessary by the EMS MD for resuming A-EMT, EMT-I or Paramedic activities and submit a duplicate license fee.
- F. EMS Personnel cannot upgrade from the EMR level.
- VIII. Provisional EMS-System membership for NREMT Certification holders.

A. QAEMS will allow those applicants, already hired or recruited by a QAEMS member agency, who hold an active NREMT certification, to function at the level of their NREMT certification within QAEMS if that applicant has satisfied all other credentialing and system-membership requirements.

9/2020; 12/20, 8/23

# QAEMS SYSTEM SYSTEM ENTRY & SYSTEM TERMINATION

I. Purpose: System entry is a privilege granted by the EMS Medical Director in accordance with rules and regulations of the Illinois Department of Public Health. It is the responsibility of the Resource Hospital to confirm credentials of System EMS Providers.

### II. System Entry Process

A. System applicants must be employed by or in the process of being employed by a Quincy Area EMS System provider agency or hospital. The provider agency must inform the EMS System Coordinator of the applicant's potential hire into their agency.

### B. Application:

- 1. The following are required for all system applicants:
  - a) Quincy Area EMS System application form.
  - b) Copy of valid driver's license or State ID card or other valid photo ID
  - c) Valid Illinois license at their provider level
  - d) Interview with the EMS System Coordinator or EMS Medical Director if requested.
  - e) A letter of good standing from the EMS Medical Director or EMS System Coordinator from the applicant's last EMS System of participation. If the applicant is a recent graduate and has not been a member of an EMS System, will require a letter of good standing from their training program. (Graduates from QAEMS System education programs are exempt)

### 2. Certifications

- a) AHA BLS for Healthcare Providers CPR or equivalent. (All levels)
- b) American Heart Association ACLS (Paramedic, PHRN, ECRN)
- c) PreHospital Trauma Life Support (PHTLS) or Tactical Emergency Casualty Care
   (TECC) or Tactical Combat Casualty Care Medical Personnel (TCCC-MP) or
   International Trauma Life Support (ITLS) (Paramedic, PHRN within 12
   months of system entry).
- d) Prehospital Trauma Life Support (PHTLS) or PHTLS for First Responders (EMT, EMR/FRD within 12 months of system entry).
- e) American Heart Association Pediatric Advanced Life Support (PALS) or Pediatric Education for Prehospital Providers (PEPP) (EMR/FRD, EMT, Paramedic, PHRN within 12 months of system entry)

### 3. Other

- a) START Triage educational PowerPoint and quiz with 80% or > score. (EMR/FRD, EMT, ECRN, Paramedic, PHRN)
- b) Transfer Medication / Equipment educational PowerPoint and quiz with 80% or > score (Paramedic, PHRN)
- c) Contract for Controlled Substances (Paramedic, PHRN)

- C. QAEMS System Exam required for all system applicants after they have submitted all other application materials and been approved by the EMS System Coordinator to sit for the exam.
  - A study guide and instructions for accessing the online QAEMS Policy Manual will be provided.
  - 2. The applicant will take the exam appropriate to their provider level.
  - 3. Score of 80% or > required. The applicant may retake the exam after remediation.
- D. Satisfactory completion of a ninety (90) day probationary period is required once System entry is granted.
  - 1. The applicant and hiring agency will be notified that the applicant has been granted probationary acceptance.
  - 2. The hiring agency will be requested to provide a progress report at the end of the ninety day probationary period.
  - 3. The provider and hiring agency will be provided notification of good standing once the probationary period has ended.
- E. The EMS Medical Director reserves the right to deny System provider status and to place additional field internship and skill evaluation requirements on any System applicant at any level.
- III. Maintaining active status in the System
  - A. Valid provider license must be maintained.
  - B. Failure to maintain current certifications as listed in this policy, section II)b)2) will result in System suspension if an extension has not been applied for and granted by the EMS System Coordinator.
  - C. Must continue to be employed by a System provider agency (see section IV)b of this policy)
  - D. Must complete any mandatory System education requirements.
  - E. Must adhere to QAEMS policies and procedures.
- IV. System Resignation / Termination
  - A. System participants may resign from the System by submitting a written resignation letter to the EMS System Coordinator. If the provider is in good standing in the System, a letter of good standing will be provided at that time as well as a copy of continuing education records on file and instructions regarding independent license renewal.
  - B. A System participant who resigns from or is terminated by a System provider agency has a sixty (60) day grace period to re-establish System membership/active status with another System provider agency. If the provider does not do so within the sixty days, their System membership will be terminated.

### V. System restrictions

- A. A provider who is no longer active in the System may not identify themselves as a Quincy Area EMS System provider and is prohibited from performing skills or providing care that he/she is not System-certified to perform.
- VI. EMS Personnel Designating QAEMS as their non-primary EMS System of Membership
  - A. System applicants who belong to another EMS System will be held to the same credentialing and licensure requirements as personnel identifying QAEMS as their primary EMS System.
    - These personnel must seek license renewal through their primary EMS System of membership.

### **QUINCY AREA EMS SYSTEM APPLICATION**

PERSONAL DATA						
Name (Last)		(First)	Mid	dle Initial	Date of Birth	
Address (Street)		(City)		State	(Zip Code)	
Telephone Number (Home)		Cell Phone		E-mail address		
Height: ft inches	Hair Colo	r:	Eye Color:	SSN #:		
		EMS	ORGANIZATIO	N		
Service				Job Title		
Business Address (City)		Telephor	ne Number			
Immediate Supervisor (Name)				Job Title		
	C	URRENT EM	PLOYMENT/	OCCUPATIO	N	
					- ,	
Employer				Job Title		
Business Address (City)		Telephon	e Number			
Immediate Supervisor (Name)				Job Title		
	<b>EMD</b>	FR	FRD	ECRN	TRAINING	
Training Location				Instru	uctor	
Date Training Completed		IL Certifi	cation #	Expir	es	
	EMT-B	EMT-I	EMT-P	PHRN	TRAINING	
EMT Training Location Instructor						
Date Training Completed		IL Certification Num	ber	Expir	es	
EMS LEAD INSTRUCTOR						
Course Location				Date		
IL Certification #		Expires				
FIELD EVALUATOR (EMT-P/PHRN ONLY)						
Currently Function at Field Evaluator Level						
Field Evaluator Training - Year				Location		
IMERT						

BACKGROUND INFORMATION					
	ciplinary process relate	ed to your EMT certification/or licensure	☐ Yes ☐ No ☐ Yes ☐ No		
If any of the above answers are y	yes, please explain be				
Are you affiliated with any other	EMS System ☐ Yes [				
I have read and I am familiar with the policies and procedures contained in the Quincy Area EMS Policy Manual:  Our policy manual is located:					
Print Name:		Date:			
PLEASE NOTE: Falsification of ar EMS System	ny of the above inforn	nation will result in suspension from practice in	the Quincy Area		
APPLICANT SIGNATURE		DAT	E		
EQUAL OPPORTUNITY CLAUSE					
The Quincy Area EMS System will make no discrimination because of race, sex, religion, national origin, ancestry or political affiliation.  FOR OFFICE USE ONLY					
Date Application Received:	Information Comp	lete/Incomplete:			
	□ PICTURE ON FILE	REVIEWED BY EMS MEDICAL DIRECTOR OR DESIGNEE			

Reviewed 8/01 Revised 2/03, 2/13, 3/15, 1/18, 9/20

### **SYSTEM ENTRY CANDIDATE REQUIREMENTS**

CANDIDATE NAME:						
CANDIDATE LEVEL BMR BMT PARAMEDIC PHRN BCRN EMD						
l.	REQUII	JIREMENTS FOR ALL CANDIDATES				
		QAEMS System application form				
		Copy of valid driver's license or other valid photo ID				
		Copy of current Illinois license(s) at their provider level				
		Interview with the EMS System Coordinator or EMS Medical Director if requested				
		Letter of good standing				
II.	CERTIF	CERTIFICATIONS				
		AHA BLS for Healthcare Providers CPR or equivalent (all levels)				
		AHA ACLS (Paramedic, PHRN, ECRN)				
		PHTLS or ITLS or TECC or TCCC (Paramedic, PHRN within 12 months)				
		Any of the above or PHTLS for First Responders (EMR/FRD, EMT within 12 months)				
		AHA PALS or PEPP (Paramedic, PHRN, EMT, EMR/FRD within 12 months)				
III. OTHER REQUIREMENTS						
		START triage quiz 80% or > score (EMR/FRD, EMT, Paramedic, PHRN, ECRN)				
		Transfer medication quiz 80% or > score (Paramedic, PHRN)				
	Contract for Controlled Medications (Paramedic, PHRN)					
IV. SYSTEM EXAM						
		System exam 80% or > score				
		Exam scores				
		Provider is approved for probationary status (see section V) DATE:				
SIGNA	ΓURE EN	IS SYSTEM COORDINATOR:				

### **V. PROBATIONARY STATUS**

# Satisfactory progress report received from employer (90 DAYS) Provider is approved for active status Notification sent to provider Notification sent to hiring agency DATE PROBATIONARY REQUIREMENTS COMPLETED: UNSATISFACTORY PROGRESS Progress report unsatisfactory – EMS Medical Director notified and makes following recommendations Additional 90-day probationary status with approval hiring agency Skill remediation or other requirement added – details in comments below Medical Director denies candidate entry into QAEMSS Comments: Notification sent to provider Notification sent to hiring agency

### **CHANGE OF ADDRESS FORM**

Purpose: All members of the Quincy Area EMS System must notify the EMS Office within 10 days of a change of address to enable timely receipt of important local and IDPH communications including license renewal information.

Date:				
Name:(Last)	(Maiden *if applicable)	(First)		(Middle)
Date of Birth:				
<u>OLD</u> Address:	(Street)	(City)	(State) (Zip)	
NEW Address:	(60.00)	(337)	(2000)	
	(Street)	(City)	(State) (Zip)	
Phone:	Fmail	ī		

### **EMS MEDICAL DIRECTORS**

I. EMS Medical Director: the physician, appointed by the Resource Hospital, who has the responsibility and authority for the total management

### A. QUALIFICATIONS:

- A physician licensed to practice medicine in all its branches in Illinois and shall be certified by the American Board of Emergency Medicine or the American Board of Osteopathic Emergency Medicine.
- 2. Have experience on an EMS vehicle at the highest level available within the System, or make provisions to gain such experience within 12 months prior to the date responsibility for the System is assumed or within 90 days after assuming the position.
- 3. Be thoroughly knowledgeable in all skills included in the scope of practices of all levels of EMS personnel within the System; and
- 4. Have or make provisions to gain experience instructing students at alevel similar to that of the levels of EMS Personnel within the System; and
- 5. For ILS and ALS EMS MDs, successfully complete a Department-approved EMS MD's course. (Section 3.20(c) (1 through 6) of the Act.)

### B. <u>DUTIES AND RESPONSIBILITIES:</u>

- 1. Be responsible for the ongoing education of all System personnel, including didactic and clinical experience,
- Develop and authorize written standing orders (treatment protocols, standard operating procedures) and certify that all involved personnel will be knowledgeable and competent in emergency care;
- 3. Be responsible for supervising all personnel participating within the System, as described by the System Program Plan;
- 4. Develop or approve one or more patient care reports covering all types of patient care responses performed by System providers;
- 5. Ensure that IDPH has access to all records, equipment and vehicles under the authority of the EMS MD during any IDPH inspection, investigation or site survey;
- 6. Notifies IDPH of any changes in personnel providing pre-hospital care in accordance with the EMS System Program Plan approved by the IDPH;
- 7. Be responsible for the total management of the System, including the enforcement of compliance with the System Program Plan by all participants within the

System;

- 8. Direct the applicant to the IDPH EMS website for access to an independent renewal form for EMS Personnel within the System who have not been recommended for relicensure by the EMS MD; and
- 9. Be responsible for compliance with the provisions of sections 515.400 and 515.410.
- II. Alternate EMS Medical Director: the physician who is designated by the Resource Hospital to direct the ALS/ Advanced/ ILS/BLS operations in the absence of or at the direction of the EMS Medical Director with the duties and responsibilities listed above in I)B.

### **EMS PHYSICIAN**

- I. EMS Physician is a physician who has been approved by the EMS Medical Director, andis assigned the following responsibilities and duties:
  - A. Provide orders to system participants in accordance with system approved treatment protocols and current medical practices.
  - B. Ensure calls are documented accurately on the emergency department radio log.
  - C. Sign the patient report form of the transporting unit, indicating transfer of patient care to the receiving hospital as appropriate (i.e. refusals, narcotic administration).
  - D. Monitor, supervise and assist prehospital personnel fulfilling educational requirements in the clinical setting.
  - E. Perform other duties as assigned by the EMS Medical Director and monitor compliance to system polies and procedures.

### II. EMS SYSTEM EDUCATION

- A. Introduction and orientation to the Quincy AREA EMS System by the EMS Medical Director, EMS Associate Medical Director or EMS System Coordinator to include:
  - 1. role of the EMS personnel
  - 2. policies and procedures
  - 3. standard operating protocols
  - 4. current medication lists

Completion of orientation as determined by the employing hospital/agency.

### QUINCY AREA EMS SYSTEM FIELD EVALUATOR

 Purpose of the QAEMS System Field Evaluator program: To ensure that EMS students completing clinical requirements and system participants being evaluated have a consistent experience led by experienced Paramedics or Prehospital RNs who serve as role models and exemplify the standards of professionalism and excellence for the EMS system.

### II. QAEMSS Field Evaluator Description

- A. Functions as a resource, coach, facilitator and guide and is valued as a teacher but also as a role model.
- B. Possesses a thorough knowledge of QAEMSS policies and procedures.
- C. Is responsible and accountable for decisions made regarding patient care while supervising students and system candidates.
- D. Orients, coaches, teaches and evaluates students and system participants in a fair, respectful and impartial manner.

### III. Program oversight

- A. The EMS student or system participant functions under the authority and license of the EMS Medical Director and designee(s) while under the direct supervision of the Field Evaluator.
- B. The Field Evaluator provides direct clinical oversight to the EMS student or system participant during ambulance clinical while maintaining overall responsibility for the care of the patient.
- C. The Field Evaluator is accountable to his/her employer, the EMS System Coordinator and the EMS Medical Director or designee.
- D. QAEMSS Field Evaluators are not employees of Blessing Hospital or John Wood Community College.

### IV. Initial Requirements for Field Evaluator

- A. Current Illinois Paramedic or Prehospital RN license.
- B. On the roster of an approved ALS-transport provider agency within the QAEMS System.
- C. Minimum of three years' experience as a licensed paramedic.
- D. Complete the application process in section V.
- E. Complete the field evaluator orientation sponsored Blessing Hospital EMS Dept.

### V. Field Evaluator Entry Process

- A. List of potential eligible candidates is compiled by Blessing EMS Department.
- B. Potential candidates are contacted by Blessing EMS to determine interest.
- C. Candidate completes the application by the due date.
- D. Request is sent by Blessing EMS to agency leadership to determine support for the candidate.
- Candidate information is sent to current list of Field Evaluators for comment.
- F. Candidate completes a panel interview with Blessing EMS staff. The panel will include at least one of the following: EMS System Coordinator, EMS Medical Director or Alternate EMS Medical Director; and at least one of the following: Paramedic Program Director and/or Clinical Coordinator.
- G. Candidate is notified of acceptance or declination.
- H. Candidate completes the orientation.
- VI. Continuing requirement to maintain recognition of Field Evaluator
  - A. Attend a minimum of two meetings per year out of four (50%).
  - B. Participate in at least one skill or scenario lab each year.
  - C. Complete any required mandatory updates, education or requirements by established deadlines.
  - D. Demonstrate ongoing clinical competence as assessed through routine system audits.
  - E. Must have no major patient care or operational issues that required serious disciplinary action.
  - F. Demonstrate effective communication skills in and out of the clinical setting.
  - G. Demonstrate leadership, respect and a professional manner of interacting with people in and out of the clinical setting.
  - H. Demonstrate the ability to fairly evaluate all students and to make evaluations based on performance.
  - I. Discuss and sign student clinical paperwork during the shift when possible and within 24 hours when not possible.
- VII. Removal of Field Evaluator status is upon the direct authority of the EMS Medical Director or designee and is based upon not meeting the requirements outlined in section VI. The status could be revoked permanently or for a period of time deemed appropriate.

6/84, re: 9/86, 7/92, 11/97, 8/01, 5/07, 3/15, 5/18

(reviewed: 7/95, 9/2020)

# Quincy Area EMS System Field Evaluator Application

This form will be shared with agency leaders, QAEMS Field Evaluators, EMS System Coordinator, EMS Medical Director, Alternate EMS Medical Director and EMS program faculty as part of the application process.

I.	GENERAL INFORMATION	
	NAME	
	ADDRESS	
	PHONE	
	EMAIL	
	MONTH/YEAR LICENSED AS A PARAMEDIC	
	ALS TRANSPORT AGENCY(IES) YOU ARE CURRENTLY WORKING FOR WHY DO YOU	
	WANT TO BECOME A QAEMS FIELD EVALUATOR?	
	WHAT QUALITIES DO YOU POSSESS THAT WILL MAKE YOU A GOOD FIELD EVALUATOR?	
II.	EDUCATION Please	
check	all that apply	
	High school diploma or GED	
	College / University:	
	Some college courses Certificate:	
	Associate Degree:	
	Bachelor Degree:	
	Master's or Doctorate:	
	Educator certifications – check box if current	
	☐ Illinois EMS Lead Instructor	
	□ ACLS instructor	
	☐ BTLS or PHTLS instructor	
	□ PALS or PEPP instructor	
	Other instructor credentials – please list:	

III.	EXPERIENCE AS AN EDUCATOR/ COACH / TRAINER				
	Briefly describe any experience that you have had as a coach/trainer/educator. This can include experience outside of EMS. (If you are an EMS Lead Instructor list courses / inservices / skills taught in past 2 years.)				
IV.	OTHER				
	V				
	Check if interested in being a mentor – Mentors are assigned to paramedic students each year prior to the beginning of field clinical. A mentor goes above and beyond the normal Field Evaluator duties by allowing the student to contact them during and outside of work when they need some extra help or advice. Mentors have been instrumental in turning things around for students who are struggling with grades or with clinical.				

3/2015, re: 5/2018, 9/20

QUINCY AREA EMS SYSTEM FIELD EVALUATOR ENTRY PROCESS CHECKLIST & AGREEMENT						
Blessing Clinical Coordinator Initia	als					
	Valid Illinois F	Paramedic or PHRN license				
	Minimum of	three years of experience as a Paramed	dic or PHRN; currently employed by an ALS-			
		ncy in the QAEMS System.				
	Application for	orm complete.				
	Written appro	oval of ALS agency administration.				
	Field Evaluato	or feedback received.				
	Panel intervie	w complete.				
	Approval of B	lessing Paramedic Program Director or	r Clinical Coordinator, EMS System			
	Coordinator a	and EMS Medical Director or Alternate	EMS Medical Director. (Signatures below)			
	Completed or	ientation.				
FIELD EVALUATO	R EXPECTATIONS A	ND AGREEMENT				
	-	ourpose of a Field Evaluator is to provious for EMS students and EMS system ca	de a consistent training experience and fair indidates.			
	I understand that policies and proce		paramedic practice and QAEMS System			
	I understand that I am responsible and accountable for decisions made regarding patient care while I am supervising students and EMS System candidates.					
	-		on under the license and authority of the			
EMS Medical Director or designee during their clinical and that all interventions perform						
under the direct supervision of the Field Evaluator.						
		agree to attend a minimum of two meetings per year (50%), participate in one skill or scenario lab				
П	I understand that	nderstand that I am a role model and I will utilize effective, respectful means of communication				
Ш	to facilitate under	facilitate understanding by the student. I will not share information regarding student				
	performance with	rmance with non-Field Evaluators other than those persons directly associated with the				
student's EMS program.						
		I agree that discussion of student or system provider performance should be conducted professionally in a manner that does not lead other Field Evaluators to prejudge.				
		nderstand that I have the authority to request remediation of student skills by contacting EMS				
		ogram faculty, the paramedic program director or the EMS System Coordinator.				
		I understand that I have the authority to uphold student dress code and rules of behavior for conduct during clinical.				
		equirements of EMT and paramedic and gramedic and gramediation and good communication	mbulance clinical and that I will be coaching ion skills to discuss performance.			
	_	to abide by QAEMS System policy P-5 a on of my status as a QAEMS System Fie				
Field Evaluator Na	ame-PRINT	Field Evaluator Signature	Date			
<b>EMS Medical Dire</b>	ctor/Designee	EMS System Coordinator	Blessing EMS Program Faculty			

### **EMS SYSTEM COORDINATOR**

I. <u>DEFINITION</u>: EMS System Coordinator – an individual responsible to the EMS Medical Director and EMS Administrative Director for coordination of the educational and functional aspects of the System program.

### II. QUALIFICATIONS:

- A. A registered professional nurse or paramedic licensed in the State of Illinois.
- B. Be trained and knowledgeable in dysrhythmia identification and treatment in conjunction with a diverse background in critical care.
- C. Be knowledgeable in the care of the critically ill or injured patient.
- D. Within one year of being appointed, complete in-field observation and/or participation on at least ten ambulance runs at the highest level of service provided by the System.

### III. <u>DUTIES AND RESPONSIBILITIES</u>

- A. The EMS System Coordinator is responsible for the following aspects as designated by the EMS Medical Director:
  - 1. Data collection and evaluation
  - 2. Coordination, Planning, and supervision of clinical, didactic, and field experience training, and physician and nurse education.
  - 3. EMS System Quality Assurance
  - 4. Monitors conformance of all participants to system policies and procedures.

re: 9/86, 6/87, 11/87, 11/97, 8/01, 8/17, 9/2020 (reviewed: 8/95)

### **EMS ADMINISTRATIVE DIRECTOR**

I. <u>DEFINITION:</u> The administrator appointed by the Resource Hospital in consultation with the EMS Medical Director for administration of the Quincy Area EMS System.

### II. <u>RESPONSIBILITIES:</u>

- A. Monitors Blessing Hospital's participation within the Quincy Area EMS System and its relationship with participating agencies.
- B. Delegates day to day operational oversight to the Blessing Hospital Emergency Medical Services Department Manager in conjunction with the Blessing Hospital Emergency Services Director.
- C. Grants authority to the EMS Department Manager, EMS Medical Director, Alternate EMS Medical Director and EMS System Coordinator to make necessary operational changes in the EMS System Plan and forward to IDPH for approval.

8/89, 11/97, 1/02, 4-17, 9/20 (reviewed: 9/95, 8/01

### QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE PARAMEDIC

- I. Description of the profession: The Paramedic is an allied health professional whose primary focus is to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight typically in the prehospital and inter- hospital environment.
- II. Scope of practice: Any person currently licensed as a Paramedic may only perform emergency and non-emergency medical services in accordance with his or her level of education, training and licensure, the standards of performance and conduct prescribed by IDPH rules & standards, and the requirements of the EMS System in which he or she practices, as contained in the approved Program Plan for that System.
- III. Approved skills based on National EMS Scope of Practice / QAEMS protocols
  - A. All BLS level skills as identified by system protocols.
  - B. Airway & Oxygenation
    - 1. CPAP
    - 2. Endotracheal intubation
    - 3. Extraglottic airways
    - 4. Foreign body removal from airway utilizing direct laryngoscopy and Magillforceps
    - 5. Nasotracheal intubation
    - 6. Needle and surgical (open) cricothyrotomy
    - 7. Tracheal suctioning
  - C. Assessment
    - 1. Use of capnography / end-tidal CO2 monitoring
  - D. Cardiac Care
    - 1. Cardiac monitoring with cardiac rhythm interpretation
    - 2. Defibrillation
    - 3. Synchronized cardioversion
    - 4. Transcutaneous pacing
    - 5. Twelve lead ECG acquisition and interpretation
  - E. Pharmacologic Medication administration routes
    - 1. Endotracheal
    - 2. Intramuscular (IM) injection
    - 3. Intranasal
    - 4. IV push, IV bolus
    - 5. IV infusion/ drip
    - 6. Nebulized
    - 7. Oral
    - 8. Rectal
    - 9. Subcutaneous (SQ, SC) injection
    - 10. Sublingual
    - 11. Topical / transdermal
  - F. Venous Access
    - 1. Access existing CVAD
    - 2. Intraosseous infusion
    - 3. Peripheral IV therapy (IV-line, saline lock) including external jugular vein access Other
      - 1. Needle chest decompression

# QUINCY AREA EMS SYSTEM POLICY AND PROCEDURE PREHOSPITAL REGISTERED NURSE (PHRN)

- I. A Registered Professional Nurse, with an unencumbered RN license in the state in which he or she practices who has successfully completed supplemental education in accordance with JCAR section 515.730 and who is approved by an Illinois EMS Medical Director to practice within an EMS System for prehospital and inter-hospital emergency care and non-emergency medical transports.
- II. Scope of practice: Any person currently licensed as a PHRN may only perform emergency and non-emergency medical services in accordance with his or her level of education, training and licensure, the standards of performance and conduct prescribed by IDPH rules & standards, and the requirements of the EMS System in which he or she practices, as contained in the approved Program Plan for that System.
- III. Approved skills based on QAEMS protocols
  - A. All BLS level skills as identified by system protocols.
  - B. Airway & Oxygenation
    - 1. CPAP
    - 2. Endotracheal intubation
    - 3. Extraglottic airways
    - 4. Foreign body removal from airway utilizing direct laryngoscopy and Magill forceps
    - 5. Nasotracheal intubation
    - 6. Needle and surgical (open) cricothyrotomy
    - 7. Tracheal suctioning
  - C. Assessment
    - 1. Use of capnography / end-tidal CO2 monitoring
  - D. Cardiac Care
    - 1. Cardiac monitoring with cardiac rhythm interpretation
    - 2. Defibrillation
    - 3. Synchronized cardioversion
    - 4. Transcutaneous pacing
    - 5. Twelve lead ECG acquisition and interpretation
  - E. Pharmacologic Medication administration routes
    - 1. Endotracheal
    - 2. Intramuscular (IM) injection
    - 3. Intranasal
    - 4. IV push, IV bolus
    - 5. IV infusion/ drip
    - 6. Nebulized
    - 7. Oral
    - 8. Rectal
    - 9. Subcutaneous (SQ, SC) injection
    - 10. Sublingual
    - 11. Topical / transdermal
  - F. Venous Access
    - 1. Access existing CVAD
    - 2. Intraosseous infusion
    - 3. Peripheral IV therapy (IV line, saline lock) including external jugular vein access
  - G. Other
    - 1. Needle chest decompression

### **EMERGENCY MEDICAL TECHNICIAN (EMT)**

- I. Description of the profession: The primary focus of the Emergency Medical Technician is to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance.
- II. Scope of practice: Any person currently licensed as an may only perform emergency and non-emergency medical services in accordance with his or her level of education, training and licensure, the standards of performance and conduct prescribed by IDPH rules & standards, and the requirements of the EMS System in which he or she practices, as contained in the approved Program Plan for that System.
- III. Approved skills based on National EMS Scope of Practice / QAEMS protocols
  - A. Airway, breathing and oxygenation
    - 1. Manual maneuvers to open and maintain the airway
    - 2. Insertion of nasopharyngeal and oropharyngeal airways
    - 3. Positive pressure ventilation with bag-valve-mask device
    - 4. Supplemental oxygen therapy
    - 5. Continuous positive airway pressure (CPAP)
    - 6. Suction of the upper airway
  - B. Assessment
    - 1. Scene size up
    - 2. Primary assessment
    - 3. History
    - 4. Secondary assessment / vital signs
    - 5. Reassessment
  - C. Pharmacological intervention
    - 1. Aspirin oral
    - 2. Albuterol inhaled nebulizer
    - 3. Epinephrine Intramuscular (IM) syringe/needle or epinephrine auto injector
    - 4. Glucagon IM or intranasal (IN)
    - 5. Naloxone IM or IN
    - 6. Assist patients with taking their own metered dose inhaler, nitroglycerin or Epipen
  - D. Medical / Cardiac Care
    - 1. Cardiopulmonary resuscitation (CPR)
    - 2. Defibrillation with AED
    - 3. Apply electrodes to perform 12 lead ECG and transmit
  - E. Trauma care
    - 1. Hemorrhage control including direct pressure and tourniquet
    - 2. Spinal motion restriction including cervical collar, long spine board, short back board or vest style device (KED)
  - F. Other

- 1. Communication
- Documentation
   Emergency vehicle operation
   Patient extrication

1/94, re: 11/97, 4/98, 9/99, 8/01, 3/15, 6/18, 11/18, 9/20

### QUINCY AREA EMERGENCY MEDICAL SERVICES SYSTEM EMERGENCY

### MEDICAL RESPONDER (EMR)

- I. Definition: A person who has successfully completed an approved course of instruction for the Emergency Medical Responder (EMR), who provides Emergency Medical Responder services prior to the arrival of an ambulance or SEMSV in accordance with the level of care established in the National EMS Educational Standards for EMR as modified by IDPH. (Training see CET-23)
- II. Qualifications for initial Emergency Medical Responder (EMR) licensure
  - A. Age 18 or over
  - B. Completed and passed all components of the approved training program
  - C. Successful completion of the EMR course final examination
  - D. Paid initial licensure fee and IDPH form
- III. Joining the QAEMS System you are not automatically a member of the Quincy Area EMS System when you complete your EMR course.
  - A. You must affiliate with an existing Emergency Medical Responder agency within the Quincy Area EMS System.
  - B. Complete the QAEMS system application process.
  - C. You should not care for patients until this process is complete.
- IV. Approved scope / duties based on National EMS Scope of Practice
  - A. Airway and Breathing
    - 1. Manual maneuvers to open the airway head tilt/ chin lift; jaw thrust
    - 2. Insertion of basic airway adjuncts oropharyngeal airway, nasopharyngeal airway
    - 3. Positive pressure ventilation with bag-valve-mask
    - 4. Supplemental oxygen therapy
    - 5. Suction of the upper airway
  - B. Assessment
    - 1. Scene size up
    - 2. Primary assessment
    - 3. Secondary assessment
    - 4. Vital signs
  - C. Pharmacological Intervention
    - 1. Aspirin oral
    - 2. Naloxone Intranasal
    - 3. Assist with prescribed Epi-Pen
  - D. Trauma care
    - 1. Manual stabilization of suspected cervical spine injuries
    - 2. Manual stabilization of extremity fractures

- 3. Dressings/bandages
- 4. Emergency moves
- 5. Bleeding control including direct pressure and tourniquet use
- E. Medical/ Cardiac care
  - 1. Basic life support (CPR)
  - 2. Use of an automated external defibrillator (AED)

7/12/98, re: 9/99, 1/02, 7/10, 7/14, 11/2018, 1/2019, 9/2020 (reviewed 8/01)

### **EMERGENCY MEDICAL DISPATCHER**

I. Definition: Emergency Medical Dispatcher or EMD – a person who has successfully completed a training course in emergency medical dispatching in accordance with this Part, who accepts calls from the public for emergency medical services and dispatches designated emergency medical services personnel and vehicles.

### II. EMD Duties:

- A. Accepts calls from the public for emergency medical services
- B. Dispatches designated emergency medical services personnel and vehicles
- C. Provides pre-arrival medical instructions to the caller in accordance with protocols approved by the EMS Medical Director.

11/00; re 9/09, 7/10, 4/17, 9/2020 (reviewed 8/01)

### **EMERGENCY COMMUNICATIONS REGISTERED NURSE**

### I. DUTIES AND RESPONSIBILITIES

An Emergency Communications Registered Nurse (ECRN) is a registered professional nurse who has been approved by the EMS Medical Director to participate in the Quincy Area EMS System and perform the following duties and responsibilities:

- A. Give voice orders and direction to system participants via radio/phone in accordance with System approved protocols.
- B. Document prehospital patient condition, interventions and orders on the Emergency Department Radio Log.
- C. Monitor, supervise and assist personnel fulfilling educational requirements in the clinical setting.
- D. Monitor conformance to system policy and procedure.

### II. RECERTIFICATIONS REQUIREMENTS

For license renewal, the following items will be submitted to the EMS Office every four years, on the first day of the expiration month shown on their ECRN license:

- A. **48 hours** of continuing medical education units (CEUs).
  - 1. At least 50% of total hours should be earned through system taught/approved courses. No more than 25% of total hours may be in the same subject.

### 2. **ACLS and PALS**:

- a) Initial course credit will be awarded hr. for hr.
- b) Recertifications will be awarded 8 hrs. of CEU credit/2 yrs.
- 3. **CPR renewal** will be awarded 3 hrs. of credit (maximum of 6 hrs. in 4 yrs.).
- B. Current **CPR certification** by the American Heart Association or equivalent.
- C. Current **ACLS Certification** by the American Heart Association or equivalent.
- D. Current **PALS Certification** by the American Heart Association or equivalent.
- III. ECRNs who fail to maintain/submit the appropriate documentation (certifications, CEUs, etc.) to the EMS Office will be considered for removal from the QAEMS System and will be unable to function as an ECRN in the emergency department.
- IV. Using a **change of address form**, members of the QAEMS system shall notify the EMS Office of changes to their current mailing address and/or contact information.

7/87; re: 11/87, 11/97, 8/01, 2/10, 7/14, 9/20

(reviewed: 8/95)

### TRAUMA NURSE SPECIALIST

To obtain recertification as a Trauma Nurse Specialist (TNS), the TNS will comply with the following guidelines:

- I. Complete a **TNS CE Summary Sheet by Category** form. CE Summary Sheet forms may be obtained from the TNS Course Coordinator (TNSCC) or on-line atillinoistraumanurse.org
  - A. List EACH trauma-related CEUs obtained during the licensure period on the formunder the appropriate category.
  - B. Attach documentation to support EACH listing on the CE Summary Sheet. CEUs submitted without proper documentation will be denied.
  - C. Note: some Categories have **MAXIMUM** allowable hours. Hours submitted over maximum allowable hours for that category will be denied.
  - D. Some courses do not carry TNS credit (i.e. INSTRUCTOR COURSES). Please refer to the CE Summary Sheet, Approved Continuing Education for guidance.
  - E. Seminar/Conferences containing medical and trauma topics will be awarded trauma CEUs according to the Seminar/Conference agenda and not the total CEUs listed on the certificate of completion. (Hours will be denied unless an agenda is provided.)
- II. Submit **CE Summary Sheet and required hours** for renewal to the TNS Course Coordinator at least 45 days prior to expiration date.
  - A. Number of hours required for renewal is listed on the renewal form (64hrs/4 years).
  - B. Incomplete CE Summary Sheet forms will be returned.
  - C. Late forms submitted will be subject to IDPH late fees as applicable.
- III. Submit completed/signed **Renewal Notice/Child Support/Personal History Statement** with ALL information required <u>directly</u> to IDPH with money order or on-line at IDPHwebsite: <a href="https://emslic.dph.illinois.gov/GLSuiteWeb/clients/ildohems/private/OnlineServices.aspx">https://emslic.dph.illinois.gov/GLSuiteWeb/clients/ildohems/private/OnlineServices.aspx</a>

### **EMS LEAD INSTRUCTOR**

- I. Definition: a person who has successfully completed a course of education as approved by IDPH EMS Division, and who is currently approved by the Department to coordinate or teach education, training and continuing education courses, in accordance with Section 3.65(a) of the EMS Act.
- II. Eligibility: the applicant shall meet at least the following minimum experience and education requirements and shall provide a written recommendation from the EMS MD of the primary EMS System affiliation.
  - A. A current Illinois license as an EMT, AEMT, Paramedic, RN or physician;
  - B. A minimum of four years of experience in EMS or emergency care;
  - C. At least two years of documented teaching experience;
  - D. Documented EMS classroom teaching experience with a recommendation for LI licensure by an EMS MD or licensed LI;
  - E. Documented successful completion of the Illinois EMS Instructor Education Course or equivalent to the National Standard Curriculum for EMS Instructors as approved by the Department.

### III. Application

- A. Upon successful course completion, the applicant may apply to the Department through the affiliated EMS System using the child support form available on the Department's website (http://dph.illinois.gov/sites/default/files/forms/ems- renewal-notice.pdf) and an application form provided by the local EMS System.
- B. The application will include demographic information, social security number, child support statement, felony conviction statement, applicable fees, and EMS System authorization.

### IV. Renewal of licensure

- A. The EMS LI shall submit the following to the Department at least 60 days, but not more than 90 days, prior to the LI's license expiration:
  - 1. A letter of support or electronic authorization from an EMS MD indicating that the EMS LI has satisfactorily coordinated programs for the EMS System at any time during the four-year period;
  - 2. Documentation of at least 40 hours of continuing education, of which 20 hours shall be related to the development, delivery and evaluation of education programs; and
  - 3. Documentation of attendance at a Department-approved national EMS education standard update course, if applicable.
  - 4. Incomplete license applications submitted less than 30 days before the expiration may not be processed by the expiration date and will be subject to a late fee once the license has expired.
  - 5. An LI whose license has expired may, within 60 days after the expiration of the license, submit all relicensure requirements and submit the fees required by Section 575.460, including a late fee, online or by certified check or money order. Cash or personal check will not be accepted. If all relicensure requirements have been met, and there is no pending or

sustained disciplinary actions against the LI, the Department will relicense the LI.

### V. Non-Renewal

- A. An LI who has not been recommended for relicensure shall be provided with a written statement from the EMS MD stating the reason for the withholding of the endorsement.
- B. The license of an LI who has failed to complete the renewal application requirements for the EMS System and the Department shall be invalid on the expiration of the license. An individual shall not function as an EMS LI on an expired license.

### VI. Revoked EMS LI license

- A. IDPH will, in accordance with Section 515.160, suspend, revoke or refuse to issue or renew the approval of an EMS Lead Instructor, after an opportunity for a hearing, when findings show one or more of the following:
  - The EMS LI has failed to conduct a course in accordance with the curriculum prescribed by the Act and this Part and the System sponsoring the course; or
  - 2. The EMS LI has failed to comply with protocols prescribed by this Part and the System sponsoring the course. (Section 3.65(b)(7) of the Act)

### VII. The EMS LI shall be responsible for the following:

- A. Ensuring that no EMS education course begins until after the Department issues its formal written pre-approval, which shall be in the form of a numeric site approval code; and
- B. Ensuring that all materials presented to participants comply with the national EMS education standards, as modified by IDPH, and are approved by the EMS System and the Department. Methods of assessment or intervention that are not approved by both the EMS System and the Department shall not be presented.

12/97, 9/2020 re: 8/01, 7/10, 2/13, 4/17

# QUINCY AREA EMS SYSTEM PROBLEM SOLVING PROTOCOLS

### Revised 11/2023

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

Scott Hough, MD EMS Medical Director

Christopher R Solaro, MD, PHD Associate Medical Director

# QUINCY AREA EMS SYSTEM PROBLEM SOLVING

System Participation Suspensions	PS-1
Event Report	PS-2
Event Report form	PS-2-F
Suspected Chemical Abuse on Duty	PS-3
Just Culture	PS-4
Just Culture Documentation form	PS-4-F
Filing a Complaint with the IDPH Central Complaint Registry	PS-5

### SYSTEM PARTICIPATION SUSPENSIONS

I. Purpose: Provides information regarding the process related to system participation suspensions. This policy is based on JCAR administrative code rules, Section 515.420.

### II. Process

- A. An EMS Medical Director may suspend from participation within the System any EMS Personnel, EMS Lead Instructor (LI), individual, individual provider or other participant considered not to be meeting the requirements of the Program Plan of that approved EMS System (Section 3.40(a) of the Act)
- B. Except as allowed in section IV of this policy, the EMS Medical Director shall provide the individual, individual provider or other participant with a written explanation of the reason for the suspension; the terms, length, and condition of the suspension; and the date the suspension will commence, unless a hearing is requested. The procedure for requesting a hearing within 15 days through the Local System Review Board shall be provided.
- C. Failure to request a hearing within 15 days shall constitute a waiver of the right to a Local System Review Board hearing.
- D. The hearing shall commence as soon as possible, but at least within 21 days after receipt of a written request. The EMS MD shall arrange for a certified shorthand reporter to make a stenographic record of that hearing and thereafter prepare a transcript of the proceedings. The transcript, all documents or materials received as evidence during the hearing and the Local System Review Board's written decision shall be retained in the custody of the EMS System. The System shall implement a decision of the Local System Review Board unless that decision has been appealed to the State Emergency Medical Services Disciplinary Review Board in accordance with the Act. (Section 3.40€ of the Act).
- E. The Local System Review Board shall state in writing its decision to affirm, modify or reverse the suspension order. That decision shall be sent via certified mail or personal service to the EMS MD and the individual, individual provider or other participant who requested the hearing within five business days after the conclusion of the hearing.
- F. The EMS MD shall notify IDPH, the Department, in writing within five business days after the Board's decision to either uphold, modify or reverse the EMS MD's suspension of an individual, individual provider or participant. The notice shall include a statement detailing the duration and grounds for the suspension.
- G. If the Local System Review Board affirms or modifies the EMS MD's suspension order, the individual, individual provider or other participant shall have the opportunity for a review of the local board's decision by the State EMS Disciplinary Review Board (Section 3.40(b)(1) of the Act)
- H. If the Local System Review Board reverses or modifies the EMS MD's suspension order, the EMS MD shall have the opportunity for review of the local board's decision by the State EMS Disciplinary Review Board. (Section 3.40(b)(2) of the Act)

I. Requests for review by the State EMS Disciplinary review Board shall be submitted in writing to the Chief of the Department's Division of Emergency Medical Services and Highway Safety, within 10 days after receiving the local board's decision or the EMS MD's suspension order, whichever is applicable. A copy of the Board's decision or suspension order shall be enclosed. (Section 3.45(h) of the Act)

### III. Local System Review Board

- A. The Resource Hospital shall designate the Local System Review Board, for the purpose of providing a hearing to any individual or entity participating within the System who is suspended from participation by the EMS MD. (Section 3.40 € of the Act).
- B. The review board will consist of at least three members, one of whom is an emergency department physician with knowledge of EMS, one of whom is an EMT and one of whom is of the same professional category as the individual, individual provider or other participant requesting the hearing.
- C. The EMS MD or designee shall prepare and post, in a 24-hour accessible location at the Resource Hospital, the System Review Board list.

### IV. Immediate suspension process

- A. An EMS MD may immediately suspend an EMR, EMD, EMT, EMT-I, A-EMT, Paramedic, ECRN, PHRN or LI, or other individual or entity if he or she finds that the continuation in practice by the individual or entity would constitute an imminent danger to the public. The suspended individual or entity shall be issued an immediate verbal notification, followed by a written suspension order by the EMS MD that states the length, terms and basis for the suspension. (Section 3.40(C)of the Act)
  - 1. Within 24 hours following the commencement of the suspension, the EMS MD shall deliver to the Department, by messenger, telefax, or other department-approved electronic communication, a copy of the suspension order and copies of any written materials that relate to the EMS MD's decision to suspend the individual or entity.
  - 2. Within 24 hours following the commencement of the suspension, the suspended individual may deliver to the Department, by messenger, telefax, or other Department-approved electronic communication, a written response to the suspension order and copies of any written materials that the individual or entity feels are appropriate.
  - 3. Within 24 hours following receipt of the EMS MD's suspension order or the individual's or entity's written response, whichever is later, the Director or the Director's designee shall determine whether the suspension should be stayed pending an opportunity for hearing or review in accordance with the Act, or whether the suspension should continue during the course of that hearing or review. The Director or the Director's designee shall issue this determination to the EMS MD, who shall immediately notify the suspended individual or entity. The suspension shall remain in effect during this period of review by the Director or the Director's designee. (Section 3.40© of the Act)

### V. Notification of suspended EMS provider to other EMS Systems

A. Quincy Area EMS, when suspending a system member for any reason, will notify the EMS Medical Director and/or EMS System Coordinator of any other Illinois EMS System that the suspended person is known to be a member of.

12/84 (reviewed: 8/95; 12/09) re: 7/86, 7/87, 8/89, 4/92, 7/92, 11/97, 5/98 3/01, 7/01, 1/02, 12/02, 3/07, 8/12, 12/20, 8/23

### **EVENT REPORTS**

### I. Definition

An event report is utilized to report an unusual occurrence or event while it is fresh in the minds of those who were involved in the situation. Examples of reportable events include:

- A. Protocol issues
- B. Equipment problems
- C. Vehicle problems
- D. Medication errors.
- E. Near-miss situations
- F. Professional practice and behavioral problems

### II. Purpose of Event Reporting:

- A. The ultimate purpose is to improve patient care and overall safety.
- B. Identify opportunities to improve protocols.
- C. Identify opportunities for education.
- D. Alert others to potential issues.

### III. Procedure

- A. The event report form shall be completed by the individual who observed or who was involved in the event. It should be as detailed as necessary to state the facts regarding the event.
- B. The report can be on the Event Report form (PS-2F) or in another form of writing such as email or written documentation. It should include date and time of the event, circumstances of the event, witnesses if appropriate, writer's name and signature.
- C. The event report should not be referred to in, or part of the Patient Care Report form.
- D. The event report should be completed within 48 hours, sooner if possible and sent to the attention of the EMS System Coordinator or the EMS Medical Director.
- E. The event report is not intended to take the place of normal reporting to a supervisor or agency leader. It should be in addition to those actions.
- F. Follow-up will occur through Blessing EMS Department if additional information is required or to answer questions.

### IV. IDPH Reporting

A. QAEMS will send a list of substantiated complaints and events to the IDPH Region 3 EMS Coordinator detailing the nature of the complaint and outcome on a monthly basis.

# QUINCY AREA EMS SYSTEM EVENT REPORT

DATE & TIME REPORTING:			
DATE & TIME OF EVENT:			
WAS THERE A NEGATIVE OUTCOME TO PATIENT:	☐ YES	□ NO	
NAME OF REPORTER:	SIGNATURE:		

11/97, 10/00, 8/12; 12/20 (reviewed: 8/95, 8/01, 3/07)

#### SUSPECTED CHEMICAL ABUSE ON DUTY

- I. Reporting suspected intoxication/personal misuse of drugs
  - A. When to report
    - 1. You observed the provider using an intoxicating substance.
    - 2. You observe behaviors/signs/symptoms that cause you to believe the provider is under the influence of an intoxicating substance.
    - 3. The provider is scheduled on duty, either paid or volunteer.
  - B. How to report
    - 1. Contact the Resource Hospital ER physician and provide information.
    - 2. Follow up with an Event Report to the EMS Department within 24 hours.
- II. Physical Exam/Lab work.
  - A. The Resource Hospital ER physician will request the provider voluntarily submit to a physical exam.
    - 1. If physical findings indicate possible substance abuse, a urinalysisand toxicological screen will be performed.
  - B. If the Resource Hospital ER physician finds no indication of substance abuse, the provider will be returned to duty.
  - C. If the exam/lab corroborates substance abuse or the provider refuses the exam, they will be placed "off-duty" for the remainder of their shift. A full investigation will be conducted by the EMS Medical Director or alternate.
- III. In the event that this policy conflicts with or duplicates a provision of a collective bargaining agreement that requires testing for drug use, the provider will contact their representative.
- IV. The Resource Hospital emergency department physician may request the provider in question to be evaluated by a physician at another hospital in the QAEMS system if closer.

#### JUST CULTURE

- I. Quincy Area EMS System leadership utilizes the principles of Just Culture to ensure a fair and just process. Just Culture is an established set of objective pathways utilized to identify if an event occurred due to a system or process issue, and / or due to human error.
- II. Duties: within the QAEMS system individual providers and agencies are held to a set of duties that spring from policies, protocols, laws and regulations, and commitments to each other and excellent patient care. These duties take three forms:
  - A. The duty to avoid causing unjustified risk or harm. Examples below (not allinclusive)
    - 1. Engaging in dishonorable, unethical or unprofessional conduct likely to deceive, defraud or harm the public.
    - 2. Use of alcohol or drugs while on duty.
    - 3. Verbal or physical abuse of a patient.
    - 4. Misrepresentation of licensure status.
    - 5. Abandonment or neglecting a patient requiring medical care.
    - 6. Mental impairment to the extent that the appropriate judgment, skill and safety required for performing the emergency care and life support functions for which the provider is certified cannot be exercised.
    - 7. Physical impairment to the extent that emergency care and life support functions for which the provider is certified, cannot be physically performed.
    - 8. Engaging in actions that cause the EMS Medical Director to believe that the continuation in practice by the provider would constitute an imminent danger to the public.
  - B. The duty to follow a procedural rule when functioning within the Quincy Area EMS System. Examples below (not all inclusive):
    - 1. Violation of the EMS Act or any rule promulgated under it.
    - 2. Failure to comply with QAEMS System Policies and Procedures.
    - 3. Falsification of any reports or orders, or making misrepresentations involving patient care.
    - 4. Unauthorized use or removal of narcotics, drugs, supplies or equipment from any ambulance, health care facility, institution, or other work place location
    - 5. Performing or attempting to perform emergency care, techniques or procedures without proper permission, certification, training or when under suspension.
    - 6. Committing a felony act while on or off duty.
  - C. The duty to produce a specific outcome or results. Examples below (not allinclusive)
    - 1. Failure to maintain a valid Illinois license.
    - 2. Failure to meet the educational and training requirements of the State or QAEMS system.
    - 3. Failure to maintain proficiency in the provision of the level of skills for which the provider is licensed.
    - 4. Failed to maintain or violated normal standards of performance and conduct including the EMT code of ethics.
    - 5. Medical misconduct or incompetence.

- 6. Discrimination in rendering care due to race, sex, creed, religion, national origin or ability to pay.
- III. Event/ breach of duty is any situation that may:
  - A. Fail to meet performance expectations.
  - B. Fail to comply with QAEMS System policies and procedures.
  - C. Fail to comply with professionalism expectations.
  - D. Create an inappropriate risk or harm to others.
  - E. Behave in a way that is not in the best interest of the QAEMS System.

#### IV. Procedure

- A. Use of Just Culture pathway is followed for investigation for all events, or breaches of duty. The pathway has three conclusions for single events which include:
  - 1. Human error: involves unintentional and unpredictable behavior that causes or could have caused an undesirable outcome either because a planned action is not completed as intended or the wrong plan is used to achieve anaim.
  - 2. At risk behavior: occurs when the individual drifts into unsafe habits, loses the perception of risk attached to everyday behaviors or mistakenly believes the risk to be justified.
  - 3. Reckless behavior: Knowingly choosing to place themselves or others in harm's way; placing their own self-interest above the rest of the System.
  - 4. When it is found that a participant or agency has committed a series of human errors or at-risk behaviors whose cause does not originate from within the System, it can result in disciplinary action if non-punitive remedial action has not been effective in changing the behavior.
- B. Action to be taken is determined by the investigation and pathway findings and will be documented on the Just Culture Documentation Form (PS-4-F). Actions include:
  - 1. Verbal coaching / counseling
  - 2. Written warning
  - 3. System suspension
  - 4. System probation

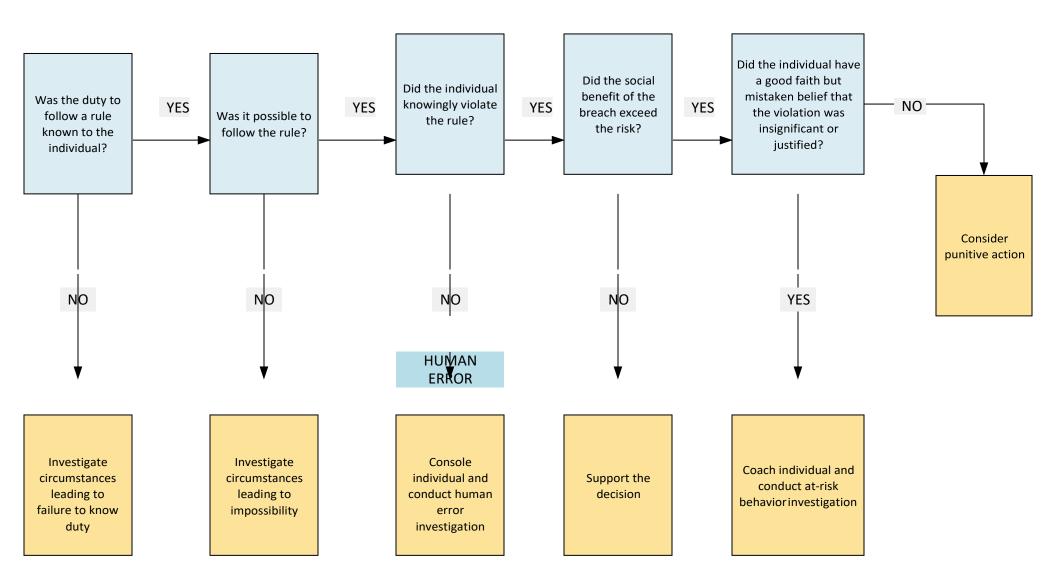
## JUST CULTURE DOCUMENTATION FORM

NAME:	DATE
LICENSE LEVEL	AGENCY
Describe the event	
date & time, breach of duty	
or duty	
Investigation Findings/Outcomes	
(attach any further	
documentation)	
Just Culture	Duty to follow a procedural rule
Pathway Used	<ul><li>☐ Duty to avoid causing unjustifiable risk or harm</li><li>☐ Duty to produce an outcome</li></ul>
	Repetitive errors
Has previous action been	given for this offense (repetitive):

OUTCOME	ACTION TAKEN		DATE
Human Error	Coaching / Cour	nseling	
At risk behavior or	Counseling		
Repetitive at-risk behavior	Written warning	g	
	Probationary st	atus	
	Suspension		
Reckless behavior or	Written warning	g	
Repetitive reckless behavior	Probationary st	atus	
	Suspension		
Length of suspension: Terms of suspension: If suspension, was due process offe explained? Date agency leader notified: Date IDPH EMS division notified:		□ <sub>YES</sub> □ <sub>NO</sub>	)
I have reviewed and understand th	is action:		
Printed name	Signature	Date	
EMS System Coordinator		Date	
EMS Medical Director or alternate		Date	

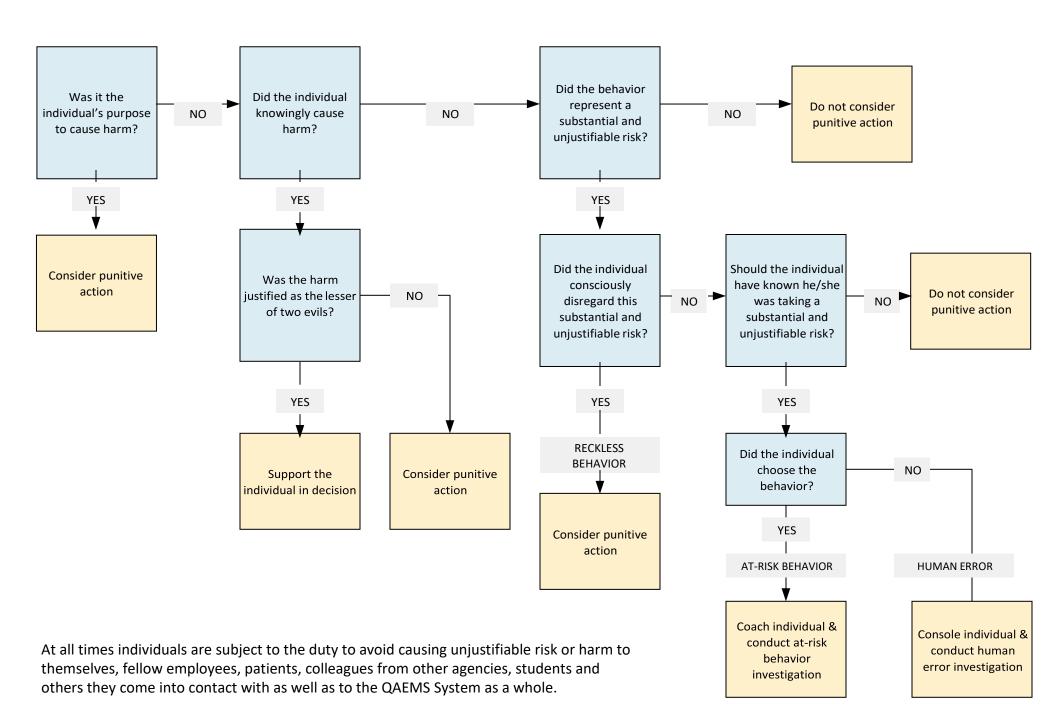
(Required signature if probationary status or termination)

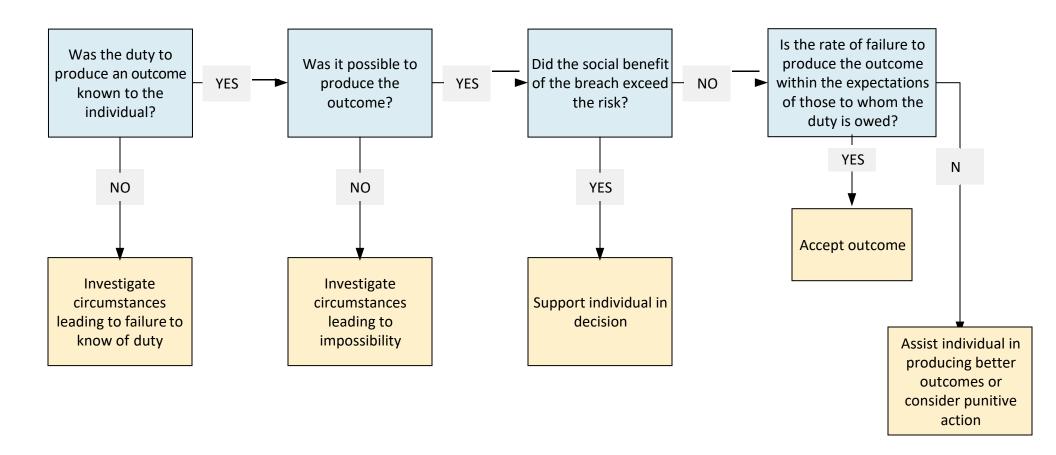
# JUST CULTURE ALGORITHM DUTY TO FOLLOW A PROCEDURAL RULE



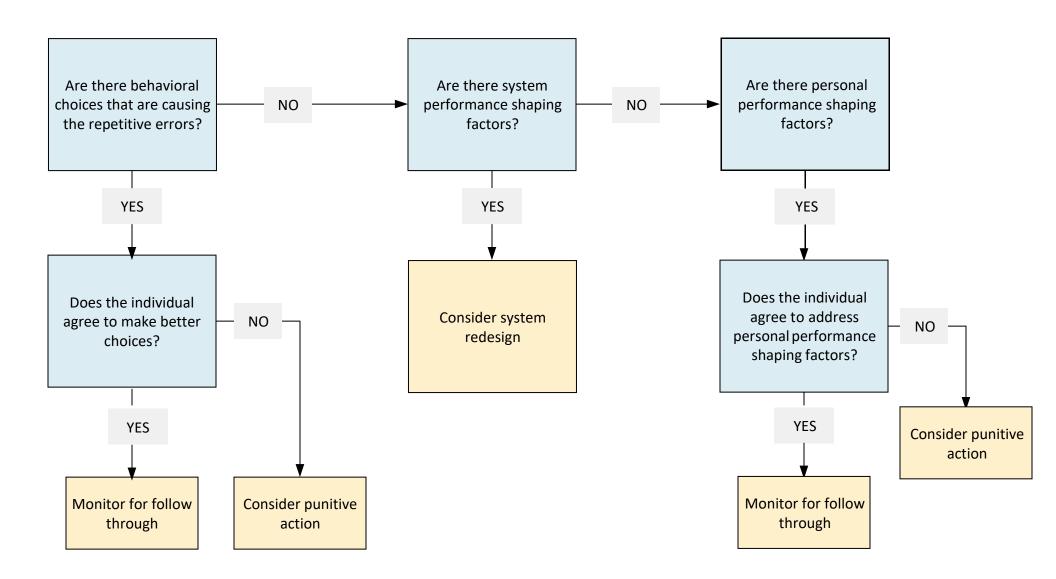
When working under a duty to follow a procedural rule within a System, an individual will be subject to punitive action when they have acted with reckless disregard toward the risk.

PS-4 appendix.2

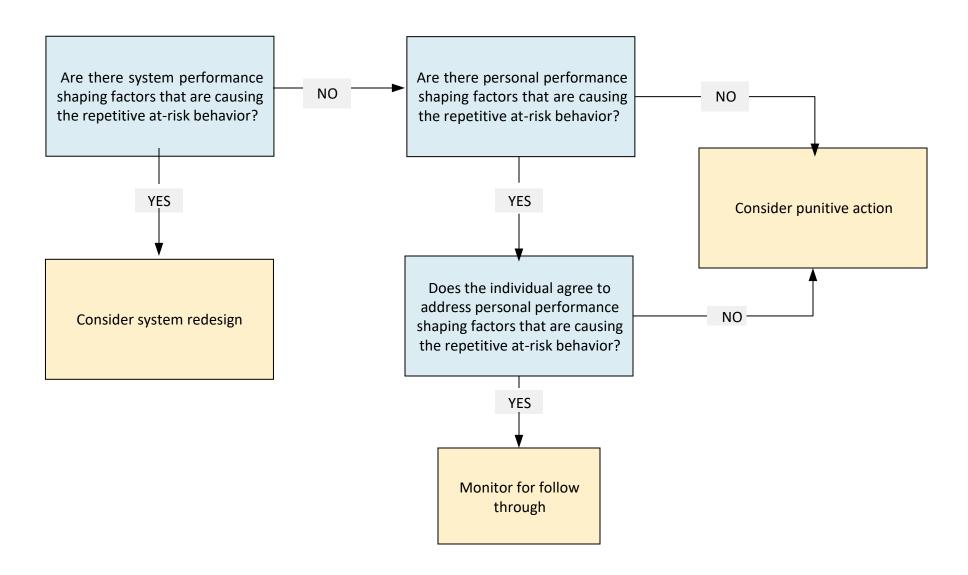




When working under a duty to produce an outcome, an individual will be held accountable as directed by code of conduct and policies. QAEMS policies put the individual on notice of the duty and acceptable outcomes.



If a series of human behaviors is not caused by system performance shaping factors, and is not correctable by changes in work choices or remedial education or training, the individual is put on notice that further errors will result in punitive action.



If a series of at-risk behaviors is not caused by system performance shaping factors, and the individual has not been responsive to behavioral coaching, the individual is put on notice that further at-risk behaviors will result in punitive action.

#### Filing a Complaint with the IDPH Central Complaint Registry

- I. Purpose of this policy: to familiarize System participants and provider agencies with the procedure for filing a complaint with the Illinois Department of Public Health Central Complaint Registry.
- II. Definition of complaint: a report of an alleged violation of the EMS Act or Administrative Rules pursuant to the Act by any System participants and/or providers covered under the Act. A complaint should be defined as problems related to the care and treatment of a patient.
- III. Procedure for Complaint Submission
  - A. Submit the complaint to:
    - 1. IDPH Central Complaint Registry\*\* and/or
    - 2. EMS Medical Director\*\*\*
    - 3. Trauma Center Medical Director (only if related to a trauma patient) \*\*\*
    - \*\*Complaints received by IDPH will be forwarded to the EMS System Medical Director and/or the Trauma Center Medical Director.
    - \*\*\* The EMS Medical Director and/or Trauma Center Medical Director will forward the complaint to the IDPH Central Complaint Registry within five working days of receipt of the complaint.
  - B. Form of submission
    - 1. Telephone call
      - a. IDPH Central Complaint Registry: 1-800-252-4343
      - b. EMS Medical Director: 217-223-8400 ext. 6590
      - c. Trauma Center Medical Director: 217-223-8400 ext. 6590
    - 2. Letter
    - 3. Fax
    - 4. In Person
  - C. Information required
    - 1. Date and time or shift of occurrence
    - 2. Names of the patient, EMS personnel, family members, and other persons involved.
    - 3. Relationship of the complainant to the patient or to the provider.
    - 4. Condition and status of the patient
    - Details of the situation
- IV. Complaint investigation
  - A. Confidentiality: IDPH and the EMS Medical Director and/or the Trauma Center Medical Director shall not disclose the name of the complainant unless the complainant consents in writing to the disclosure.

#### B. Notification of involved parties

 The substance of the complaint shall be provided in writing to the System participant and/or provider agency no earlier than at the commencement of an onsite investigation.

#### C. Investigation

- 1. Conducting the investigation
  - a) IDPH will conduct the investigation jointly with the EMS Medical Director or the Trauma Center Medical Director if a death or serious injury has occurred or there is imminent risk of death or serious injury, or if the complaint alleges action or conditions that could result in a denial, non-renewal, suspension or revocation of license or designation.
  - b) If the complaint alleges a violation by the EMS Medical Director, EMS System Coordinator or Trauma Center Medical Director, IDPH will conduct the investigation.
  - c) If the complaint alleges a violation that would not result in licensure or designation action, the IDPH will forward the complaint to the EMS Medical Director or Trauma Center Medical Director for review and investigation.
  - d) The EMS Medical Director or Trauma Center Medical Director may request the assistance of IDPH at any time during an investigation.
  - e) In a case between EMS Systems, the IDPH will be involved as mediator or lead investigator.

#### 2. Results of investigation

- a) The EMS Medical Director or Trauma Center Medical Director will forward the results of the investigation and any disciplinary action resulting from a complaint to IDPH.
  - (1) Documentation of the investigation will be retained at the hospital in accordance with EMS System improvement policies and will be available to IDPH upon request.
  - (2) The investigation file will be considered privileged and confidential in accordance with the Medical Studies Act [735 ILCS 5/8-2101].
- b) Based on the information submitted by the complainant and the results of the investigation conducted, IDPH will determine whether the Act or part of the Act is being or has been violated.
- c) IDPH will have final authority in the disposition of a complaint and will classify the complaint as "valid", "invalid" or "undetermined".
- d) IDPH will inform the complainant and the System participant or provider of the complaint results within twenty days after its determination.

e) A complainant or EMS System participant or provider who is dissatisfied with the determination or investigation by IDPH may request a hearing pursuant to section 515.160 of the EMS and Trauma Center Code. A request for a hearing shall be submitted to IDPH within thirty days after the determination is mailed.

# QUINCY AREA EMS SYSTEM QUALITY ASSURANCE PROTOCOLS

## Revised 11/2023

These protocols approved by

EMS Medical Director: Dr. Scott Hough

Associate EMS Medical Director: Dr. Christopher Solaro

Scott Hough, MD EMS Medical Director Christopher R Solaro, MD, PHD Associate Medical Director

## QUINCY AREA EMS SYSTEM QUALITY ASSURANCE

Data Collection and Evaluation	QA-1
Quality Assurance Guidelines and Standards	QA-2
Case Audit Form	QA-21
Blood Glucometer	QA-3
Cardiac Monitor and Manual Defibrillator System Tests	OA-4

## QUINCY AREA EMS SYSTEM DATA COLLECTION AND EVALUATION

#### I. Completion of Patient Care Report (PCR) forms

- A. A run report shall be completed by each vehicle service provider for every emergency pre-hospital or inter-hospital transport and for refusal of care.
- B. All non-transport vehicle providers (First responders, alternate response vehicles) shall document all medical care provided and shall make the documentation available to the EMS System within 24 hours. The Resource Hospital shall review all medical care provided by non-transport vehicles and shall provide a report to IDPH upon request.
- C. The Resource Hospital must approve PCR forms being utilized in the EMS System including electronic format forms to ensure they contain the minimum prescribed data elements as provided in Appendix 515.E of the IDPH Administrative Code for subchapter f Emergency Medical Services.

#### II. Disposition of Patient Care Report forms

- A) One copy of the PCR form shall be left with the receiving hospital emergency department, trauma center or health care facility before leaving this facility. If utilizing an electronic PCR form, the form can be submitted electronically. If the crew must depart the facility before the form is completed, it must be submitted before the end of the crew's shift.
- B) First Responders and Non-Transport agencies using paper forms must send a copy of the forms to Blessing EMS department by the 15<sup>th</sup> of the following month.
- C) Agencies must submit data as required to IDPH. If using an electronic format, the required information will be submitted to IDPH with an email confirming submission sent monthly to the EMS System Coordinator.
- D) Individuals should not maintain personal copies of PCR forms.

#### III. Resource Hospital Quality Control

- A. Agencies within the Quincy Area EMS System will grant specific Blessing Hospital EMS Department staff access to their ePCR system for Quality Improvement purposes *or*, *if using paper reporting and not an electronic ePCR*, *will provide a copy of a requested PCR form within 24 hours of the request.*
- B. The Resource Hospital shall develop and implement a mechanism for linking pre-hospital and inter-hospital run reports with emergency department, trauma center and admission records from the hospitals that receive emergency patients within the System. This mechanism shall facilitate tracking of case outcomes for purposes of internal quality control, medical study and improvement of both adult and pediatric patients.
- C. QAEMS will require all member agencies to develop internal QA/QI procedures that include the following at a minimum:
  - i. Monthly reporting of total number of EMS calls run. The total number of charts reviewed internally for compliance with QAEMS and IDPH requirements, and any issues identified along with corrective actions taken.
  - ii. All transport member agencies must review their performance on each of the following types of EMS calls: STEMI, stroke, sepsis, trauma, cardiac arrest. Identified issues must be reported monthly to QAEMS.
- D. QAEMS will review, on a monthly basis, all STEMI, stroke, sepsis and cardiac arrest PCRs. QAEMS will also review PCRs as requested by agencies, the public, IDPH, and will conduct random audits of care to ensure high quality EMS QA/QI.

re: 11/97, 5/98, 8/01, 9/04, 2/06, 2/10, 8/17, 8/23

## QUINCY AREA EMS SYSTEM QUALITY ASSURANCE GUIDELINES AND STANDARDS

- I. Objectives of quality assurance reviews
  - A. Review effectiveness of policies and procedures
  - B. Detect trends and repeated errors
  - C. Identify and acknowledge exceptional performance
  - D. Identify and correct substandard performance
  - E. Identify educational opportunities
- II. Analysis screens
  - A. Illinois patient care report forms including electronic PCR form
  - B. System event reports
  - C. ER radio logs
  - D. Patient report tapes
  - E. Complaints
- III. Corrective Measures
  - A. Plan and conduct educational activities
  - B. Create policy and procedure
  - C. Amend policy and procedure
  - D. Issue commendations
  - E. Take disciplinary actions
- IV. Review Indicators: May change as specific System needs are identified.
  - A. Trauma)
    - 1. Time on scene
    - 2. Oxygen if needed
    - 3. Was care appropriate to patient condition
  - B. STEMI
    - 1. Documentation of oxygen if needed
    - 2. Documentation of 12 lead EKG
    - 3. Documentation of medications administered

## C. Stroke

- 1. Documentation of the Cincinnati stroke scale
- 2. Documentation of onset
- 3. Documentation of blood sugar
- 4. Documentation of oxygenation

## D. Other Review Indicators

- 1. Cases requested for review
- 2. Incomplete forms
- 3. Unusual circumstances
- 4. Exceptional performance

re: 11/97,

# QUINCY AREA EMS SYSTEM CASE AUDIT FORM

DATE	<b>:</b> _	Form / IC	)## <u> </u>	
SITU	ATION/PATIENT COMPLAINT:			
REVIEW INDICATOR:				
	Cardiac Arrest (includes hypothermia) Chest Pain Stroke/CVA Pediatric (one day to 13 years old)		Incomplete Form Unusual Circumstances Request for Review Random Audit	
Com	ments:			
Reco	mmended Corrective Measures:			
Audit	tor Signature:		Date:	
Date	Sent:			
Date	Received:			
Date	Reviewed:			
Audit	Completion: No Further Action	☐ Actio	on Taken:	

## QUINCY AREA EMS SYSTEM QUALITY ASSURANCE GUIDELINES AND STANDARDS

- I. Objectives of quality assurance reviews
  - A. Review effectiveness of policies and procedures
  - B. Detect trends and repeated errors
  - *C.* Identify and acknowledge exceptional performance
  - D. Identify and correct substandard performance
  - E. Identify educational opportunities
- II. Analysis screens
  - A. Illinois patient care report forms including electronic PCR form
  - B. System event reports
  - C. ER radio logs
  - D. Patient report tapes
  - E. Complaints
- III. Corrective Measures
  - A. Plan and conduct educational activities
  - B. Quarterly trauma/case reviews
  - C. Create policy and procedure
  - D. Amend policy and procedure
  - *E.* Issue commendations
  - *F.* Take disciplinary actions
- IV. Review Indicators: May change as specific System needs are identified.
  - A. Trauma)
    - 1. Time on scene
    - 2. Oxygen if needed
    - 3. Was care appropriate to patient condition
  - B. STEMI
    - 1. Documentation of oxygen if needed
    - 2. Documentation of 12 lead EKG
    - 3. Documentation of medications administered

- C. Stroke
  - 1. Documentation of the Cincinnati stroke scale
  - 2. Documentation of onset
  - 3. Documentation of blood sugar
  - 4. Documentation of oxygenation
- D. Other Review Indicators
  - 1. Cases requested for review
  - 2. Incomplete forms
  - 3. Unusual circumstances
  - 4. Exceptional performance

# QUINCY AREA EMS SYSTEM CASE AUDIT FORM

DATE	:	Form / ID	D#	
SITU	ATION/PATIENT COMPLAINT:			
	REVIEW	/ INDICATOR:		
	Cardiac Arrest		Incomplete Form	
	STEMI		Unusual Circumstances	
	Stroke		Request for Review	
	Pediatric (one day to 13 years old)		Random Audit	
	Trauma			
Comn	nents:			
Recor	mmended Corrective Measures:			
Audit	or Signature:		Date:	
Date:	Sent:			
	Received:			
Date	Reviewed:			
Audit Completion: No Further Action		☐ Actio	Action Taken:	

## DAILY EQUIPMENT CHECKS BLOOD GLUCOMETER

- I. Glucometer tests will be used to identify and resolve significant sources of error.
  - A. A daily operation test will be performed on each Glucometer at the beginning of each shift using the plastic test strip provided with the instrument.
  - B. A control will be performed weekly on each blood Glucometer according to the manufacturers recommended procedures.
  - C. If any control test exceeds limits, do not use that instrument for patient testing until the problem is reconciled.
  - D. A written record will be maintained of each test which documents the instrument tested and the results of the test. This record will be kept on the ambulance with the blood Glucometer until the next test is performed. The previous test record may be transferred to a central location to be kept on file. Copies shall be made available to the EMS office upon request.
  - E. Each test record must consist of at least the following:
    - 1. serial number, make and model of the instrument
    - 2. date of test
    - 3. results of test
    - 4. signature of person performing the test
    - 5. steps taken to resolve any problem with the instrument or controls
  - F. After each patient use, record the Glucometer reading on the test record and the results of the control test performed.

4/95, re: 11/97, 2/06 (reviewed 8/01, 12/20)

#### **CARDIAC MONITOR AND MANUAL DEFIBRILLATOR SYSTEM TESTS**

Tests will be regularly conducted on cardiac monitors and manual defibrillators to identify and resolve conditions that could lead to possible malfunction.

- 1. A daily operational test of all manual defibrillators in service will be conducted and documented utilizing the manufacturer's guidelines.
- 2. Records of all tests and documentation or corrective actions taken must be kept on file by each service a minimum or 2 years. Copies shall be made available to the EMS office uponrequest.
- 3. Periodic testing, evaluation, and maintenance will be performed on each cardiac monitor and/or manual defibrillator in service according to the manufacturer's guidelines. Records of required periodic maintenance and testing must be maintained by the EMS agency for a minimum of 24 months and be made available to the EMS System upon request.