

Quincy Area EMS System

STUDY GUIDE

ECRNs and Paramedics



2026 Version

Policies can be reviewed on-line at:

blessinghealth.org

Click "I WANT TO"

Click "EXPLORE SCHOOLS AND PROGRAMS"

Click "EMERGENCY MEDICAL SERVICES" then

Click "QAEMS Policies and Procedures"

OPERATIONAL PROTOCOLS

1. The Resource Hospital can be asked to intervene or override orders from an Associate Hospital when:

Intervention Policy

- A. No radio response by the receiving hospital after 3 attempts by the prehospital unit.
- B. Deviation from Quincy System defined treatment protocols, disposition, or communication protocols.
- D. When the Associate Hospital requests the intervention.
- E. When an ALS crew requests the intervention.

(O-5)

2. Prior to accepting a refusal from a patient that you have determined to be low risk, you should:

Refusal Procedure

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 risks associated with their decision to refuse treatment/transport.
- C. *Medical Control MUST be contacted via radio or phone to verify acceptance of the refusal for all **HIGH RISK REFUSALS**.*

(O-6)

3. You respond to a call regarding a patient with history of diabetes and decreased level of consciousness. Upon arrival, you find a 55 y/o male, conscious, responsive with skin moist and cool to the touch. blood glucose reading is 36. After administration of Dextrose 10%, the patient is alert, oriented and states feeling “much better”. The patient and spouse thank you for your treatment, but do not feel the need for transport as you “fixed” him. In this case, you realize you:

REFUSALS

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.

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. (O-6.1)

4. Your patient is refusing treatment and transport after an MVC. Under which circumstance would you be able to accept a refusal at the scene without calling report to Medical Control?

● Low Risk Refusals (**NO need to call Medical Control**)

- 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
- (O-6.2)

5. Which statement regarding patient refusal is correct?

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

(O-7)

6. The START program is used to triage patients involved in a MASS Casualty Incident. It consists of assessing for three basic components which include

STEP 1: 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)

(O-12.b)

7. The disaster tag system used in the QAEMS System in the event of a major EMS Incident is called the:

QAEMS SYSTEM USES **SMART TAG**

(O-12-F)

8. Which situation does not require an EMS physician to be present at Medical Control radio/phone?

PHYSICIAN TO THE OPERATIONAL CONTROL POINT (RADIO)

- A. A decision regarding where a patient is to be transported needs to be made by the resource hospital. (O-4)
- B. Intervention by the resource hospital is indicated. (O-5)
- C. A major EMS incident is declared. (O-12)
- D. When a Quincy 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. (O-27)

9. Patients with serious trauma may need interventions that are not available in the pre-hospital setting, making rapid transport a priority. Which of the following are considered **“load and go”** situations:

Certain signs/symptoms require the trauma patient to be immediately loaded onto a spine board, transferred to the ambulance, and transported rapidly with lights and siren. Non-lifesaving procedures (such as splinting and bandaging) may be needed but should be done during transport. Life-saving procedures must not delay transport.

The following are critical situations that require **“load and go”**

- 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

(O-23)

10. Unless delayed by extrication or other mitigating circumstances, the goal is to have an on scene time of ten minutes or less when the patient is seriously injured. Which procedures should be initiated while en route to the hospital?

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. Oxygen/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...

(O-23)

11. An In-Field Service Level Downgrade can occur when:

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 not 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.

12. Criteria to request a scene response by a helicopter air ambulance would include:

Criteria for Helicopter

- Category I trauma or seriously ill patient in remote or off-road locations not easily accessible to ground ambulances, or whose location may cause delay in transport time.
- MVC or incident with prolonged extrication time anticipated (> 20 minutes).
- 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).
- No available trauma center within 20 minutes by ground transport time.
- Reduction in transport time to a trauma center compared to ground transport for the seriously injured patient
- Ground transport resources are exhausted or exceeded (multi-casualty or multiple calls).

(O-28.1)

13. Examples of possible System-wide crisis that might necessitate activation of the System Wide Crisis plan includes all of the following:

Examples of possible System-wide crises:

- 1. Heat emergency
- 2. Communicable disease
- 3. Influenza epidemic
- 4. Terrorist act involving a nuclear, biological or chemical agent

(O-32.1)

14. Appropriate procedures involving uninjured students from a school bus accident (category II) include:

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.

- 1. 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.
- 3. 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. O-37.2
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 Form.

APPROVED PROCEDURES

15. The preferred site for needle chest decompression is:

DECOMPRESSION SITE

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

(AP-1)

16. You respond to a one-vehicle car crash in a remote area. Upon assessment of the driver, you note the patient to be in acute respiratory distress with absent breath sounds on the right side, jugular vein distention, hyperresonance to percussion on the right chest wall, normal heart tones and tracheal deviation to the left. You suspect:

INDICATIONS

- A. Procedure is performed when tension pneumothorax is suspected. Tension pneumothorax is a life-threatening emergency in which air enters the pleural space 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
 1. Unilateral decreased or absent breath sounds
 2. 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)

(AP-1)

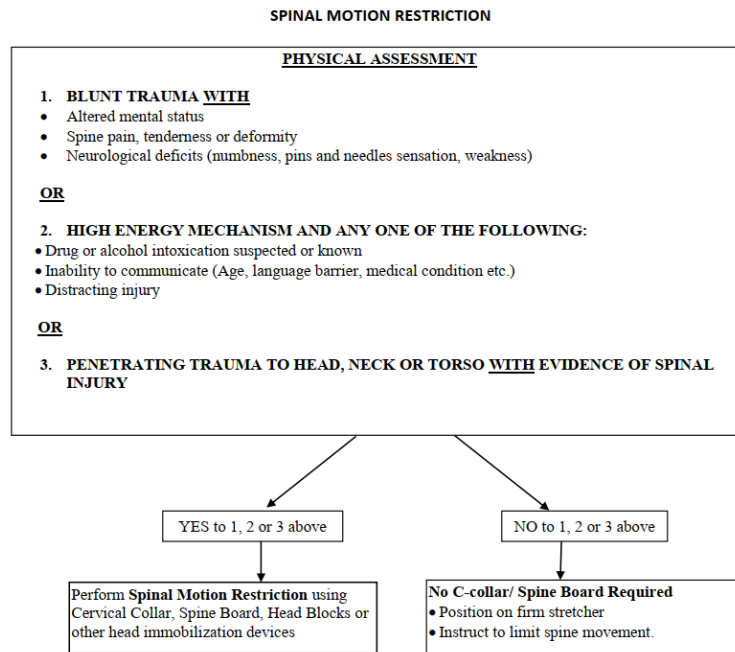
17. On a snow-covered road, you arrive to find a driver involved in a MVC, car vs electric pole with estimated speed of 30 mph. Driver was belted and airbags did deploy. The patient is ambulating at the scene and reports neck pain of 3/10 when questioned. No signs of alcohol intoxication are present. Due to road conditions, transport time to receiving hospital is 50 minutes. The most appropriate steps would be to:

- **Other PEARLS for consideration...**

- 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 over immobilization.)
- Spine boards should be removed in the Emergency Department at the discretion of the ED Physician at the earliest appropriate time.
- **If in doubt, follow spinal motion restriction guidelines**

18. Which patient would require spinal motion restriction using a long spine board?

INDICATIONS for spinal motion restriction



(AP-2)

19. Which statement is FALSE regarding adult endotracheal intubation?

INDICATIONS

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

CONTRAINDICATIONS

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

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

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 (AP-6.1)

20. You are having difficulty placing an endotracheal tube in patient with respiratory rate of 6/min. You quickly recall the contraindications of an iGEL airway. Which patient would be appropriate to use an iGEL airway?

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. CONTRAINDICATIONS

- 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 (AP 7.5)

21. Which is a NOT a potential complication of IV therapy?

COMPLICATIONS of IV THERAPY

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

(AP-10.1)

22. When delivering medications for bronchospasm with wheezing via the nebulizer route in the prehospital setting, the oxygen flow rate to the medication reservoir chamber should be set to?

PROCEDURE

- A. Prepare patient – explain procedure, apply cardiac monitor (ALS), pulse oximetry, obtain vital signs and lung sounds as baseline.
- A. Gather equipment – choose mask or handheld device based on patient condition.
- B. Instill the medication into the medication chamber and assemble the device.
- C. Connect to oxygen and set flow rate at 6-10 LPM to produce a steady visible mist.
- D. Coach the patient to inhale and exhale slowly and deeply through the mouth.
- E. 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.

- F. Reassess patient for response to treatment – lung sounds, respiratory status, vital signs, pulse oximetry, cardiac rhythm (ALS)

(AP-13)

23. You are transporting a 55 y/o male patient who was diagnosed with anterior MI. Your patient has a rhythm change which you identify as ventricular tachycardia. The patient is now restless and confused. His skin color is ashen and feels cool and clammy. BP is 68mmHg systolic. Your next action should be:

TREATMENT OF SYMPTOMATIC V-TACH WITH PULSE

- If ventricular rate > 150 with serious signs and symptoms related to the tachycardia, prepare for immediate cardioversion.
- S&S may include chest pain, dyspnea, decreased level of consciousness, low blood pressure, pulmonary congestion, AMI

(AP-17.1)

24. The approved site for EZ IO insertion by ALS ground crews is the

APPROVED SITE

Currently, the only site approved for use in the QAEMS system by ground crews is the proximal tibia.

EZ IO PROCEDURE

- Don appropriate PPE.
- Aseptic technique must be used.
- Identify landmarks at the proximal tibia site and choose a needle set appropriate to patient weight.
- Attach the needle set to the driver.
- Cleanse the site.
- Stabilize the extremity. Do NOT position your hand behind the site.
- 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.
- 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.
- Stabilize the needle set hub while removing the driver by pulling it straight off. Do not rock, twist or turn the driver.
- 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.
- 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.
- 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.
- 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.
- 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

(AP-19.2)

25. According to protocols, which patient can the paramedic attempt an EZ IO placement if a peripheral line is unable to be obtained?

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

(AP-19)

26. During cardiac arrest, it is often easier to gain IV access via intraosseous (IO) approach. Which is a contraindication to EZIO™ needle insertion?

EZIO™

PURPOSE: Provides an alternative means to gain rapid vascular access in the cardiac arrest patient.

I. Indications: Adult 40 kg or greater (over 88 lbs) in cardiac arrest

- A. EZ IO™ may be considered PRIOR to peripheral IV attempts for cardiac arrest (medical or trauma)

II. Contraindications

- A. Fracture of the tibia or femur (consider alternate tibia)
- B. Previous orthopedic procedures (IO within 24 hours, knee replacement)
- C. Pre-existing medical condition (tumor near site, peripheral vascular disease)
- D. Infection at insertion site (consider alternate site)
- E. Inability to locate landmarks (significant edema)
- F. Excessive tissue at insertion sites (obesity)

(AP-25.1)

27. Which patient would benefit from CPAP therapy enroute to the hospital?

Ventilator Management: CPAP

Indications:

- A. Awake and able to follow commands
- B. Is over 12 years old and is able to fit the CPAP mask
- C. Has the ability to maintain an open airway
- D. AND exhibits two or more of the following:
 - 1. A respiratory rate greater than 25 breaths per minute
 - 2. SPO₂ of less than 94% at any time
 - 3. Use of accessory muscles during respirations

Contraindications

- A. Patient is in respiratory arrest/apneic
- B. Patient is suspected of having a pneumothorax or has suffered trauma to the chest
- C. Patient has a tracheostomy
- D. Patient is actively vomiting or has upper GI bleeding
- E. Patient has decreased cardiac output, obtundation and questionable ability to protect airway, (i.e. stroke), penetrating chest trauma, gastric distention, severe facial injury, uncontrolled vomiting and hypotension secondary to hypovolemia.

(AP-26)

28. Continuous Positive Airway Pressure (CPAP) has been shown to rapidly improve vital signs, gas exchange and reduce work of breathing. Which patient would be a candidate to receive Continuous Positive Airway Pressure (**CPAP**) management?

Indications to CPAP Therapy

Any patient who is in respiratory distress with signs and symptoms consistent with asthma, COPD, pulmonary edema, CHF, or pneumonia **and** who is:

- A. Awake and able to follow commands
- B. Is over 12 years old and is able to fit the CPAP mask
- C. Has the ability to maintain an open airway
- D. **AND** exhibits two or more of the following:
 - 1. A respiratory rate greater than 25 breaths per minute
 - 2. SPO₂ of less than 94% at any time
 - 3. Use of accessory muscles during respirations

Contraindications to CPAP Therapy

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

(AP 26.1)

29. Application of a tourniquet is an effective means to control severe bleeding when other methods have failed. Of the following patients with uncontrolled hemorrhage, which treatment does follows the procedure for tourniquet application and/or monitoring of patients with a tourniquet

Tourniquet - Procedure

- a. The CAT tourniquet (or equivalent) is the 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. Tighten until bleeding stops (venous oozing is acceptable) and/or distal pulse is absent.
- e. If one tourniquet is not sufficient a second should be applied just proximal to the first.
- f. Do not cover the tourniquet with a dressing.
- g. Once a tourniquet has been applied, do not remove or loosen it unless ordered by medical direction.
- h. Note time of tourniquet application and communicate this to the receiving care providers.

(AP 27.1)

30. Appropriate application, assessment and indication for use of a tourniquet includes:

Tourniquets

- I. **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

(AP-27)

MEDICAL PROTOCOLS

31. Supine-hypotension syndrome can occur in the pregnant trauma patient over _____ weeks gestation when the enlarged uterus compresses the _____

Supine-Hypotensive Syndrome

- A. May occur in pregnant patients over 20 weeks gestation due to the gravid uterus compressing the inferior vena cava when the patient is supine.
- B. Treatment
 - 1. Administer oxygen
 - 2. Place the patient on her left side
 - 3. Initiate an IV line and administer a fluid bolus if needed to maintain blood pressure at a minimum of 100 systolic. (ALS)
 - 4. Consider use of PASG (MAST) leg sections only*
*(Note: BLS to contact Medical Control before inflating.)
 - 5. Monitor vital signs and fetal heart tones

(PHTLS)

32. You have been called to transport a 56 year old male patient who has experienced an acute MI. The patient becomes unresponsive, no carotid pulse detected and you note the following rhythm on the cardiac monitor. You identify this rhythm as:

ACLS RHYTHM IDENTIFICATION

(ACLS)

33. Post-intubation sedation considerations would include:

Diazepam 5m slow IV push or Fentanyl 50mcg slow IV push

34. Which is an indication for endotracheal intubation?

Indications: -Comatose patients with inadequate airway and -Respiratory arrest

(MP-2)

35. What medication/dosage may be given in the pre-hospital setting to control severe pain prior to any contact with Medical Control?

MORPHINE:

- a) Adult: Initial dose of 2 mg IVP may be given prior to contacting Medical Control.
May repeat x 1. Contact Medical Control for additional doses.
- b) Pediatric: Must call Medical Control prior to administration 0.1 mg/kg IVP

FENTANYL

- a) Adult: Initial dose of 50 mcg mg IVP may be given prior to contacting Medical Control.
May repeat x 2. Contact Medical Control for additional doses.
- b) Pediatric: Must call Medical Control prior to administration 1 mcg/kg IVP (max 25mcg)

(MP-3)

36. Routine cardiac care for patient with chest pain includes:

PATIENTS WITH CHEST PAIN AND/OR POSSIBLE AMI

- Administer O₂ to achieve target saturation of 94% or greater (92% in COPD)
- Start IV normal saline to keep vein open
- Monitor cardiac rhythm (ALS)
- Nitro 0.4mg SL is BP if appropriate
- MS 2 mg IV is appropriate
- Administer four 81 mg aspirin tablets.

(MP-4)

37. You are transporting a cardiac patient. Suddenly, the monitor shows asystole and no pulse is detected. Your initial steps in caring for this patient would include

ACLS SKILLS

(MP-5)

38. Which patient would you consider administering external (transcutaneous) pacing?

INDICATIONS:

- A. Symptomatic and hemodynamically unstable bradycardias:
1. sinus or junctional
 2. 2^o block, type I
 3. 2^o block, type II
 4. 3^o block

CONTRAINDICATIONS:

non-symptomatic patient

(MP-6)

39. Your patient is experiencing chest pain, confusion and hypotension. You attach the monitor and identify sinus bradycardia with a rate of 32. Proper treatment would include:

INTERVENTION SEQUENCE

- Atropine 1 mg IVP every 3-5 minutes up to max of 3 mg
Transcutaneous pacing
If low blood pressure after rate increases:
* Dopamine IV at 5-20 mcg/kg/minute
OR
* Epinephrine IV drip at 2-10 mcg/minute

(MP-6)

40. You are transporting a 60 y/o female patient who was diagnosed with AMI. Minutes after transport began, your patient has a rhythm change which you identify as wide complex ventricular tachycardia. She is alert and oriented, and her color is pale. She denies dyspnea or chest pain. BP 100/58 P 140. Which would be an appropriate initial treatment of this patient?

STABLE WIDE COMPLEX TACHYCARDIA

- Assure airway patency and administer O₂ at high flow, cardiac monitoring, IV
Administer Lidocaine 1-1.5 mg/kg IV push

(MP-7)

41. Your patient is complaining of severe chest pain and dyspnea. During your assessment, the patient becomes semiconscious and diaphoretic. The monitor is showing a tachycardic rhythm with a rate greater than 170 beats per min. You should:

UNSTABLE TACHYCARDIA

Synchronized Cardioversion (50-100J, 200J)

42. The initial dosage for Adenosine administration is _____, and the correct second dosage is _____ .

Administration of Adenosine

Administer Adenosine 6 mg per the following method: A syringe of Adenosine and a second syringe of 10-20 ml of normal saline should be prepared. The Adenosine is given rapid IV push followed immediately by the flush of normal saline. If the tachycardia persists after 1-2 minutes and the rhythm is still thought to be PSVT, then consider Adenosine 12 mg, rapid IV push by the method outlined above.

(MP-7)

43. Treatment goals for the patient with pulmonary edema includes preventing hypoxemia and subsequent respiratory failure. Medications to be considered in the treatment regimen include

First Line Action

Oxygenation (Intubate if needed)
Nitroglycerin SL
Morphine 2 mg IVP

(MP-8)

44. A patient has signs and symptoms of acute pulmonary edema and a heart rate of 90. Prehospital treatment may include

First Line Action

Administer O₂ to achieve target saturation of 94% or greater (92% in COPD)
Nitroglycerin SL 0.4mg,
Morphine 2 mg IVP*

(MP-8)

45. Medications indicated for the prehospital treatment of asthma include:

Asthma

Administer O₂ to achieve target saturation of 94% or greater (92% in COPD)
Administer Methylprednisone 125mg IV and/or
Administer 2.5 mg of albuterol / 3mL via nebulizer

(MP-9)

46. Which is NOT indicated in the care of the adult patient in anaphylactic shock?

Medications (ALS)

1. Administer **epinephrine** 1:1,000 solution
Adults: 0.3 mL subcutaneously for a mild reaction
2. Administer **Benadryl**:
Adults - 25 mg slow IV push
3. If patient is conscious, Albuterol 2.5 mg via nebulizer may be considered but must be used with extreme caution if epinephrine has been administered
4. Methylprednisolone 125mg IV

B. Epi-Pen (BLS)

1. BLS transport and BLS non-transport agencies: (Per protocol AP-24)
 - a. Epi pen 0.3 mg IM
 - b. Epi pen (Pediatric) 0.15 mg IM
2. EMT-B's working for First Responder agencies can assist the patient with Epi-pen injection

47. A search for an IV site continues on a patient with a blood sugar of 38. Which of the following is a possible treatment option for this patient?

EMT and Paramedic able to administer Glucagon, 1mg IM or IN.

(MP-14)

48. Pre-hospital orders/care for the adult insulin dependent diabetic patient may include

Determine blood glucose level with a Glucometer (ALS)

1. If blood glucose level is less than 60 mg/dl:
 - a) Establish IV of Normal Saline, TKO rate (ALS)
 - b) Administer 100 mL of 10% Dextrose IV push (ALS)
 - c) Administer 1 mg Glucagon IM, if IV is not obtainable and patient is unresponsive or unable to swallow (BLS/ALS)

(MP-14)

49. Which would indicate the emergent use of a Central Venous Access Devices (CVAD's) in the pre-hospital setting after 3 failed attempts at peripheral IV access?

GENERAL INFORMATION: (ALS)

- A. Utilize a dialysis access only if IV and IO is unsuccessful and the patient is in cardiac arrest or near cardiac arrest.

Purpose:

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

-Emergency situations include:

1. Cardiac arrest
2. Major trauma
3. Life-threatening situation requiring immediate need for medication or fluid therapy

(MP-15)

50. Which presenting sign and/or symptom would prompt the provider to consider potential for emerging infectious disease, adherence to PPE and alert to the receiving facility?

Signs and Symptoms

Fever > 100.4°F

Cough, Shortness of Breath

Nasal/chest congestion

Sore Throat, Body aches

(MP-16)

51. An adult patient is being transported to you via ground EMS with severe nausea and vomiting. You know that the correct **drug/dose** for the active vomiting patient in the pre-hospital setting is:

NAUSEA & VOMITING

- A. If the patient has a complaint of nausea or vomiting:

1. Administer:
 - a) Adults: Zofran 4 mg slow IVP. Repeat dose X (1) if necessary in 15 minutes
 - b) Pediatrics: Must contact Medical Control prior to administration
 - c) Phenergan (promethazine) 12.5mg diluted in 10mL NS, slow IVP

(MP-18)

52. After normal delivery of an infant and placenta, you note that the mother is pale, hypotensive and bleeding heavily from the vagina. Your initial steps in caring for this patient would include:

Severe Post-Partum Hemorrhage (TXA)

QAEMS OB DELIVERY WITH COMPLICATIONS		MP-34
OB HISTORY <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Prolapsed cord: umbilical cord is protruding from the vagina. Shoulder dystocia: Head delivers then retracts tightly against the mother's perineum (turtle sign) or shoulder does not deliver with next two contractions. Breech: presenting part other than the fetal head. 	DIFFERENTIAL <ul style="list-style-type: none"> Prolapsed cord Abnormal presentation – buttocks, foot, hand Shoulder dystocia Other issue POST-PARTUM HEMORRHAGE <ul style="list-style-type: none"> Consider TXA Consider Pitocin

(MP-34)

ROUTE	<ul style="list-style-type: none"> IV infusion
DOSE	<ul style="list-style-type: none"> Post-Partum Hemorrhage: 1 gram in 100mL NS, slow infusion. Hemorrhagic Shock, Trauma with Hypotension, Massive GI Bleeds: 2 grams in 100mL NS, slow infusion.

(M-1.33)

53. Prehospital care of the unconscious patient of undetermined cause would include:

OVERDOSE-ALTERED MENTAL STATUS

- Finger stick glucose to rule out hypoglycemia. (ALS)
 - If hypoglycemic, treat per protocol
- Administer Naloxone in the patient suspected of having a narcotic overdose (ALS)
 - Adult: 1-2 mg IV, IO, IM, IN – may repeat in 2-3 minute intervals for 2-3 doses if no response.
- Monitor vital signs, level of consciousness and cardiac rhythm (ALS). (MP-19)

54. Atropine is an antidote for organophosphate poisoning including Malathion and Diazinon. The correct dose for treatment of organophosphate poisoning is:

Atropine 2-5 mg every 10-15 minutes

- Organophosphate poisoning – insecticides
 - Parathion
 - Malathion
 - Diazinon
 - TEEP

(MP-19)

55. Prehospital care of the patient with chief complaint of cellulitis, systolic BP 80, decreased level of consciousness and failed out patient antibiotic therapy with via PICC line includes:

Suspected Sepsis Infection:

- IV Access
- Begin NS 1000mL infusion
- If systolic <90mmHg, consider septic shock which may require boluses to max of 30mL/kg

(MP-22)

56. Shock patients require immediate recognition, transport and treatment to produce the best outcomes. Signs and symptoms exhibited in the shock patient may include:

Signs and Symptoms of Shock

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

(MP-22)

57. The Cincinnati Stroke Scale includes the following parameters:

STROKE

- I. A stroke should be considered an emergent situation. Depending upon the type of stroke, patients may be candidates for thrombolytic (clot buster) therapy in the emergency department. Time is critical and on scene time should be kept to a minimum for all patients with signs and symptoms of stroke.
- II. Assessment: All possible stroke patients should have the following assessed...
 - A. Level of consciousness
 1. AVPU
 2. Glasgow Coma Scale
 - B. **Cincinnati stroke scale – 3 components.**
 1. Facial droop (Ask the patient to smile)
 - a. Normal: Both sides of face move equally
 - b. Abnormal: One side of face does not move
 2. Speech (Ask the patient to repeat a simple sentence.)
 - a. Normal: Patient uses correct words with no slurring
 - b. Abnormal: Slurred or inappropriate words or unable to speak
 3. Arm drift (Ask patient to close eyes and hold arms straight out in front of them.)
 - a. Normal: Both arms move equally or not at all
 - b. Abnormal: One arm drifts compared to the other
 - C. Finger stick glucose
 - D. Determine time of “*last known well*” (This will be a critical determinant in the decision to give thrombolytic agents to the patient in the Emergency Depart.)
 - E. Obtain SAMPLE history (It is especially important to determine what medications the patient is taking.)

(MP-23)

58. Which of the following statements regarding the care of an amputated part is NOT true?

PREHOSPITAL PROTOCOL FOR AMPUTATED PARTS

Prehospital protocol for handling amputated parts intended for reanastomosis.

- Any gross contaminants on the part should be removed by rinsing the part in sterile saline solution.
- No attempt should be made to debride or otherwise clean up the amputated part.
- The part should be rinsed, wrapped in a moist but not wet sterile dressing, placed in a plastic bag and tightly sealed to prevent direct contact with liquid substances. The sealed bag should then be placed in iced saline or sterile water.

-Cover stump with sterile dressing.

-Patient transport should not be delayed by the search for the amputated part. Search can be continued by other personnel (i.e. 2nd ambulance, fire, law enforcement) while patient is transported.

(MP-24)

59. Which of the following statements is true regarding the prehospital treatment of serious burns?

TREATMENT OF BURNS

Airway Management - be alert to the possibility of associated pulmonary injuries if the burn occurred in an enclosed space or during an explosion. Note any toxic fumes.

5. Ensure patent airway
6. Suction if necessary
7. Utilize oral or nasal airway as needed
8. Perform endotracheal intubation if necessary (ALS)

Oxygenation/Ventilation

9. Administer oxygen
10. Assist ventilations if necessary
11. Monitor O2 saturation if pulse oximetry is available to 94% or greater

Pain Management

Morphine 2-4mg IV or Fentanyl 25-50 mcg IV

(MP-25)

60. You are called to the scene of a house fire. A fifty-year-old female is complaining of dyspnea and burns to her face and anterior chest. Upon assessment you note singed eyebrows, sooty deposits in the mouth and nose and blistering of her right cheek, forehead and anterior chest with estimate 20% TBSA burn. You suspect the patient has an injury involving the respiratory tract. Treatment for this patient would include:

TREATMENT OF BURNS

Airway Management - be alert to the possibility of associated pulmonary injuries if the burn occurred in an enclosed space or during an explosion. Note any toxic fumes.

- i. Ensure patent airway
- ii. Suction if necessary
- iii. Utilize oral or nasal airway as needed
- iv. Perform endotracheal intubation if necessary (ALS)

Oxygenation/Ventilation

- v. Administer oxygen
- vi. Assist ventilations if necessary
- vii. Monitor O2 saturation if pulse oximetry is available to 94% or greater

Pain Management-Morphine 2-4mg IV or Fentanyl 25-50 mcg IV

(MP-25)

61. You arrived at a chest pain call to find a 60 y/o female lying on the kitchen floor. Your patient is unresponsive, pale, diaphoretic and has a **faint carotid pulse of 60 bpm**. Your partner quickly applies patches and begins to look for an IV site. The monitor shows a rhythm resembling ventricular fibrillation. You should:

ACLS SKILLS

When your assessment and monitor readings do not “match” always recheck patient and equipment.

(ACLS)

62. Pre-hospital treatment of a brain injured patient includes maintaining vitals and monitoring for changes. Which is NOT an expected sign of severe brain injury/herniation?

Signs and Symptoms

- Cushing Triad: increasing systolic BP, slowing heart rate, irregular respirations
- Unilateral or bilateral dilation of pupils
- Posturing – decerebrate or decorticate

(MP-27)

63. Treatment for the victim of a heat related emergency may include:

Heat Exhaustion/Heat Stroke

A. Treatment

1. Move the patient to a cool environment
2. Remove excessive clothing.
3. If hypotensive or unconscious:
 - a. maintain an open airway
 - b. oxygen per nasal cannula or mask as needed.
 - c. initiate an IV of normal saline and administer an initial fluid bolus of 500mL bolus, repeat to SBP > 90mmHg.
 - d. monitor cardiac rhythm (ALS).
 - e. perform and transmit 12 lead EKG if possible (ALS).
 - f. initiate cooling of the heat stroke victim with cold packs or cool soaks to the neck, axilla, and groin.

(MP-30)

64. An adult patient is being transported to you via ground EMS with severe **nausea and vomiting** advises allergies include PCN, morphine and ondansetron. You know that the appropriate **drug/dose** for this active vomiting patient in the pre-hospital setting is:

NAUSEA & VOMITING

A. If the patient has a complaint of nausea or vomiting:

1. Administer:

- a) Adults: Zofran 4 mg slow IVP. Repeat dose X (1) if necessary in 15 minutes
- b) Pediatrics: Must contact Medical Control prior to administration
- c) Phenergan (promethazine) 12.5mg diluted in 10mL NS, slow IVP

(MP-18)

65. In the case of a prolapsed umbilical cord, you should:

Emergency Delivery with Cord Prolapse

- A. A prolapsed cord occurs when the umbilical cord is compressed between the fetus and the pelvis.
- B. If the umbilical cord is noted to be protruding from the vagina:
 1. Administer oxygen at 15 LPM per non-rebreather mask to the mother
 2. Place the mother in knee-chest or Trendelenberg position
 3. Insert two fingers of a gloved hand into the vagina to raise the presenting part off the cord. This position will need to be maintained until instructed otherwise at the hospital. At the same time check the cord for pulsations.
 4. Cover the exposed cord with a moist sterile dressing. Do not compress, palpate or handle the cord more than necessary

66. Appropriate prehospital care for the OB/GYN patient exhibiting a prolapsed umbilical cord would include:

If the umbilical cord is noted to be protruding from the vagina:

1. Administer oxygen at 15 LPM per non-rebreather mask to the mother
2. Place the mother in knee-chest or Trendelenberg position
3. Insert two fingers of a gloved hand into the vagina to raise the presenting part off the cord. This position will need to be maintained until instructed otherwise at the hospital. At the same time check the cord for pulsations.
4. Cover the exposed cord with a moist sterile dressing. Do not compress, palpate or handle the cord more than necessary

(MP-34)

67. You respond to a call for active labor. You arrive to find a 39-week gestation, Gravida 2, Para 1 female in active labor. Hx is normal with routine prenatal care. The fetus' head has delivered, but fails to progress, even with multiple contractions and urges to push. You consider shoulder dystocia as a possible complication and would:

Shoulder Dystocia

- Flex mom's thighs up to her chest, allowing the shoulder to deliver.
- If shoulder doesn't deliver, apply posterior pressure over the symphysis pubis.

(MP-34)

68. An ambulance is called to a local residence for an injured child. Which of the following might be indications of child abuse?

Possible Indicators of Abuse and/or Neglect:

- Obvious or suspected fractures in a child under age two.
- Injuries in various stages of healing, especially burns or bruises.
- Injuries scattered over many body parts.
- Bruises or burns in a pattern which suggests intentional infliction.
- Injuries which do not match the history.
- Vague, inconsistent or changing history.
- Delay in seeking treatment.
- Inappropriate clothing, signs of poor nutrition or poor care.
- Abandonment of an elderly person or child unable to care for themselves.

(MP-36)

69. Paramedics and ECRNs are mandatory reporters when a patient is a victim of child abuse or neglect. Which patient would potentially be reported to the Child Abuse Hotline?

I Required Reporting

EMS providers are required to report any child or elderly person whom you have reasonable cause to suspect has been abused or neglected.

II. Possible Indicators of Abuse and/or Neglect:

- A. Obvious or suspected fractures in a child under age two.
- B. Injuries in various stages of healing, especially burns or bruises.
- C. Injuries scattered over many body parts.
- D. Bruises or burns in a pattern which suggests intentional infliction.
- E. Injuries which do not match the history.
- F. Vague, inconsistent or changing history.
- G. Delay in seeking treatment.

- H. Inappropriate clothing, signs of poor nutrition or poor care.
- I. Abandonment of an elderly person or child unable to care for themselves.

(MP-36)

PEDIATRICS

70. Which of the following assessment findings would indicate decreased perfusion in the 6-month-old patient?

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

(PED-1)

71. What is the initial energy dose for defibrillation of the pediatric patient?

Treatment of V-Tach/V-Fib

Defibrillate 2J/kg
May repeat immediately X2 @ 4J/kg as indicated

(PED 2.2)

72. What is the correct joule setting for the 2nd and 3rd shocks of a child in ventricular fibrillation?

Ventricular Fibrillation or Pulseless Ventricular Tachycardia

Defibrillate 2J/kg (Continue CPR while defibrillator is charging)

**After 2 min of CPR...Give 1 shock of 4 J/kg or utilize AED
Resume CPR immediately for 2 minutes**

(PED 2.2)

73. The pediatric dosage for epinephrine in cardiac arrest is:

PEDIATRIC CARDIAC ARREST ALS CARE GUIDELINE

-Secure airway as appropriate
-Establish vascular access IV/IO NS @TKO
-Epinephrine IV/IO 0.01 mg/kg (0.1 ml/kg) 1:10,000 or
-ET 0.1 mg/kg (0.1 ml/kg) 1:1,000 May repeat every 3-5 minutes

(PED-2.2)

74. For volume expansion in the pediatric patient, a rapid bolus of _____ should be given initially followed by additional boluses if needed.

HYPOVOLEMIC SHOCK

(Suspected dehydration/volume /loss /hemorrhagic shock)

-Establish vascular access IV/IO NS @TKO
-Administer fluid bolus 20 ml/kg
-If no response to initial fluid bolus, repeat at 20 ml/kg as indicated to maximum of 60 ml/kg

(PED 9.2)

75. Which is the **first step** in the treatment of the child with suspected hypovolemic shock?

First Steps in shock Treatment

- Assess ABC's
- Secure airway as appropriate
- Administer 100% oxygen
- Complete initial assessment
- Cardiac Monitor
- Supine position

Second steps

- Establish vascular access IV/IO NS @TKO
- Administer fluid bolus 20 ml/kg
- If no response to initial fluid bolus, repeat at 20 ml/kg as indicated to max. of 60 ml/kg (PED-13.2)

76. Pediatric burns that would be an appropriate transfer to a burn center include:

Any patient with a life threatening condition should be treated until stable at the nearest appropriate facility before being transferred to a burn center.

Listed below is the American Burn Association criteria for pediatrics to be **transported to a burn center**:

- Second and third degree burns greater than 10% body surface area (BSA) in patients < 10 years of age.
- Second and third degree burns greater than 20% BSA in other age groups.
- Second and third degree burns that involve the face, hands, feet, genitalia, perineum and major joints.
- Third degree burns greater than 5% BSA in any age group.

(PED-17.3)

77. Which of the following measures should be taken first in a neonatal resuscitation with no signs of meconium present?

NEONATAL RESUSCITATION ALS CARE GUIDELINE

Meconium Absent

Dry/stimulate/cover head/keep warm

RR slow/gasping absent

Position airway

Support ventilation with BVM 100% O₂ @40-60/min. for 15-30 sec (PED-21.2)

78. According to Illinois law, as a mandated reporter of child abuse, ECRNs and paramedics must:

Report suspicions to ED physician, ED charge nurse and DCFS (1-800-25-ABUSE)

(PED-20)

79. Which could be considered a form of child neglect?

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, etc.).
- Caretaker has not provided, or refuses to permit medical treatment of child's acute or chronic life-threatening 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, prostrating illness) and cannot meet child's care requirements.
 - Child appears inadequately fed (e.g., seriously underweight, emaciated, or dehydrated) inadequately clothes, or inadequately sheltered.
 - Child is found to be intoxicated or under the influence of an illicit substance(s).
- (PED-20.2)

MEDICINE/DRUGS

80. Due to its potential side effect of tachycardia and paradoxical bronchospasm with repeated, excessive use, Albuterol nebulizer treatments are limited to _____ mg per dose, which may be repeated up to _____ if needed.

Albuterol

-2.5mg (nebulizer) – may repeat x 3 if needed

-MDI 90mcg/puff with spacer – 4 puffs; may repeat in 20 min if needed.

(MP-1.2)

81. Which would be a contraindication for administration of chewable aspirin in a 70 y/o with chest pain?

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 style="list-style-type: none"> ▪ Known hypersensitivity to the drug ▪ Bleeding disorders ▪ Active ulcer disease ▪ Asthma

(M-1.3)

82. You are administering Valium to a patient who is actively seizing. You would monitor this patient for a potentially serious side effect, including:

VALIUM

SIDE EFFECTS

- a. CNS depression; drowsiness
- b. Respiratory depression
- c. Hypotension
- d. Phlebitis; venous thrombosis

ROUTE

- a. IV (administer no faster than 1 mg/minute)
- b. IM (Onset of action 15-30 minutes)
- c. Rectal

DOSE

- a. Seizures: 5-10 mg slow IV push at 1 mg/minute. Maximum dose of 10 mg.
- b. Sedation prior to electrical therapy: 5-10 mg slow IV push at 1 mg/minute. Max dose of 10 mg.
- c. Acute anxiety: 2-5 mg IM or slow IV push.

(M-1.7)

83. Dopamine IV is a drug used in the prehospital setting to treat:

CARDIOGENIC SHOCK

DOPAMINE 5-20 mcg/kg/minute

(M-1.9)

84. Which statement about Glucagon is correct?

GLUCAGON

Causes breakdown of glycogen stored in the liver to glucose

Inhibits glycogen synthesis

Elevates blood glucose level

(M-1.14)

85. Which of the following is correct regarding Lidocaine IV:

Dosage: 1 to 1.5mg/kg initial dose

INDICATIONS

Ventricular Tachycardia

Ventricular Fibrillation

CONTRAINDICATIONS

Hypersensitivity to the drug

High degree heart blocks

Malignant PVC's

(M-1.15)

86. Which of the following statements is true about nitroglycerin tablets?

PRECAUTIONS-NITRO

1. Monitor blood pressure before and after administration of each dose.

2. Do not administer if systolic BP less than 90

3. Protect from light

(M-1.19)

87. Which medication may be administered for a patient with overdose of tricyclic antidepressants exhibiting ventricular tachycardia or other dysrhythmias?

Sodium Bicarbonate-Indications

Severe acidosis, Cardiac arrest with prolonged downtime

Tricyclic antidepressant overdose

(M-1.23)

88. You have given diazepam to a patient who is having increasing anxiety. Their behavior continues to escalate and the patient is exhibiting violent behavior and extreme agitation. You consider administration of

KETAMINE HCL (KETALAR)	
CLASSIFICATION	Dissociative anesthetic
ACTION	Provides analgesia, amnesia and sedation
INDICATIONS	Excited delirium
CONTRAINDICATIONS	Known schizophrenia
PRECAUTIONS	<ul style="list-style-type: none"> • Be prepared for hypoxia and need for advanced airway control. • Be aware of duration of action -
SIDE EFFECTS / ADVERSE EFFECTS	<ul style="list-style-type: none"> • Transient tachycardia • 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

ADDITIONAL PROCEDURES

89. While transferring a patient with a Nitroglycerin drip, the patient becomes hypotensive. The patient has a history of ACS without pulmonary edema. You should first:

Nitroglycerin and hypotension

1. Lower the head of the stretcher and administer a 200 mL fluid bolus if not contraindicated (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.

(A-4.2)

90. You are transferring a patient who is receiving Amiodarone IV infusion following an MI which required multiple defibrillations. Which is the most common side effect of Amiodarone?

Transfer of Patients Receiving: Amiodarone

Potential adverse effects/side effects:

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

(A-6)

COMMUNICATIONS & PROBLEM SOLVING

91. Prior to dispatching ALS assistance to an incoming ambulance transporting a patient with a serious injury, Medical Control or the receiving facility should:

Prior to dispatching ALS 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-2)

92. Approved ten-codes used for medical communications in the QAEMS system includes:

Five 10 signals that shall be used for medical communications to the hospital:

- 10-33 Run Emergent (HOT)
- 10-40 Run Non-Emergent (COLD)
- 10-56 Intoxicated
- 10-79 Dead body
- 10-96 Psychiatric patient

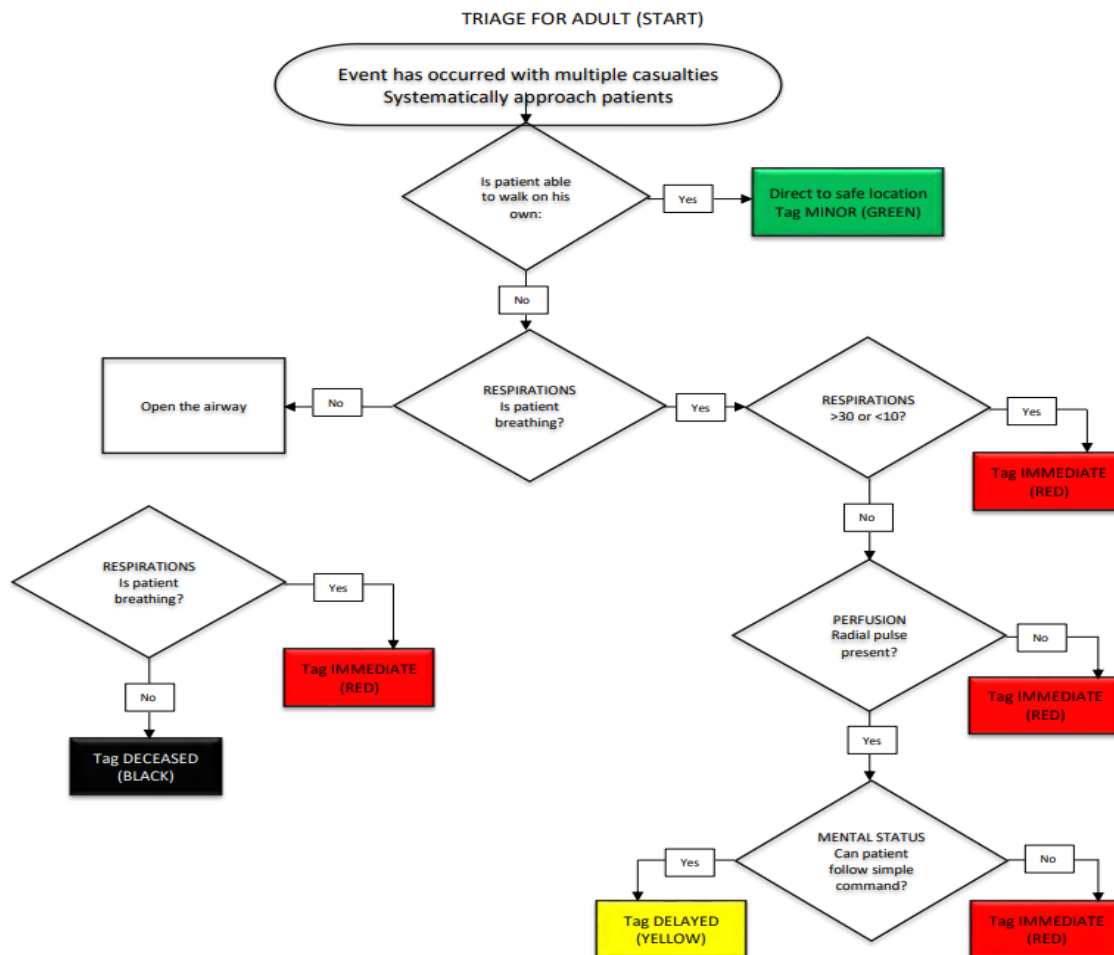
(C-4)

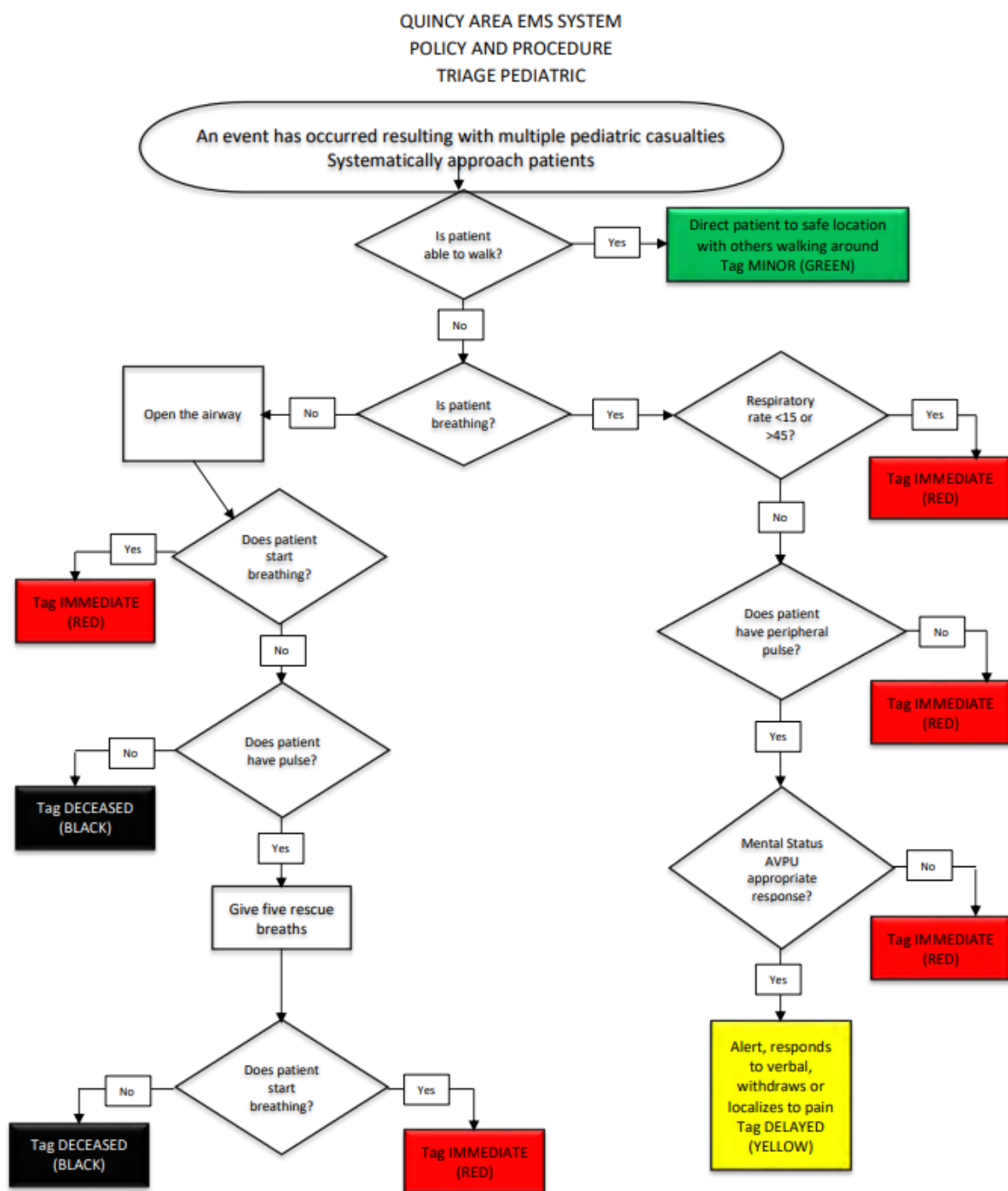
DISASTER AND START TRIAGE

93. Questions 93-100 will cover disasters response, START Triage and JUMPSTART.

Review policies for disaster response/mass casualty triage for adult and pediatric populations including:

- OPERATIONAL POLICY O-12 Major EMS Incident/Multiple Casualty





All infants under age 1 go to secondary triage.