# Clinical Guidelines

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# EMS **Clinical Guidelines** 2026

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Reviewed and Approved January 1st, 2026

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# Clinical Operating Guidelines

## Introduction

The following Clinical Operating Guideline document describes the methods and guidelines used by Mercy EMS and affiliate pre-hospital EMS systems to provide the most advanced care of our patients. Included in this document are evidence-based guidelines with historically proven emergency practices based off the American College of Emergency Physicians EMS guidelines. This document will not address every possible variation of disease or traumatic injury. However, the following policies, procedures, and guidelines will provide a foundation for treating most patients we encounter.

Provider education, experience, and clinical judgment will assist in providing the most advanced and highest quality prehospital care. On-line medical direction is available and should be used when possible, for those patient presentations that do not fall within the scope of the document.

## Foundations of Practice

### *Definition of a Patient*

A patient is an individual requesting or potentially needing medical evaluation or treatment. The patient-provider relationship can be established via telephone, radio, or personal contact. It is the provider's responsibility to ensure all potential patients, regardless of the size of incident, are offered the opportunity for evaluation, treatment, and transport. The guidelines for documenting patient encounters are discussed in the policies section and should include any patient-provider relationship of any aid, assistance, evaluation, treatment, or transport.

### *Rights of a Patient*

At the time of initial information collection regarding a patient encounter, it is important to take every precaution to protect patient **confidentiality.** HIPAA adherence is crucial, but we also have ethical obligations to protect a patient's confidential information. This applies not only to the sharing of written information and our speech and conversations.

Patients with mental capacity retain the right to accept or refuse medical care, even if the consequences of the refusal of care may potentially harm the patient. In the event a patient attempts to refuse medical care, it is important to:

1. Be courteous
2. EMR providers should defer to responding EMS providers and supervisor
3. Offer transport or treatment options without some (or all) of the recommended treatment(s) if that is what the patient will allow (document the discussion, capacity and refusal of some or all treatment(s)/transport).
4. Clearly advise the patient of the possible complications of their decision and their capacity to understand those complications.
5. Advise the patient to call back if they subsequently desire treatment and transport
6. Accurately document all components of the patient encounter.

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There are three situations regarding **consent** that deserve special consideration:

### 1) Minors:

In general, patients under the age of 18 may not consent to medical treatment or transport. The following groups may consent for the treatment of a minor:

- Mother or Father or a Legal Guardian
- An individual standing in *loco parentis*. A person stands in *loco parentis* when he or she takes on the responsibilities of a parent of the child (e.g., a step-parent)
- The leader of a group of children in possession of written permission from the parent authorizing emergency medical treatment (e.g., a school field trip, a child at school where the parent is not present).

In the following circumstances, no consent is required prior to initiating treatment:

- The parent, guardian, or person standing in *loco parentis* cannot be reached and the minor needs to receive medical treatment
- The identity of the child is unknown and a delay in giving treatment would endanger the life of the child
- The effort to contact the child's parents, guardian, or a person standing in *loco parentis* would result in a delay that would seriously worsen the condition of the child

Under the following circumstances, a minor may consent to treatment without the knowledge of the parent:

- Pregnancy
- Treatment for sexually transmitted diseases
- Alcohol or drug abuse
- If the minor has been "Emancipated" by a judge (they should have legal paperwork to show)

### 2) Life-threatening situations without ability to communicate

A. A patient of any age who is unable to communicate because of an injury, accident, illness, or unconsciousness –AND- is suffering from what reasonably appears to be at risk of mortality or morbidity. This patient is treated on the principle of implied consent.
B. The principle of implied consent presumes that if the individual with the illness or injury were conscious and able to communicate, he or she would consent to emergency treatment
C. In these situations, patients may be transported without their consent. Law enforcement, physical restraint, and/or medication may be required

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### 3) Potentially life-threatening situations or poor outcome

It is the expectation to transport all patient encounters for additional evaluation. At times, despite our best effort patients may refuse transport for additional evaluation and/or treatment. Patients in this category generally fall into one of two groups: the alert patient who has a concerning presentation and refuses treatment and/or transport (e.g., the patient with chest pain and EKG changes or a diabetic with poor control of their blood sugar) or the patient who may be intoxicated but does not have what reasonably appears to be a life-threatening injury (e.g. the patient who has consumed alcohol with a small laceration). In these situations, additional effort and documentation are required - the following steps should be taken:

Determine orientation to person, place, and time. Document results.

- Determine what factors are influencing the patient to refuse medical care. Resolve the ones in your scope (e.g., patient does not want an IV – offer transport without an IV).
- Attempt communication with spouse/significant other/other family members if available.
- If patient continues to refuse, consider contacting supervisors and on-line medical control.
- If patient continues to refuse, clearly explain options and risks of refusal, determine if they have the capacity to understand those risks and have the patient verbalize the risks back to you. Document results.
- In a courteous manner, assure the patient to call back for treatment and transport at any time.

## *Automatic Notification of the Medical Director*

Incidents that potentially have an adverse or negative impact on a patient or the EMS system **must be immediately reported to the EMS medical director or, in their absence, their designee** as soon as possible after the completion of the call. Such notification should be made via phone or through the Mercy Communications Center. Events that require this notification include:

- Cardiac and/or respiratory arrest occurring after administration of midazolam, fentanyl, hydromorphone, or ketamine.
- Cardiac arrest after administration of an antiarrhythmic agent in a previously stable patient.
- Any attempt (successful or unsuccessful) at needle and/or surgical airways
- Incorrect medication administration with patient complication (wrong dose, etc.)
- Any cardiac and/or respiratory arrest or patient injury related to the use of physical restraints
- System provider operating outside of scope of practice. The scope of practice is defined not only by State Certification but by the provider's level of approved practice within the System.
- Unrecognized misplaced advanced airway device or other complication related to advanced airway management.
- Any diversion or suspected diversion of a controlled substance.
- Death of any patient with 24 hours of contact and a refusal of care.

Other patient care concerns, potential adverse events, complicated patient care or complicated transfer requests may be directed to the medical director when needed and possible.

## *Use of Clinical Operating Guidelines*

In general, guidelines are divided into adult and pediatric sections. For pediatric patients, the appropriate pediatric-specific guideline should be utilized if one exists. If there is not a pediatric specific guideline for a given pediatric patient situation, utilize the adult guideline for care guidance. Always use pediatric based dosing for medications. Never exceed adult doses of medication for a pediatric patient.

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Individual guidelines are divided into three sections.

The upper sections include **History, Signs and Symptoms, and Differential.** Information in these boxed areas are to help obtain pertinent patient information and consider multiple potential causes for a patient complaint. Providers should choose those elements which are pertinent to the particular patient encounter. It is not expected that every historical element or sign/symptom be recorded for every patient. It is expected that those elements pertinent to your patient will be included in the patient evaluation and documentation.

The center section describes the **Essentials of Patient Care** which are presented in flow chart style. The Clinical Operations Committee and Medical Director have reviewed and represent the proven practices which are the foundation of the care we provide. Most patients should receive the care suggested in this section, usually in the order described. Certainly, exceptions will exist; the rationale for any deviation from the recommended course should be clearly explained in the narrative of the patient care report. It is anticipated that such exceptions will be rare, and providers are strongly encouraged to contact the medical director or on-line medical control prior to any deviations (as long as the patient's condition allows).

The **Pearls** section on the second page or at the bottom of the operating guideline provides further guidance and adjuncts for patient care based on experience and common medical knowledge. It is impossible to condense emergency medicine to a single page flow chart. The pearls allow for expanded medication advice, dosages, and description of special situations. The Pearls should be studied along with the rest of the guidelines and should be followed if applicable. Not every patient will require every element under the pearls section. It is anticipated this section will be used as practical guide for the implementation of the **essentials of patient care** section.

Levels of practice are delegated by both the state EMS board and credentialing by the system medical director. No provider may operate above the scope of practice provided by the National Registry of Emergency Medical Technicians, state EMS medical board or credentialing level outlined by the system medical director.



Within these guidelines indicates EMT-B credentialing within our system. Two levels of EMT-B exist within our system. EMT-B1 may perform all practice designated by this symbol when accompanied by an EMT-B2 or higher-level provider. EMT-B1 is not permitted to practice alone. Credentialling beyond EMT-B1 to a level EMT-B2 allows the provider to practice at this level in a solo capacity or with another provider.



Within these guidelines indicates the practice of Advanced EMT. Two levels of Advanced EMT exist within our system. AEMT-1 may perform all practice designated by this symbol when accompanied by an AEMT-2 or higher-level provider. AEMT-1 is not permitted to practice alone. Credentialling beyond AEMT-1 to a level AEMT-2 allows the provider to practice at this level in a solo capacity or with another provider.



Within these guidelines indicates EMT-P credentialing and scope of practice within our system.



Within these guidelines indicates EMT-P2 credentialing and scope of practice within our system.



Within these guidelines indicates EMT-P3 credentialing and scope of practice within our system.

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## *Life Line Caregiver Scope on Ground Assignments*

Paramedics who are also currently credentialed as Life Line caregivers may perform Life Line-authorized skills and interventions while functioning as ground paramedics, provided they maintain the required credentials and competencies, have the necessary equipment and medications available, and comply with applicable Life Line clinical guidelines and Medical Director authorization.

## *Operating Guideline Clarifications*

The States of Oklahoma and Arkansas have common guidelines that provide a baseline standard of care for EMS. Individual systems may exceed the baseline standard of care as established in these Clinical Operating Guidelines.

EMR providers should consult with responding EMS prior to medication administration within their scope of practice when applicable.

All operating guidelines use: “Notify destination or contact medical control” and is satisfied by contacting the receiving hospital at the appropriate time by radio, phone, or electronic communication. We have no restriction in contacting medical control prior to administering any treatments in subsequent boxes. On-line medical control is encouraged at any time you need direction, patients with unusual presentations, high risk refusals, or other unusual circumstances.

With regard to intravenous access, it is appropriate to continue attempts to obtain access in the patient who is unstable or potentially unstable past 3 attempts without contacting medical control. IO should be considered in these patients.

There are specific clinical guidelines that may be attached as trailing documents to address specific and time sensitive issues of our practice. The use of Cyanokits or Duodote antidote kits may be used on a patient when the kit is provided by a federal, state, or municipal agency. Specific guidelines and medication including Terbutaline may be used on patients in times when the Mercy EMS system and Medical Director and/or state and federal declarations of high consequence infectious outbreaks or pandemics. This medication will not be stocked or used unless the above declarations are made.

## *Review and Approval of Clinical Operating Guidelines*

The guidelines, procedures, approved medications, and policies will be reviewed, at minimum, on a yearly basis. An official, signed copy of this page will be kept on file at Mercy EMS Headquarters signifying the yearly review and approval has been complete. If any change is made to any of these documents outside of that yearly review, this digital file will be updated and distributed for co-worker access, and a signed copy of the new or edited document will be kept on file at Mercy EMS Headquarters.

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## *Summary*

The Clinical Operating Guidelines describe the proven practices that are the foundation of our care. These guidelines coupled with your experience and education will allow us to provide pre-hospital patient care in alignment with the most advanced EMS systems in the world.

The manner in which we carry ourselves, the professionalism we display and the customer service we provide is often as important as the medicine we provide. You represent our fellow providers, our profession, our medical system, and our mission. For many of our less critically ill or injured patients, the human interaction and compassion we provide has more healing effect than any proven practices or medicine we provide.

Thank you,

Dr. Tom Lewis

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Board Certified Emergency Medical Services
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David Bernier

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Manager of EMS Operations
Mercy EMS

January 1st, 2026

**Date**

Mercy EMS expects caregivers to follow these reasonable and achievable safety rules. Caregivers will be held responsible for following these safety rules. Injuries or illnesses could result when these safety rules are not followed. These safety rules were created for your safety, to protect Mercy EMS, and to help keep others safe.

# WorkSafe Tips

- Report for duty free from the after effects of illicit or prescription drugs or alcohol. Report for duty rested, and ready for work. Fatigue or extreme sleepiness is as dangerous as being under the influence of alcohol.
- Report maintenance concerns or hazards to your Supervisor(s) immediately.
- Perform a written ambulance inspection before each shift.
- Wear your seat belt when driving or riding in ambulances.
- Co-workers in rear must wear seat belts unless the patient is receiving emergent, critical care.
- Mercy EMS has a Zero Tolerance policy for distracted driving. Do not eat, read maps, text or use cell phones while driving an ambulance.
- Drive at a speed appropriate for conditions.
- Do not tailgate motorists when driving, and use the recommended following distances at all times (1 car length per 10mph speed) .
- Smoking is not permitted on any Mercy property, ambulances included.
- Use ambulance scene lighting and flashlights whenever on night scenes.
- Clean up/ pick up slip and trip hazards found in the station.
- Do not lift heavy supplies or equipment without help.
- Use three-point contact when entering or exiting ambulances.
- Replace sharps containers when 2/3 full.
- Co-workers must wear a high-visibility vest when working near traffic, and helmets, gloves and eye protection when working in dangerous environments.
- Always wear appropriate personal protective equipment for the situation, escalating the level of protection as needed. Change duty clothing whenever soiled during patient care.
- Wear appropriate personal protective equipment when cleaning the ambulance.
- To avoid work zone crashes, park the ambulance to prevent struck-by incidents.
- Secure all oxygen cylinders inside the ambulance. Do not replace large oxygen cylinders without assistance. If provided, use required lifting aids.
- Keep steps & stairs into the ambulance clear of trip or slip hazards. Keep the back step down always when not loading or unloading cot.
- Use a spotter when backing the ambulance. When parking at convenience stores, etc., park in a manner to avoid backing, while also maintaining good public relations.

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Organized by clinical category, then alphabetically. Select an entry to open it.


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Organized by clinical category, then alphabetically. Select an entry to open it.


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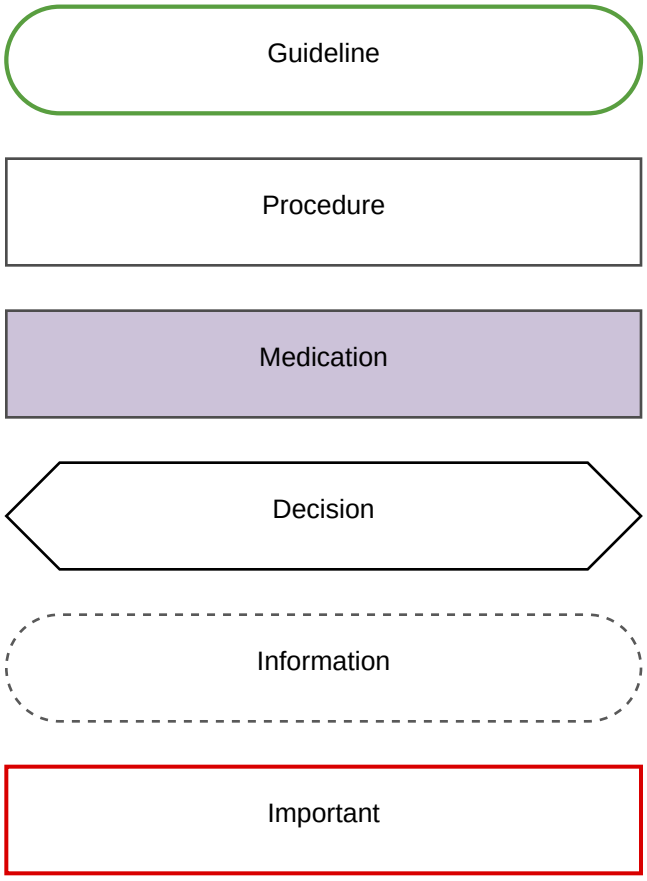
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Guideline

Procedure

Medication: dose, route and repeat information

Decision point

Information

Important information

## Reference availability

Pediatric cardiac arrest - algorithm and companion 99

Neonatal resuscitation 101

Umbilical venous catheter procedure - two pages 150

Still not supplied: standalone diabetic guideline, chest-tube procedure, and Appendix 11c equipment manuals. Links here do not supply replacement treatment orders.

# Adult - Asystole / PEA

### History

- Past medical history
- Medications
- Events leading to arrest
- End stage renal disease
- Estimated downtime
- Suspected hypothermia
- Suspected overdose
- Tricyclic
- Digitalis
- Beta blockers
- Calcium channel blockers
- DNR, TPOP, or Living Will

### Signs and Symptoms

- Pulseless
- Apneic
- No electrical activity on ECG
- No heart tones on auscultation

### Differential

- Hypovolemia (Trauma, AAA, other)
- Cardiac tamponade
- Hypothermia
- Drug overdose (Tricyclic, Digitalis, Beta blockers, Calcium channel blockers)
- Massive myocardial infarction
- Hypoxia
- Tension pneumothorax
- Pulmonary embolus
- Acidosis
- Hyperkalemia

Cardiac Arrest Guideline

**Criteria for Death / No Resuscitation**
**Review DNR / TPOP form**

YES → Exit to Termination of Resuscitation Guideline

NO

| | |
|---|---|
| FR | ***Begin Continuous CPR Compressions (Consider Mechanical Compression Device if available)*** ***Push Hard (≥ 2 inches) Push Fast (100/min)*** ***Change Compressors every 2 minutes*** ***(Limit pauses to AED analyze or defibrillation)*** |
| B | Cardiac Monitor / Quick Combo Pads / Limb Leads |

**Shockable Rhythm**

YES → Follow Rhythm Appropriate Guideline

NO

| | | | |
|---|---|---|---|
| B | Establish & Maintain Airway & Ventilate 100% $O_2$ Capnography (if available) | | |
| | Search for Reversible Causes → | | |
| A | IV Procedure | P | IO Procedure |
| A | **Normal Saline Bolus 1000 mL IV/IO** | | |
| | **Epinephrine (1:10,000) 1 mg IV/IO** Repeat every 3 to 5 minutes. Maximum of 6 mg. | | |
| P2 | Consider Chest Decompression Procedure | | |
| P | After Priority Medications: **Naloxone 2 mg IV/IO** All nontraumatic arrests Do not delay CPR/Ventilation/Shocks | | |

**Criteria for Discontinuation**
**$EtCO_2$ < 10 for 10 min and Asystole**

NO

**Notify Destination or Contact Medical Control**

If no response and Asystole after 20 min, CONTACT MEDICAL CONTROL for possible termination of resuscitation (Address decision with family and all personnel involved.)

**AT ANY TIME**

**Return of Spontaneous Circulation**

**Go to Post Resuscitation Guideline**

**Reversible Causes**

Hypovolemia
Hypoxia
Hydrogen ion (acidosis)
Hypothermia
Hypo / Hyperkalemia
Hypoglycemia

Tension pneumothorax
Tamponade; cardiac
Toxins
Thrombosis; pulmonary (PE)
Thrombosis; coronary (MI)

**If LUCAS is available, consider early transport.**

**Consider Early for PEA**

1. **Repeated Saline Boluses for possible hypovolemia**
2. **Dextrose 10% IV/IO**
3. **Naloxone 2 mg IV/IO**
4. **Calcium Chloride 1 g IV/IO for suspected hyperkalemia, hypocalcemia**
5. **Sodium Bicarbonate 50 mEq IV/IO for possible overdose, hyperkalemia, renal failure**
6. **Consider Atropine 1 mg IV/IO ONLY for organized PEA with rate < 60.**
7. **Chest Decompression**

Adult - Cardiac - Asystole / PEA

## Pearls

- SURVIVAL FROM PEA OR ASYSTOLE is based on identifying and correcting the CAUSE: consider a broad differential diagnosis, with early and aggressive treatment of possible causes.
- **If a LUCAS device is available, early transport should be considered.**
- **Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated. Consider early IO placement if available and/or difficult IV access anticipated.**
- **DO NOT HYPERVENTILATE: Ventilate 8-10 breaths per minute with continuous, uninterrupted compressions, or as guided by $EtCO_2$.**
- **Do not interrupt compressions to place endotracheal tube. Consider supraglottic airway first to limit interruptions.**
- Success is based on proper planning and execution. Procedures require space and patient access; make room to work.
- Potential association of PEA with hypoxia so placing airway with oxygenation early may provide benefit.
- PEA caused by sepsis or severe volume loss may benefit from higher volume of normal saline administration.
- Return of spontaneous circulation after Asystole / PEA requires continued search for underlying cause of cardiac arrest.
- Treatment of hypoxia and hypotension are important after resuscitation from Asystole / PEA.
- Asystole is commonly an end-stage rhythm following prolonged VF or PEA with a poor prognosis.
- Sodium bicarbonate no longer recommended as a standard cardiac arrest drug based on down time. Consider in the dialysis / renal patient, slow and wide complex rhythms with or without a pulse (given with Calcium Chloride), known hyperkalemia or tricyclic overdose at 50 mEq total IV/IO.
- Discussion with Medical Control can be a valuable tool in developing a differential diagnosis and identifying possible treatment options.
- Potential guidelines used during resuscitation include Overdose / Toxic Ingestion, Diabetic and Dialysis / Renal Failure.

# Adult - Bradycardia

**History**
- Past medical history
- Medications
- Beta-Blockers
- Calcium channel blockers
- Clonidine
- Digoxin
- Pacemaker

**Signs and Symptoms**
- HR < 60/min with hypotension, acute altered mental status, chest pain, acute CHF, seizures, syncope, or shock secondary to bradycardia
- Chest pain
- Respiratory distress
- Hypotension or Shock
- Altered mental status
- Syncope

**Differential**
- Acute myocardial infarction
- Hypoxia
- Pacemaker failure
- Hypothermia
- Sinus bradycardia
- Athletes
- Head injury (elevated ICP) or Stroke
- Spinal cord lesion
- Sick sinus syndrome
- AV blocks (1°, 2°, or 3°)
- Overdose

**Heart Rate < 60 / minute and Symptomatic:** Hypotension, Acute AMS, Chest Pain, Dizziness, Acute CHF, Seizures, Syncope, or Shock secondary to bradycardia

NO → Exit to Appropriate Guideline

Dyspnea / Increased Work of Breathing, especially with hypoxia

YES → Also Utilize Airway and / or Appropriate Respiratory Distress Guideline

**Suspected Beta-Blocker or Calcium Channel Blocker**

**Follow Overdose / Toxic Ingestion Guideline**

B: Cardiac Monitor / 12 Lead ECG Procedure / Capnography

A: IV Procedure | P: IV/IO Procedure

A: **Isotonic Crystalloid Bolus 500 mL IV / IO**
**May repeat as needed**
**Maximum 2 Liters**

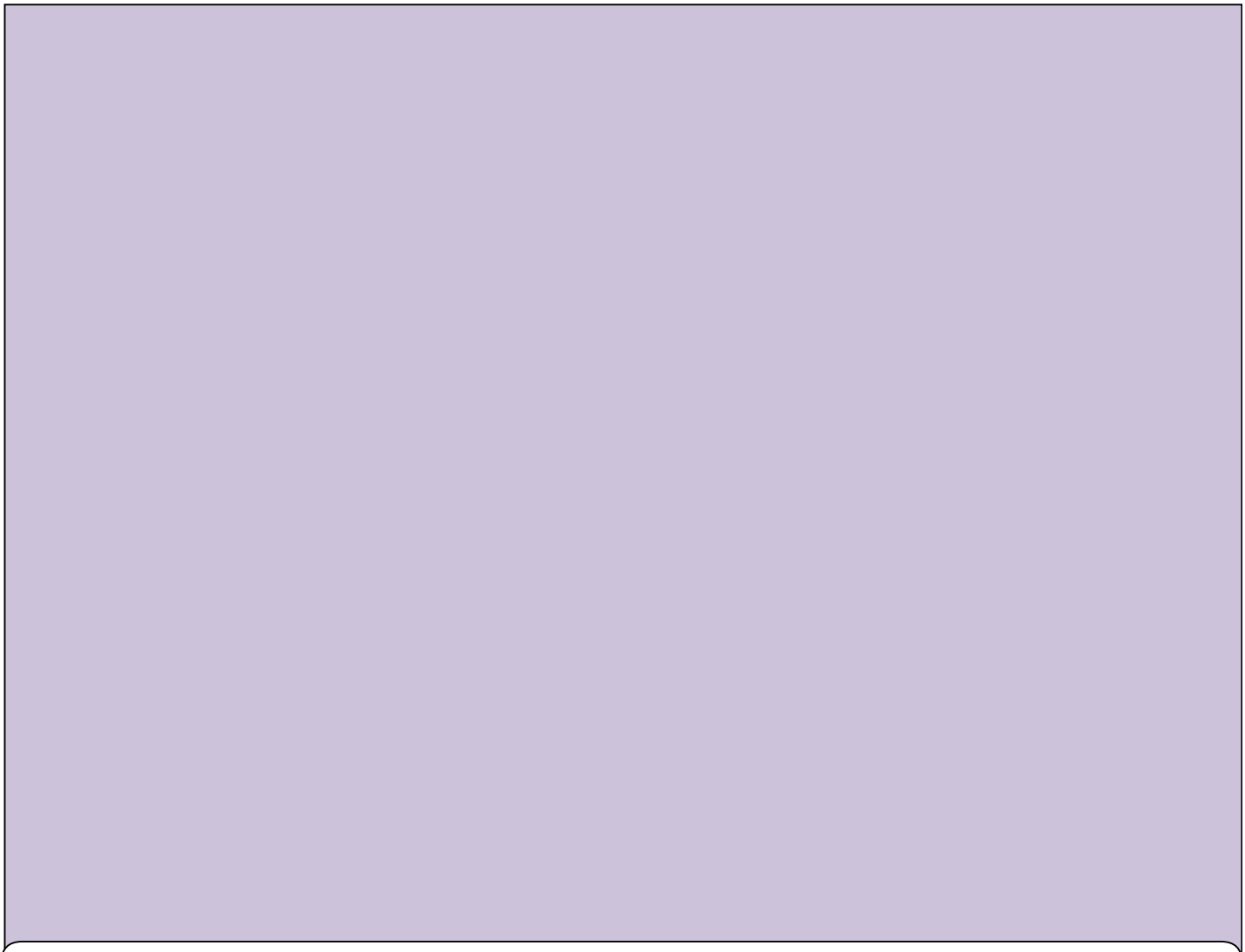
P: **Atropine 1 mg IV/IO** Repeat every 3 - 5 minutes

P2: **Epinephrine 1:100,000 (PDP), 0.1-0.2 mcg IV / IO**

P: Transcutaneous Pacing
If not responsive to medication or if unavailable. Pacing may be considered first line therapy for severe symptoms.
*(Consider early in 2nd or 3rd degree AVB)*

P: *For pacing, consider*
**Midazolam 2.5 mg to 5 mg IV/IO/IN**
Or
**Fentanyl 50 mcg-100 mcg IV/IO/IN**
(repeat as needed)
Or
**Ketamine Pain Dose 20 mg IV/IO**

**Notify Destination or Contact Medical Control**



**Pearls**

- **Recommended Exam: Mental Status, Neck, Heart, Lungs, Neuro**
- **Bradycardia causing symptoms is typically < 50/minute. Rhythm should be interpreted in the context of symptoms and pharmacological treatment given only when symptomatic, otherwise monitor and reassess**
- **Identifying signs and symptoms of poor perfusion caused by bradycardia are paramount.**
- **Atropine vs. Pacing**: **Caution in setting of acute MI. The use of Atropine for PVCs in the presence of a MI may worsen heart damage. Providers should NOT DELAY Transcutaneous Pacing for patients with poor perfusion in the setting of acute MI or second or third degree heart block. Atropine is ineffective in cardiac transplantation.**
- Wide complex, bizarre appearance of complex with slow rhythm consider hyperkalemia.
- Consider treatable causes for bradycardia (Beta Blocker OD, Calcium Channel Blocker OD, etc.)
- Hypoxemia is a common cause of bradycardia. Be sure to oxygenate the patient and support respiratory effort.

# Adult - Cardiac Arrest

**History**

- Events leading to arrest
- Estimated downtime
- Past medical history
- Medications
- Existence of terminal illness

**Signs and Symptoms**

- Unresponsive
- Apneic
- Pulseless

**Differential**

- Medical vs. Trauma
- VF vs. Pulseless VT
- Asystole
- PEA
- Primary Cardiac event vs. Respiratory arrest or Drug overdose

**Criteria for Death / No Resuscitation**
**Review DNR / TPOP Form**

YES → Exit to Termination of Resuscitation Guideline

| | |
|---|---|
| FR | ***Begin Continuous CPR Compressions (Consider Mechanical Compression Device if available)***<br>***Change Compressors every 2 minutes***<br>***(Limit pauses to AED analyze or defibrillation)*** |
| | Place multi-function pads on patient without interrupting compressions |

| | | | |
|---|---|---|---|
| FR | AED | B | Cardiac Monitor |

**AT ANY TIME**

**Return of Spontaneous Circulation**

**Go to Post Resuscitation Guideline**

**Ventilate with BVM ONLY every 12 compressions without stopping compressions.**

- Use one handed three finger technique to achieve chest rise
- PEEP set to 5 $cmH_2O$
- Attach capnography if available
- Intubate only if i-gel or supraglottic method fails
- IO/IV Access only after below priorities:

1. Continuous Compressions
2. AED or Monitor Placement / Analyze / Defibrillation
3. Ventilation (i-gel preferred with $O_2$ and BVM)

| Non-Shockable Rhythm | | Shockable Rhythm | |
|---|---|---|---|
| FR | Continue CPR Changing compressors every 2 min | FR | Shock Delivery (Manual Delivery by Paramedic only)<br>Immediately continue CPR Changing compressors every 2 min |
| B | Place i-gel with $O_2$ tubing to port at 8 L/min and attach capnography / BVM | B | Place i-gel with $O_2$ tubing to port at 8 L/min and attach capnography / BVM |

Follow age appropriate Asystole / PEA Airway Guideline(s) ***as indicated***

Follow age appropriate VF / VT Tachycardia Airway Guideline(s) ***as indicated***

Adult - Cardiac - Cardiac Arrest

**Termination of Efforts Checklist**

- Give history of present illness
- Time down / Pre-Arrival CPR
- Airway / Interventions
- Ventilation (Adequate or Poor)
- Initial rhythm / Rhythm changes
- Any defibrillations
- All medication given
  ETCO2 Current and changes throughout event

**Transport Considerations**
**We should consider early transport for any cardiac arrest In which the following interventions have been performed.**

Cardiac monitor placed
Continuous compressions for 10-minutes (5 full cycles)
Epinephrine Provided when indicated
CPR Compression Device Utilized
ETCO2 >30

Any patients who do not meet these criteria should be worked at the scene per guideline.




## Pearls

Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated.
Consider early Humeral or Femoral IO placement if available and / or difficult IV access anticipated.
Tibial IO placement has little benefit even with high quality chest compressions.
DO NOT HYPERVENTILATE: If advanced airway is in place ventilate 8-10 breaths per minute (ONLY once per every 12 compressions) with continuous, uninterrupted compressions.
Do not interrupt compressions to place endotracheal tube.
Consider i-gel first to limit interruptions.
Do not interrupt compressions for AED / Monitor pad placement or airway placement.
Resuscitation is based on proper planning and organized execution.
Procedures require space and patient access.
Make room to work.
Utilize Team Focused Approach assigning responders to predetermined tasks and use the Cardiac Arrest Checklist and Code Commander when personnel are available to do so.
Reassess, document advanced airway placement and EtCO 2 frequently, after every move, and at transfer of care.
Maternal Arrest - Treat mother per appropriate guideline with immediate notification to Medical Control and rapid transport as per Cardiac Arrest Destination Plan.
Place mother supine and perform Manual Left Uterine Displacement moving uterus to the patient's left side.
IV/IO access preferably above diaphragm.
Defibrillation is safe at all energy levels.
Cardiac Arrest in pregnant patients should have consideration of early transport for post-mortem c-section.
Administer naloxone as directed by the applicable rhythm-specific algorithm, after priority medications.

# Adult - Chest Pain

**History**

- Age
- Medications (Viagra / sildenafil, Levitra / vardenafil, Cialis / tadalafil)
- Past medical history (MI, Angina, Diabetes, post menopausal)
- Allergies
- Recent physical exertion
- Palliation / Provocation
- Quality (crampy, constant, sharp, dull, etc.)
- Region / Radiation / Referred
- Severity (1-10)
- Time (onset /duration / repetition)

**Signs and Symptoms**

- CP (pain, pressure, aching, vice-like tightness)
- Location (substernal, epigastric, arm, jaw, neck, shoulder)
- Radiation of pain
- Pale, diaphoresis
- Shortness of breath
- Nausea, vomiting, dizziness
- Time of Onset

**Differential**

- Trauma vs. Medical
- Angina vs. Myocardial infarction
- Pericarditis
- Pulmonary embolism
- Asthma / COPD
- Pneumothorax
- Aortic dissection or aneurysm
- GE reflux or Hiatal hernia
- Esophageal spasm
- Chest wall injury or pain
- Pleural pain
- Overdose (Cocaine) or Methamphetamine

Chest Pain

NO → Dyspnea / Atypical symptoms Suspect cardiac etiology

YES

| | |
|---|---|
| B | **Cardiac Monitor / 12 Lead ECG / Capnography** |
| | **Aspirin 81 mg x 4 PO (chewed)** Or **325 mg PO** |
| A | IV Procedure |
| P | IO Procedure |

Dizziness, weakness, syncope, fatigue, discomfort from neck to navel without obvious etiology
**Obtain 12/15 Lead ECG**

Exit to appropriate guideline

Systolic BP ≥ 100

NO → Lung Exam: CHF / Pulmonary Edema

Exit to Adult CHF / Pulmonary Edema Guideline

YES

| | |
|---|---|
| A | **Nitroglycerin 0.4 mg SL** Repeat every 5 minutes as needed |
| P | **If pain becomes controlled, Nitroglycerin Paste 1 inch** |
| P | **Fentanyl 25 - 100 mcg IV / IO** Repeat every 10 minutes as needed. **OR** Dilaudid 0.5-1 mg slow IVP |
| P2 | **OR** Consider Push Dose NTG Procedure |

| | |
|---|---|
| A | **Normal Saline Bolus 500 mL IV / IO** *Repeat as needed* **Maximum 2 L** |
| P | Consider Fentanyl 25 -100 mcg Repeat every 10 minutes as needed. |

Does BP improve to >100? → YES

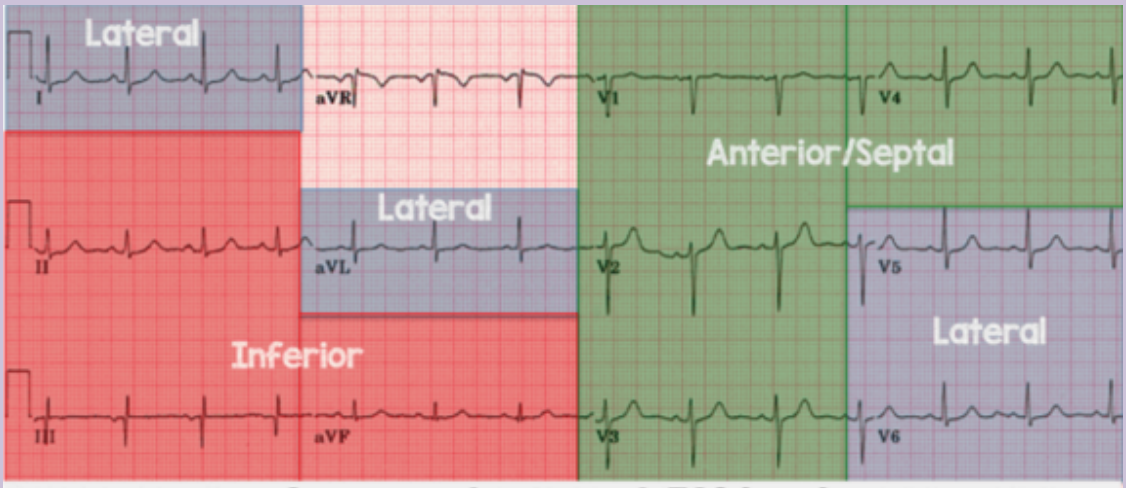
**Notify Destination or Contact Medical Control**

**Acute MI / STEMI**
**(STEMI = 1 mm ST Segment Elevation ≥ 2 Contiguous Leads; SEE 12-LEAD/CODE STEMI IN PROCEDURE SECTION)**

**Transport based on:**
**STEMI**
**EMS Triage and Destination Plan**
**Immediate Notification of Facility**
**Immediate Transmission of ECG**
*if capable*
**Keep Scene Time to ≤ 10 Minutes if possible**

Adult - Cardiac - Chest Pain

## STEMI/Culprit Vessel Localization Aid:




| Coronary Anatomy & ECG Leads | | |
|---|---|---|
| Lateral Leads | I, aVL, V5 - V6 | LCx or Diagonal of LAD |
| Inferior Leads | II, III, aVF | RCA and/or LCx |
| Anterior/Septal Leads | V1 - V4 | LAD |

*** SEE 12-LEAD/CODE STEMI CATH LAB ACTIVATION PROCEDURE FOR CRITERIA TO CALL "CODE STEMI" AND ACTIVATE CATH LAB VS. SEND EKG FOR CONSULT.**

ST Elevation in 2 or more leads: II, III, aVF = Inferior wall MI (vessel likely RCA or LCx)
ST Elevation in 2 or more leads: I, aVL, V5, V6 = Lateral wall MI (vessel likely LCx or LAD branch)
ST Elevation in 2 or more leads: V1, V2, V3, V4 = Septal/Anterior wall MI (vessel likely LAD)
**Look for ST DEPRESSION in reciprocal leads (opposite wall) to confirm diagnosis. In this example ekg there is ST Elevation in this INFERIOR wall MI, and ST Depression in the Antero-Septal leads.
** Isolated ST elevation in aVR, with ST depression EVERYWHERE ELSE is concerning for a possible proximal LAD or Left Main lesion. Not STEMI criteria, but EKG should be sent for consult and ED notified early.

**Pearls**

- **Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro**
- **Items in Red Text are key performance indicators**
- **Caution with 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.**
- **Caution with Nitroglycerin in patients with heart rate above 100.**
- **Patients with STEMI (ST-Elevation Myocardial Infarction) should be transported to the appropriate facility based on STEMI EMS Triage and Destination Plan.**
- **If CHF / Cardiogenic shock / Tachycardia resulting from any MI including inferior (II, III, aVF) Nitroglycerin and / or opioids may cause hypotension requiring fluid boluses.**
- If patient has taken their own nitroglycerin without relief, consider potency/age/storage of the medication.
- Monitor for hypotension after administration of nitroglycerin and narcotics.
- Nitroglycerin and opioids may be repeated per dosing guidelines.
- Diabetics, geriatric and female patients often have atypical pain, or only generalized complaints. 12-lead EKG should be obtained in for all non-typical patients with pain.
- Document the time of the 12 Lead ECG in the PCR as a Procedure along with the interpretation (Paramedic).
- **15 lead EKG is indicated in all Normal EKG's, Inferior MI's and ST segment depression in V-leads.**

# Adult - Hypertension

**History**

- Documented Hypertension
- Related diseases: Diabetes; CVA; Renal Failure; Cardiac Problems
- Medications for Hypertension
- Compliance with Hypertensive Medications
- Erectile Dysfunction medications
- Pregnancy

**Signs and Symptoms**

**One of these**

Systolic BP 220 or greater
Diastolic BP 120 or great

**AND at least one of these**

Severe Headache
Chest Pain
Dyspnea
Altered Mental Status
Seizure

**Differential**

- Hypertensive encephalopathy
- Primary CNS Injury
  - Cushing's Response with Bradycardia and Hypertension
- Myocardial Infarction
- Aortic Dissection / Aneurysm
- Pre-eclampsia / Eclampsia
- CVA

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 pre-hospital 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 those specific guidelines.

Exit to Appropriate Guideline(s)

Hypertension with symptoms consistent with hypertension
***Manual BP*** taken on 2 occasions at least 5 minutes apart
Pain and Anxiety are addressed

| | |
|---|---|
| FR | Obtain and Document BP Measurement in Both Arms |
| B | Cardiac Monitor / 12 Lead ECG / Capnography |
| A | IV Procedure |

Stroke / AMS → Exit to Appropriate Guideline(s)

Pregnancy → Exit to Obstetrical Emergency Guideline

Chest Pain → Exit to Chest Pain / STEMI Guideline

Dyspnea/CHF → Exit to Appropriate Guideline(s)

| | |
|---|---|
| P | Medical Control<br>Consider Labetalol (Normodyne) 20 mg slow IV (over 2 min.) |

**Notify Destination or Contact Medical Control**

Adult - Cardiac - Hypertension

### Pearls

- **Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro**
- **Elevated blood pressure is based on two to three sets of vital signs, each several minutes apart.**
- **Symptomatic hypertension is typically revealed through end organ dysfunction to the cardiac, CNS or renal systems.**
- **All symptomatic patients with hypertension should be transported with their head elevated at, or above, 30 degrees.**
- **Ensure appropriate size blood pressure cuff utilized for body habitus.**

# Adult - Hypotension / Shock

**History**

- Age
- Medications (Viagra / sildenafil, Levitra / vardenafil, Cialis / tadalafil)
- Past medical history (MI, Angina, Diabetes, post menopausal)
- Allergies
- Recent physical exertion
- Recent illnesses

**Signs and Symptoms**

- Any CP (pain, pressure, aching, vice-like tightness)
- Respiratory distress
- Lung sounds
- Pale, diaphoresis
- Shortness of breath
- Nausea, vomiting, dizziness
- Symptoms of drug reaction or overdose

**Differential**

- Trauma vs. Medical
- Angina, Myocardial infarction
- Pericarditis
- Pulmonary embolism
- Asthma / COPD /CHF
- Overdose
- Drug use (Cocaine, Meth, etc)
- Hypoxia
- Cardiac Medications

Altered Mental Status Guideline ***if indicated***

Airway Procedure ***if indicated***

If Sepsis is suspected, exit to Sepsis guideline.

| | | | |
|---|---|---|---|
| **A** | 2 large bore IVs | **P** | Consider IO |
| **B** | Cardiac Monitor, 12 Lead EKG / Capnography | | |
| **FR** | Obtain temperature | | |

If hypotension is thought to be from hemorrhage, consider permissive hypotension.

| | | | |
|---|---|---|---|
| **A** | Isotonic crystalloid solution up to 3 L | **P2** | Consider: Push dose pressor procedure concurrent with fluids |

Continuously monitor $EtCO_2$ and expect $CO_2$ to be low. A decreasing $EtCO_2$ could indicate worsening Sepsis.

Treat other complaints with the appropriate guideline

**Notify Destination or Contact Medical Control**

**Pearls**

Recommended Exam: Mental Status, Skin, HEENT, Neck, Heart, Lung, Abdomen, Back, Extremities, Neuro

## SIRS CRITERIA

Temperature >100.9$^{O}$ or <96.8$^{O}$
Heart Rate >90
Respiratory Rate >20 or $EtCO_2$ <32
WBC >12,000 or <4,000
New Onset Altered Mental Status

## SEPSIS DEFINED

At least 2 SIRS criteria + a suspected or documented infection.

# Adult - Narrow Complex Tachycardia

**History**
- Medications

(Aminophylline, Diet pills, Thyroid supplements, Decongestants, Digoxin)
- Diet (caffeine, chocolate)
- Drugs (nicotine, cocaine)
- Past medical history
- History of palpitations / heart racing
- Syncope / near syncope

**Signs and Symptoms**
- Heart Rate > 150
- Systolic BP < 90
- Dizziness, CP, SOB, AMS, Diaphoresis
- CHF
- Potential presenting rhythm

Atrial/Sinus tachycardia
Atrial fibrillation / flutter
Multifocal atrial tachycardia
Ventricular Tachycardia

**Differential**
- Heart disease (WPW, Valvular)
- Sick sinus syndrome
- Myocardial infarction
- Electrolyte imbalance
- Exertion, Pain, Emotional stress
- Fever
- Hypoxia
- Hypovolemia or Anemia
- Drug effect / Overdose (see HX)
- Hyperthyroidism
- Pulmonary embolus

**Four lead ECG able to diagnose and treat unstable arrhythmia**

12 Lead ECG should be performed prior to treatment when patient is stable.

**Consider WPW**
****See PEARLS****

Unstable / pre-arrest (no radial pulse)
HR Typically > 150

FR AED Placement

P **Synchronized Cardioversion** ***per procedure***
*May repeat if needed*

Exit to Appropriate Guidline

B Cardiac Monitor / 12 Lead ECG / Capnography

A IV Procedure P IO Procedure

Regular Rhythm (SVT)

Irregular Rhythm (Atrial Fibrillation / Flutter) Rate ≥ 130

Consider if this elevated HR is from hypovolemia and may respond to IVF

Hypotensive

NO

YES

B Attempt Vagal Maneuvers (REVERT)

Rhythm Changes?

YES

NO

P **Adenosine 12 mg IV / IO**

Rhythm Changes?

YES

NO

P **Diltiazem 0.25 mg/kg IV / IO** (Max 20 mg) IVP over 2 min. May repeat after 15 minutes **0.35 mg/kg** (Max 25 mg) if SBP ≥ 100

P **Diltiazem 0.25 mg/kg IV / IO** (Max 20 mg) IVP over 2 min. May repeat after 15 minutes **0.35 mg/kg** (Max 25 mg) if SBP ≥ 100

P **Amiodarone 150 mg** over 10min. May repeat 150 mg over 10 min if rhythm continues or returns

Rhythm Changes?

Yes

No

Sinus Rhythm and/or Rate Controlled?

Supportive therapy and monitor for patient changes.

B 12 Lead ECG Procedure

Exit to Rhythm- Appropriate Guideline

**Notify Destination or Contact Medical Control**

**Adult - Cardiac - Narrow Complex Tachycardia**

# Adult - Narrow Complex Tachycardia

DELTA WAVE - Consider WPW




Supportive Care → If Patient Becomes UNSTABLE → **P** **Synchronized Cardioversion** ***per procedure*** *May repeat if needed*

## Pearls

Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
Most important goal is to differentiate the type of tachycardia and if STABLE or UNSTABLE.
If at any point patient becomes unstable move to unstable arm in algorithm.
For ASYMPTOMATIC PATIENTS (or those with only minimal symptoms, such as palpitations) and any tachycardia with rate approximately 100-120 and a normal blood pressure, consider CLOSE OBSERVATION and/or fluid bolus rather than immediate treatment with an anti-arrhythmic medication.
A patient's "usual" atrial fibrillation, for example, may not require emergent treatment.
Narrow complex tachycardia >200 should be closely evaluated for WPW Symptomatic tachycardia usually occurs at rates of 120 -150 and typically ≥ 150 beats per minute.
Patients symptomatic with heart rates < 150 likely have impaired cardiac function such as CHF.
Serious Signs / Symptoms: Hypotension.
Acutely altered mental status.
Signs of shock / poor perfusion.
Chest pain with evidence of ischemia (STEMI, T wave inversions or depressions.) Acute CHF.
Search for underlying cause of tachycardia such as fever, sepsis, dyspnea, etc.
If patient has history or 12 Lead ECG reveals Wolff-Parkinson-White (WPW), DO NOT administer a Ca Channel Blocker (e.g. Diltiazem) or Beta Blockers.
Use caution with Adenosine and give only with defibrillator available.
Typical sinus tachycardia is in the range of 100 to (200 - patient's age) beats per minute.
Regular Narrow-Complex Tachycardias: - Vagal maneuvers (REVERT) and/or adenosine are preferred.
Vagal maneuvers may convert up to 50% of SVT. - Adenosine should be pushed rapidly via proximal IV site followed by 20 mL Normal Saline rapid flush.
Irregular Tachycardias: - First line agents for rate control are calcium channel blockers (or beta blockers). - DO NOT give both calcium channel blockers and beta blockers to a patient sequentially without contacting Medical Control.
This may lead to heart block, profound bradycardia, and/or hypotension. - Adenosine may not be effective in atrial fibrillation / flutter, yet is not harmful and may help identify rhythm.
Synchronized Cardioversion: Recommended to treat UNSTABLE Atrial Fibrillation, Atrial Flutter and Monomorphic-Regular Tachycardia (SVT.) Monitor for hypotension after administration of Calcium Channel Blockers or Beta Blockers.
Monitor for respiratory depression and hypotension associated with Midazolam.
Continuous pulse oximetry is required for all SVT patients.
Document all rhythm changes with monitor strips and obtain monitor strips with each therapeutic intervention.

# Adult - Post-Resuscitation Care

**History**
Respiratory arrest
Cardiac arrest

**Signs/Symptoms**
Return of pulse

**Differential**
Continue to address specific differentials associated with the original dysrhythmia

PRIOR TO PATIENT MOVEMENT CREW SHOULD REMAIN ON SCENE TO COMPLETE CHECKLIST ON PAGE 2

| | | | |
|---|---|---|---|
| **FR** | Monitor Vital Signs/Reassess | **B** | Cardiac Monitor / 12 Lead ECG / Capnography |
| **B** | **Optimize Ventilation and Oxygenation**<br>Maintain $SpO_2$ = 94-99%<br>Advanced airway ***if indicated***<br>Obtain vital signs and 12/15 lead ECG<br>DO NOT HYPERVENTILATE - monitor $CO_2$ | | |
| **A** | IV Procedure | **P** | IO Procedure |

Hypotension Guideline ← YES — Hypotension Systolic BP < 90

NO

STEMI / Suspicion of MI → YES → Chest Pain Guideline

NO

Bradycardia Guideline ← YES — Symptomatic Bradycardia

NO

ROSC with Antiarrhythmic given → Arrhythmias are common and usually self limiting after ROSC and may not need further meds or drips.

If Arrhythmia Persists follow Rhythm Appropriate Guideline

**P2** Consider RSI for ETT Only When Necessary

**Notify Destination or Contact Medical Control**

Adult - Cardiac - Post-Resuscitation Care

## ROSC Checklist

ASSESS CO2 (should be > 20 with a good waveform).
Keep a finger on the pulse and continuously evaluate it before movement.
Obtain a full set of vital signs, ECG, and blood glucose. Do not move the patient until complete.
Continuously observe the cardiac monitor rhythm.
Check the oxygen supply and pulse oximetry; titrate to SaO2 94-99%.
Do not increase the respiratory rate to obtain a "normal" EtCO2.
If STEMI is evident, notify the hospital.
Assess for and treat bradycardia < 60 bpm.
Obtain blood pressure. Pressors are indicated for SBP < 90 or MAP < 65.
Evaluate the need for post-resuscitation airway placement (e.g., ETT). Strongly consider a bougie if an airway change is indicated.
During movement, continuously check the pulse and monitor the cardiac rhythm.
Keep a mask available for BVM ventilation if the advanced airway fails.
Once in the ambulance, confirm the pulse, breath sounds, SaO2, EtCO2, and cardiac rhythm.
Ensure appropriate personnel are present in the back of the ambulance for transport.

**Pearls**

- **Recommended Exam: Mental Status, Neck, Skin, Lungs, Heart, Abdomen, Extremities, Neuro**
- **Continue to search for potential cause of cardiac arrest during post-resuscitation care.**
- **Hyperventilation is a significant cause of hypotension and recurrence of cardiac arrest in the post resuscitation phase and must be avoided at all costs.**
- **Initial End tidal $CO_2$ may be elevated immediately post-resuscitation but will usually normalize. While goal is 35 - 45 mmHg, avoid hyperventilation.**
- **Transport to facility capable of managing the post-arrest patient including hypothermia therapy, cardiac catheterization and intensive care service.**
- **Most patients immediately post resuscitation will require ventilatory assistance.**
- **The condition of post-resuscitation patients fluctuates rapidly and continuously, and they require close monitoring. Appropriate post-resuscitation management may require consultation with medical control.**
- **Common causes of post-resuscitation hypotension include hyperventilation, hypovolemia, pneumothorax, and medication reaction to ALS drugs.**
- **Titrate vasopressors to maintain SBP ≥ 90. Ensure adequate fluid resuscitation is ongoing.**

# Adult - Ventricular Ectopy

### History

- Age
- Medications (Viagra / sildenafil, Levitra / vardenafil, Cialis / tadalafil)
- Past medical history (MI, Angina, Diabetes, post menopausal)
- Allergies
- Recent physical exertion
- Recent illnesses

### Signs and Symptoms

- Any CP (pain, pressure, aching, vice-like tightness)
- Respiratory distress
- Lung sounds
- Pale, diaphoresis
- Shortness of breath
- Nausea, vomiting, dizziness
- Symptoms of drug reaction or overdose

### Differential

- Trauma vs. Medical
- Angina, Myocardial infarction
- Pericarditis
- Pulmonary embolism
- Asthma / COPD /CHF
- Overdose
- Drug use (Cocaine, Meth, etc)
- Hypoxia
- Cardiac Medications

**B** Calm and reassure the patient. NO EXERTION
Cardiac Monitor or AED with pads (anterior/posterior)
Pulse oximetry / Capnography

Dyspnea / Hypoxia / Chest Pain / Atypical symptoms
Suspect cardiac etiology / Signs of overdose

→ Exit to Appropriate Guideline

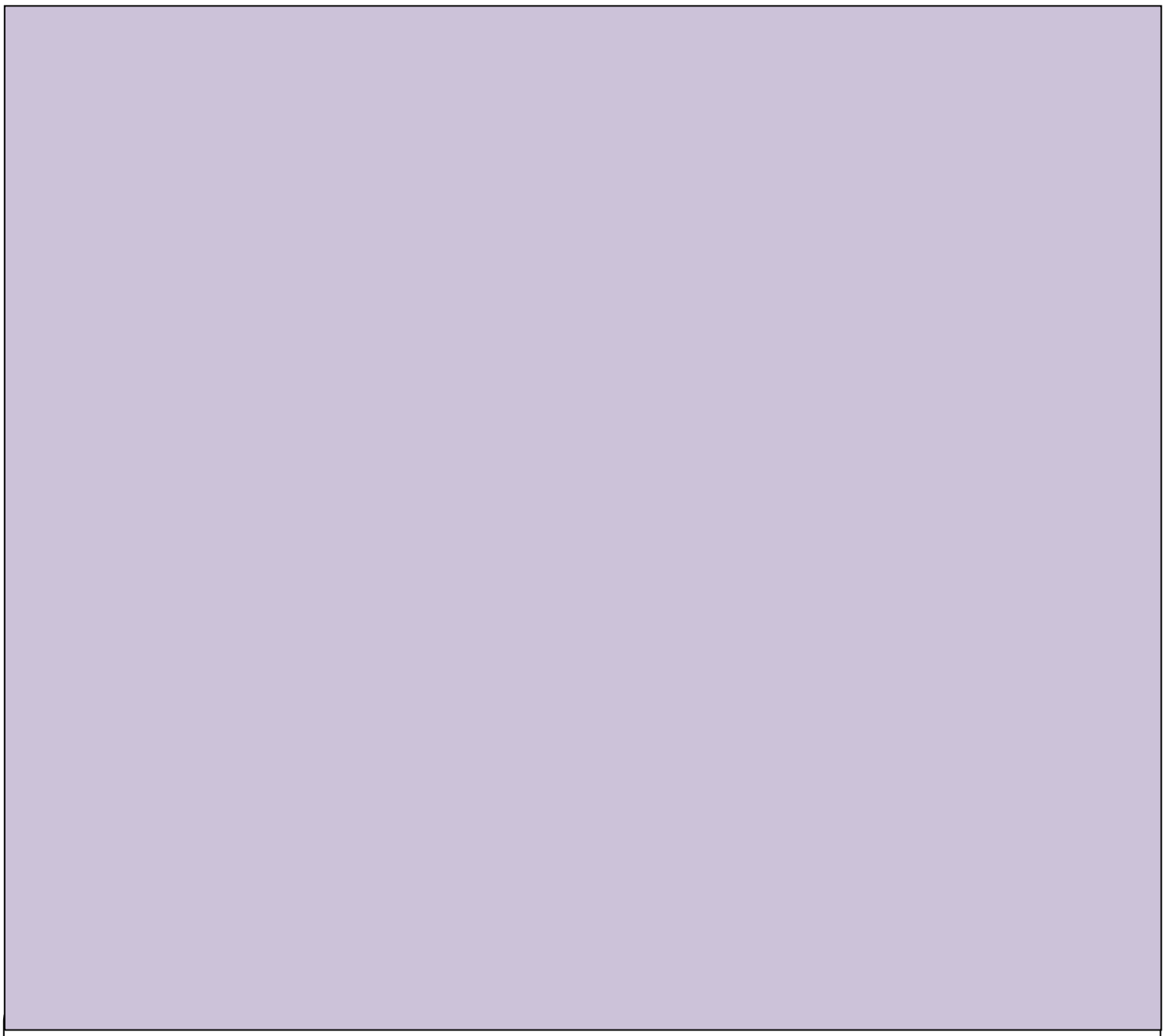
**B** **12 Lead ECG Procedure**

**Aspirin 81 mg x 4 PO (chewed)**
Or **325 mg PO** if no contrindication

**A** IV Procedure **P** IO Procedure

**Notify Destination or Contact Medical Control**

Adult - Cardiac - Ventricular Ectopy



## Pearls

- **Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro**
- **Ventricular ectopy can be from cardiac irritability and the cause must be investigated.**
- **Cardiac ischemia, infarction, hypoxia, electrolyte abnormalities, drugs and medications are often causes of ectopy**.
- Monitor closely for hypotension and changes in rhythm.
- Diabetics, geriatric and female patients often have atypical pain, or only generalized complaints. Have a low threshold to perform a 12 lead EKG and consider ischemia/infarction in these patients.
- Document the time of the 12-Lead ECG in the PCR as a Procedure along with the interpretation (Paramedic).

# Adult - Ventricular Fibrillation / Pulseless VT

**History**

- **Estimated down time**
- **Past Medical History**
- **Medications**
- **Events leading to arrest**
- **Renal failure / Dialysis**
- **DNR or TPOP form**

**Signs and Symptoms**

- Unresponsive, apneic, pulseless
- Ventricular fibrillation or ventricular tachycardia on EKG

**Differential**

- Asystole
- Artifact / Device Failure
- Cardiac
- Endocrine / Medicine
- Drugs
- Pulmonary

**FR** — ***Begin Continuous CPR Compressions (Consider Mechanical Compression Device if available)***
***Push Hard (≥ 2 inches) Push Fast (100/min)***
***Change Compressors every 2 minutes***
***(Limit pauses to AED analyze or defibrillation)***

Airway Guideline(s)

IV Procedure | **P** | IO Procedure

**A** — **Epinephrine 1:10,000 1 mg IV/IO**

**(One time only dose of epinephrine while in a shockable rhythm)**

**P** — **Defibrillation procedure**

FR — **Resume Continuous CPR Compressions**
**Continue CPR up to point where you are ready to defibrillate with device charged.**

**<u>If Vfib/Pulseless VT Refractory after 2 shocks</u>**
**1. Continue aggressive CPR and give Medications during compressions.**
**2. Consider anterior / posterior pad placement**

**P** — **Amiodarone, 300 mg IV/IO** x1
For Recurrent VF/Pulseless VT give additional **150 mg IV/IO** x1
OR
**Lidocaine, 1-1.5 mg/kg IV/IO** may repeat in 3-5 minutes at **0.5-1 mg/kg**. Total of 3 doses <u>OR</u>
**3 mg/kg** max

**For refractory VFIB/Pulseless VT, consider defibrillation procedure with new pad location**

FR — High Quality, Continuous Compressions

**P** — Consider Magnesium Sulfate 2 g, diluted in 100 mL D5W IV/IO,
Consider Sodium Bicarbonate 50 mEq and Calcium Chloride 1 g IV/IO
Consider Labetalol 20 mg IV/IO

**AT ANY TIME**

**Return of Spontaneous Circulation**

**Go to Post Resuscitation Guideline**

**<u>Reversible Causes</u>**

Hypovolemia
Hypoxia
Hydrogen ion (acidosis)
Hypothermia
Hypo / Hyperkalemia
Hypoglycemia

Tension pneumothorax
Tamponade; cardiac
Toxins
Thrombosis; pulmonary (PE)
Thrombosis; coronary (MI)

Consider Magnesium Sulfate for these reversible causes
Torsades de Pointes
Malnourished
Alcoholic
Suspected Digitalis Toxicity

**Contact Medical Control**

**Adult - Cardiac - Ventricular Fibrillation / Pulseless VT**

**Pearls**

Recommended Exam: Mental Status Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated.
Consider early IO placement if available and difficult IV anticipated.
DO NOT HYPERVENTILATE: Ventilate 8 - 10 breaths per minute or as guided by EtCO2, with continuous, uninterrupted compressions.
Do not interrupt compressions to place endotracheal tube.
Consider supraglottic airway first to limit interruptions.
Consider elevating the head of the cot to 15 degrees if mechanical compression device available Effective CPR and prompt defibrillation are the keys to successful resuscitation.
Use the medication routes specified in the algorithm.
Give epinephrine 1 mg IV/IO once only while the rhythm remains shockable.
Reassess, document airway placement and EtCO2 frequently, after every move, and at transfer of care.
Do not stop CPR to check for placement of airway device or to give medications.
If BVM is ventilating the patient successfully, intubation should be deferred until rhythm has changed or 4 or 5 defibrillation sequences have been completed.
Return of spontaneous circulation: Heart rate should be > 60 when initiating anti-arrhythmic infusions.

# Adult - Wide Complex Tachycardia

## History

- Medications (Aminophylline, Diet pills, Thyroid supplements, Decongestants, Digoxin)
- Diet (caffeine, chocolate)
- Drugs (nicotine, cocaine)
- Past medical history
- History of palpitations / heart racing / Bundle Branch Blocks
- Syncope / near syncope

## Signs and Symptoms

- Heart Rate > 150
- Systolic BP < 90
- Dizziness, CP, SOB, AMS, Diaphoresis
- CHF
- Potential presenting rhythm
- Atrial/Sinus tachycardia with aberrancy
- Ventricular Tachycardia

## Differential

- Heart disease (Bundle Branch Block)
- Sick sinus syndrome with aberrancy
- Myocardial infarction with BBB
- Drug effect / Overdose (see HX)
- Ventricular Tachycardia
- When in doubt always treat as V-Tach

| | | | |
|---|---|---|---|
| FR | AED Placement | | |
| B | Cardiac Monitor / 12 Lead ECG / Capnography | | |
| A | IV Procedure | P | IO Procedure |

Unstable / pre-arrest (no radial pulse)
HR Typically > 150

P **Synchronized Cardioversion** ***per procedure***
*May repeat if needed*

Ventricular Tachycardia

P **Amiodarone 150 mg IV** over 10 minutes (150 mg in 100 mL of D5W) may repeat as needed to a max of **2.2gm** over 24 hours
OR
**Lidocaine 1-1.5 mg/kg IV/IO**
May repeat in 3-5 minutes at **0.5-1 mg/kg**. Total of 3 doses or 3 mg/kg max

Rhythm Changes?

NO

P **Synchronized Cardioversion should be considered for stable refractory V-Tach**

SVT / Unknown

Attempt Vagal Maneuvers (REVERT)

Rhythm Changes? — YES

NO

P **Adenosine 6 mg IV / IO**
Rapid push
If no response, **12 mg IV / IO**

Rhythm Changes? — YES

NO

A-Fibrillation
A-Flutter

P **Cardizem 0.25 mg/kg (max 20 mg) IV / IO slow IV push**

**May repeat 0.35 mg/kg (max 25 mg) IV / IO slow IV push**

Torsades de Pointes

P **Mag Sulfate 2 grams** over 5 minutes. (Mix 2 grams in 100 mL D5W.)

Supportive therapy and monitor for patient changes.

Sinus Rhythm and/or Rate Controlled?

Rhythm Changes?

NO

B 12 Lead ECG Procedure

**Notify Destination or Contact Medical Control**

**Four lead ECG able to diagnose and treat unstable arrhythmia**

12 Lead ECG should be performed prior to treatment when patient is stable.

Slow and wide complexes should receive Sodium Bicarb and Calcium

**Consider WPW**
**"SEE PEARLS"**

**Adult - Cardiac - Wide Complex Tachycardia**

DELTA WAVE - Consider WPW




Supportive Care → If Patient Becomes UNSTABLE → **P** **Synchronized Cardioversion** ***per procedure*** *May repeat if needed*

**Pearls**

- **Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro**
- **Most important goal is to differentiate the type of tachycardia and if STABLE or UNSTABLE.**
- **If at any point patient becomes unstable move to unstable arm in algorithm.**
- **For ASYMPTOMATIC PATIENTS (or those with only minimal symptoms, such as palpitations) and any tachycardia with rate approximately 100-120 and a normal blood pressure, consider CLOSE OBSERVATION and/or fluid bolus rather than immediate treatment with an anti-arrhythmic medication. A patient's "usual" atrial fibrillation, for example, may not require emergent treatment.**
- **Wide complex tachycardia >150 should be closely evaluated for Ventricular Tachycardia.**
- **Symptomatic tachycardia usually occurs at rates of 120 -150 and typically ≥ 150 beats per minute. Patients symptomatic with heart rates < 150 likely have impaired cardiac function such as CHF.**
- **Serious Signs / Symptoms: Hypotension. Acutely altered mental status. Signs of shock / poor perfusion. Chest pain with evidence of ischemia (STEMI, T wave inversions or depressions.) Acute CHF.**
- **Search for underlying cause of tachycardia such as fever, sepsis, dyspnea, etc.**
- Typical sinus tachycardia is in the range of 100 to (200 - patient's age) beats per minute.
- **SVT with aberrancy Wide-Complex Tachycardias:**
- **-** Vagal maneuvers (REVERT) and/or adenosine are preferred. Vagal maneuvers may convert up to 50% of SVT.
- - Adenosine should be pushed rapidly via proximal IV site followed by 20 mL Normal Saline rapid flush.
- - Adenosine should be pushed rapidly via proximal IV site followed by 20 mL Normal Saline rapid flush.
- **Ventricular Tachycardias:**
- - First line medications are Amiodarone or Lidocaine.
- - Cardioversion / Defibrillation may be needed.
- **Synchronized Cardioversion:**
- Recommended to treat UNSTABLE Monomorphic Regular Tachycardia (SVT) and Ventricular Tachycardia with a pulse.
- Monitor for hypotension after administration of Adenosine, Amiodarone or Lidocaine.
- Monitor for respiratory depression and hypotension associated with Midazolam.
- Continuous pulse oximetry is required for all SVT patients and Ventricular Tachycardic patients.
- Document all rhythm changes with monitor strips and obtain monitor strips with each therapeutic intervention.

# Adult - Abdominal Pain

## History

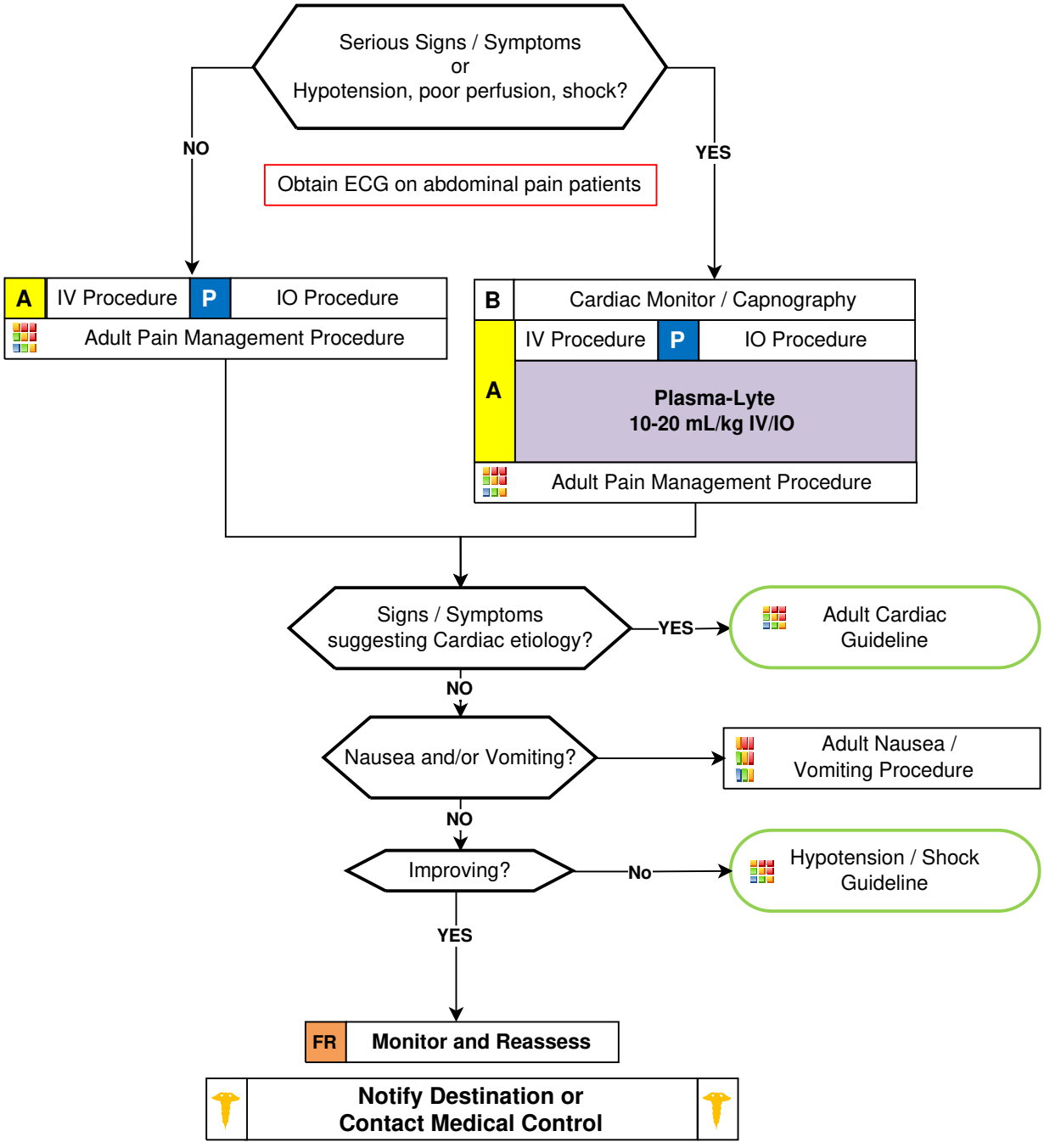
- Age
- Past medical / surgical history
- Medications
- OPQRST
- Fever
- Last meal eaten
- Last bowel movement / emesis
- Menstrual history (pregnancy)

## Signs and Symptoms

- Pain (location / migration)
- Tenderness
- Nausea
- Vomiting
- Diarrhea
- Dysuria
- Constipation
- Vaginal bleeding / discharge
- Pregnancy

## Differential

- Pneumonia or Pulmonary embolus
- Liver (hepatitis, CHF)
- Gallbladder
- Myocardial infarction
- Pancreatitis
- Kidney stone
- Abdominal aneurysm
- Appendicitis
- Diverticulitis
- Bowel obstruction
- Gastroenteritis (infectious)



**Pearls**

- **The majority of abdominal pain cases should be treated and transported at the ALS level when available.**
- **Recommended Exam: Mental Status, Skin, HEENT, Neck, Heart, Lung, Abdomen, Back, Extremities, Neuro**
- Document the mental status and vital signs prior to administration of anti-emetics
- Abdominal pain in women of childbearing age should be treated as pregnancy related until proven otherwise.
- Antacids should be avoided in patients with renal disease.
- **The diagnosis of abdominal aneurysm should be considered with abdominal pain or back pain especially in patients > 50 and / or patients with shock / poor perfusion.**
- **Repeat vital signs after each fluid bolus.**
- Consider cardiac etiology in patients > 50, diabetics and / or women especially with abdominal complaints.
- **Use caution with administration of prochlorperazine maleate (compazine) in elderly patients; may cause extra sedation or dyskinesia.**

# Adult - Altered Mental Status

## History

- Known diabetic, medic alert tag
- Drugs, drug paraphernalia
- Report of illicit drug use or toxic ingestion
- Past medical history
- Medications
- History of trauma
- Change in condition
- Changes in feeding or sleep habits

## Signs and Symptoms

- Decreased mental status or lethargy
- Change in baseline mental status
- Bizarre behavior
- Hypoglycemia (cool, diaphoretic skin)
- Hyperglycemia (warm, dry skin; fruity breath; Kussmaul respirations; signs of dehydration)
- Irritability

## Differential

- Head trauma
- CNS (stroke, tumor, seizure, infection)
- Cardiac (MI, CHF)
- Hypothermia
- Infection (CNS and other)
- Thyroid (hyper / hypo)
- Shock (septic, metabolic, traumatic)
- Diabetes (hyper / hypoglycemia)
- Toxicological or Ingestion
- Acidosis / Alkalosis
- Environmental exposure
- Pulmonary (Hypoxia)
- Electrolyte abnormality
- Psychiatric disorder

Selective Cervical Splinting Procedure

Airway Procedure

B: Blood Glucose Analysis Procedure; Cardiac Monitor / 12 Lead ECG / Capnography

A: IV Procedure | P: IO Procedure

### Stroke Suspicion

FR: Prehospital Stroke Screen

FR: RACE Assessment

Time Critical Diagnosis
Obtain accurate Last Seen Normal time and contact number of witness

Consider rapid transport and early notification to the receiving facility

### Blood Glucose ≤ 60 mg/dL

B: Consider Oral Glucose

P: 10% Dextrose 0.1 g/kg slow IV/IO
(1 mL/kg 250 mL bag)

If not available or IV/IO access failed, Oral Glucose could be given via NG/OG tube

If patient is on oral hypoglycemic or long acting insulin, and/or an IV/IO was inserted, the patient should be transported.
If PRC is obtained, patient must be left with a responsible caregiver.

### Consider toxin, environmental, metabolic, & infectious etiologies

Adequate Respirations / Oxygenation / Ventilation?

NO

FR: **Naloxone Prefilled device (1 mL / nare) IN for BLS only**

A: **Naloxone 0.4 mg increments** IV/IO/IM repeat prn Naloxone is titrated to effect adequate ventilation and oxygenation up to **2 mg**

YES

**Notify Destination or Contact Medical Control**

Adult - Medical - Altered Mental Status

R.A.C.E Stroke Scale
Rapid Arterial oCclusion Evaluation Scale

| Item | Instruction | Score | NIHSS Equivalent |
|---|---|---|---|
| Facial palsy | Ask patient to smile | Absent = 0<br>Mild = 1<br>Moderate to severe = 2 | 0-3 |
| Arm motor function | Extend patient's arm 90 degrees if sitting, 45 if supine | Normal to mild = 0<br>Moderate = 1<br>Severe = 2 | 0-4 |
| Leg motor function | Extend patient's leg 30 degrees in supine position | Normal to mild = 0<br>Moderate = 1<br>Severe = 2 | 0-4 |
| Head & gaze deviation | Observe deviation to one side | Absent = 0<br>Present = 1 | 0-2 |
| Aphasia (right side) | Ask patient to close their eyes and make a fist | Normal = 0<br>Moderate = 1<br>Severe = 2 | 0-2 |
| Agnosia (left side) | Ask patient to recognize familiar objects | Normal = 0<br>Moderate = 1<br>Severe = 2 | 0-2 |
| Patient RACE scale total | | 6 | |

Medscape

- ☐ Consider trauma, look for signs of injury
- ☐ Consider toxin, HAZMAT, drugs and alcohol (pupils, diaphoresis)
- ☐ Consider blood glucose
- ☐ Consider additional causes in those known to have drugs and alcohol

**Pearls**

- **Recommended Exam: Mental Status, HEENT, Skin, Heart, Lungs, Abdomen, Back, Extremities, Neuro.**
- **Pay careful attention to the head exam for signs of bruising or other injury.**
- Be aware of AMS as presenting sign of an environmental toxin or Haz-Mat exposure and protect personal safety and that of other responders who may already be exposed.
- Recheck blood glucose after Dextrose.
- Do not let alcohol confuse the clinical picture. Alcoholics frequently develop hypoglycemia and may have unrecognized injuries.
- Consider using multiple doses of naloxone in suspected carfentanyl.

# Adult - Anaphylaxis

### History

- Onset and location
- Insect sting or bite
- Food allergy / exposure
- Medication allergy / exposure
- New clothing, soap, detergent
- Past history of reactions
- Past medical history
- Medication history

### Signs and Symptoms

- Itching or hives
- Coughing / wheezing or respiratory distress
- Chest or throat constriction
- Difficulty swallowing
- Hypotension or shock
- Edema
- Nausea / Vomiting

### Differential

- Urticarial (rash only)
- **Anaphylaxis (systemic effect)**
- Shock (vascular effect)
- Angioedema (drug induced)
- Aspiration / Airway obstruction
- Vasovagal event
- Asthma or COPD
- CHF

| | |
|---|---|
| | Airway Procedure |
| FR | **$O_2$ via appropriate device** |
| B | **Cardiac Monitor / 12 Lead / Capnography** |
| A | IV Procedure / P: IO Procedure |

Assess Symptom Severity

**MILD**

| | |
|---|---|
| FR | Monitor and Reassess for Worsening Signs and Symptoms |
| P | **Diphenhydramine 25 - 50 mg IM/IV/IO** |

**MODERATE**

| | |
|---|---|
| FR | **Epinephrine 1:1000 0.3 IM via auto-injector device** — **B-OK EMT Scope may administer Epi 0.3 mg IM** |
| B | **Albuterol Nebulized 2.5 mg** Repeat as needed |
| A | **Epinephrine 1:1000** 0.3-0.5 mg IM |
| P2 | **Epinephrine 1:100,000 (PDP) 0.1-0.3 mg slow IV/IO (10-30 mcg)** |
| P | **Diphenhydramine 25 - 50 mg IM/IV/IO** |
| P | **Solumedrol 125 mg IM/IV/IO** |
| P | **Magnesium Sulfate 1-2gm IV/IO** |

Nebulize 1-2gm Magnesium Sulfate if unable to obtain IV.

**SEVERE**

| | |
|---|---|
| FR | **Epinephrine 1:1000 0.3 IM via auto-injector device** — **B-OK EMT Scope may administer Epi 0.3 mg IM** |
| B | **Albuterol Nebulized 2.5 mg** Repeat as needed |
| A | **Duoneb Nebulized 3 mL** (ipratropium 0.5 mg - albuterol 2.5 mg) **Give only 1 time** — **B-OK EMT Scope** |
| A | **Normal Saline** Titrated to maintain Blood Pressure |
| A | **Epinephrine 1:1000** 0.3-0.5 mg IM |
| P2 | **Epinephrine 1:100,000 (PDP) 0.1 -0.3 mg slow IV/IO (10-30 mcg)** |
| P | **Diphenhydramine 25 - 50 mg IM/IV/IO** |
| P | **Solumedrol 125 mg IM/IV/IO** |
| P | **Magnesium Sulfate 1-2gm IV/IO** |

**Notify Destination or Contact Medical Control**

## Symptom Severity Classification:

**Mild symptoms:**

- Flushing
- Hives
- Itching
- Erythema
- Normal blood pressure and perfusion

**Moderate symptoms:**

- Flushing
- Hives
- Itching
- Erythema
- Respiratory (wheezing, dyspnea, hypoxia)
- Gastrointestinal symptoms (nausea, vomiting, abdominal pain)
- Normal blood pressure and perfusion.

**Severe symptoms:**

- **Skin symptoms may or may not be present**
- **Possible Itching, erythema**
- **Respiratory (wheezing, dyspnea, hypoxia)**
- **Gastrointestinal symptoms (nausea, vomiting, abdominal pain)**
- **Hypotension and poor perfusion.**

**Allergic reactions may occur with only respiratory and gastrointestinal symptoms and have no rash / skin involvement.**

### Pearls

Recommended Exam: Mental Status, Skin, Heart, Lungs.
Anaphylaxis is an acute and potentially lethal multisystem allergic reaction.
Epinephrine is the first-line medication for anaphylaxis.
Use the route, concentration, dose, and provider level specified in the algorithm.
To improve patient safety, Use an auto-injector to deliver IM epinephrine any time one is available.
For IV/IO epinephrine, follow the algorithm and the push-dose pressor procedure.
Contact Medical Control for refractory anaphylaxis.
Lateral thigh is the preferred site for IM injection of epinephrine.
Angioedema is seen in moderate to severe reactions and is swelling involving the face, lips or airway structures.
This can also be seen in patients taking ACE-inhibitor blood pressure medications like Prinivil / Zestril (lisinopril)-typically end in -il.
Caution is warranted in patients who are ≥ 55 years of age, have a history of cardiac disease, take Beta-Blockers / Digoxin or patients who have heart rates ≥ 150.
Epinephrine may precipitate cardiac ischemia.
These patients should receive a 12 lead ECG at some point in their care, but this should NOT delay administration of epinephrine.
Administer epinephrine according to the provider-level designations in the algorithm, including the B-OK EMT scope designation.
The shorter the onset from symptoms to contact, the more severe the reaction.
Early use of epinephrine has shown significantly better outcomes for patients in anaphylaxis.

# Adult - Behavioral Emergencies

### History

- Situational crisis
- Psychiatric illness/medications
- Injury to self or threats to others
- Medic alert tag
- Substance abuse / overdose
- Diabetes

### Signs and Symptoms

- Anxiety, agitation, confusion
- Affect change, hallucinations
- Delusional thoughts, bizarre behavior
- Combative violent
- Expression of suicidal / homicidal thoughts

### Differential

- Altered Mental Status differential
- Alcohol Intoxication
- Toxin / Substance abuse
- Medication effect / overdose
- Withdrawal syndromes
- Depression
- Bipolar (manic-depressive)
- Schizophrenia
- Anxiety disorders

**Danger to Self/Others**

Expressing s/s of paranoia, disorientation, hyper- aggression, hallucination, acts of violence, threats of violence

**NO**

Responds to verbal de-escalation, police standby, and/or family.
Mild anxiety

**B** Cardiac Monitor / Capnography

**P**

Consider **Midazolam 2-5 mg IV/IM/IN**
**May be repeated**

**Haldol 2.5 - 5 mg IV/IM**
**OR**
**Olanzapine 10 mg PO**

Administer only one antipsycotic medication

**Patients should never be given both Olanzapine and Haldol.**

Patients receiving antipsychotics should have an EKG obtained when possible

Oral medications should be given to the patient to ingest on their own. Never place your hands near patients mouth

**YES**

**B**

Consider Physical Restraint Policy

Cardiac Monitor / Capnography

**A**

IV Procedure

**Normal Saline or Plasma Lyte if indicated**

**P**

*CONSIDER:*
**Haldol 5 mg IM/IV/IO *may repeat x1*** for psychosis

**AND/OR**

*CONSIDER:*
**Midazolam 2 - 5 mg IM/IV/IO/IN , *Repeat as needed.***

*CONSIDER:*
**Ketamine 1 mg/kg IV/IO *or* 4 mg/kg IM (max IM dose 500 mg). *May repeat at 0.5 mg/kg IV/IO***

If Ketamine given you must be able to monitor the airway with Capnogrpahy

Monitor and Reassess

**Notify Destination or Contact Medical Control**

- Patients should be transported with cot manufacturer safety restraint system in full view above sheets and/or blankets
- If Law Enforcement plans to seek a 96 hour hold, they will need to follow EMS to the hospital.
- In the event a patients intent to elope is expressed or observed, the crew should make every effort to stop the ambulance in a safe location, notify local law enforcement via dispatch and maintain visual contact with the patient where possible until law enforcement arrives.
- Patients actively resisting restraint should be treated for psychosis and/or anxiety.

**Pearls**

- **Recommended Exam: Mental Status, Skin, Heart, Lungs, Neuro**
- **Crew / responders safety is the main priority. SEE PHYSICAL/CHEMICAL RESTRAINT PROCEDURE**
- **Any patient who is handcuffed or restrained by Law Enforcement and transported by EMS must be accompanied by law enforcement in the ambulance.**
- **Consider antipsychotics (Haloperidol or Olanzapine) for patients with history of psychosis or extreme alcohol intoxication, or a benzodiazepine for patients with other presumed substance abuse. While benzodiazepines may be indicated for patients with alcohol intoxication, consider that alcohol and benzodiazepines together may lead to respiratory depression.**
- **All patients who receive physical restraint must be continuously observed.**
- Be sure to consider all possible medical/trauma causes for behavior (hypoglycemia, overdose, substance abuse, hypoxia, head injury, etc.)
- Do not overlook the possibility of associated domestic violence or child abuse.
- Do not position or transport any restrained patient is such a way that could impact the patients respiratory or circulatory status.

- **Extrapyramidal reactions:**

Condition causing involuntary muscle movements or spasms typically of the face, neck and upper extremities. May present with contorted neck and trunk with difficult motor movements. Typically an adverse reaction to antipsychotic drugs and may occur with your administration. When recognized give **Diphenhydramine 50 mg IV/IO/IM** in adults or **1 mg/kg IV/IO/IM** in pediatrics.

# Adult - Epistaxis

### History

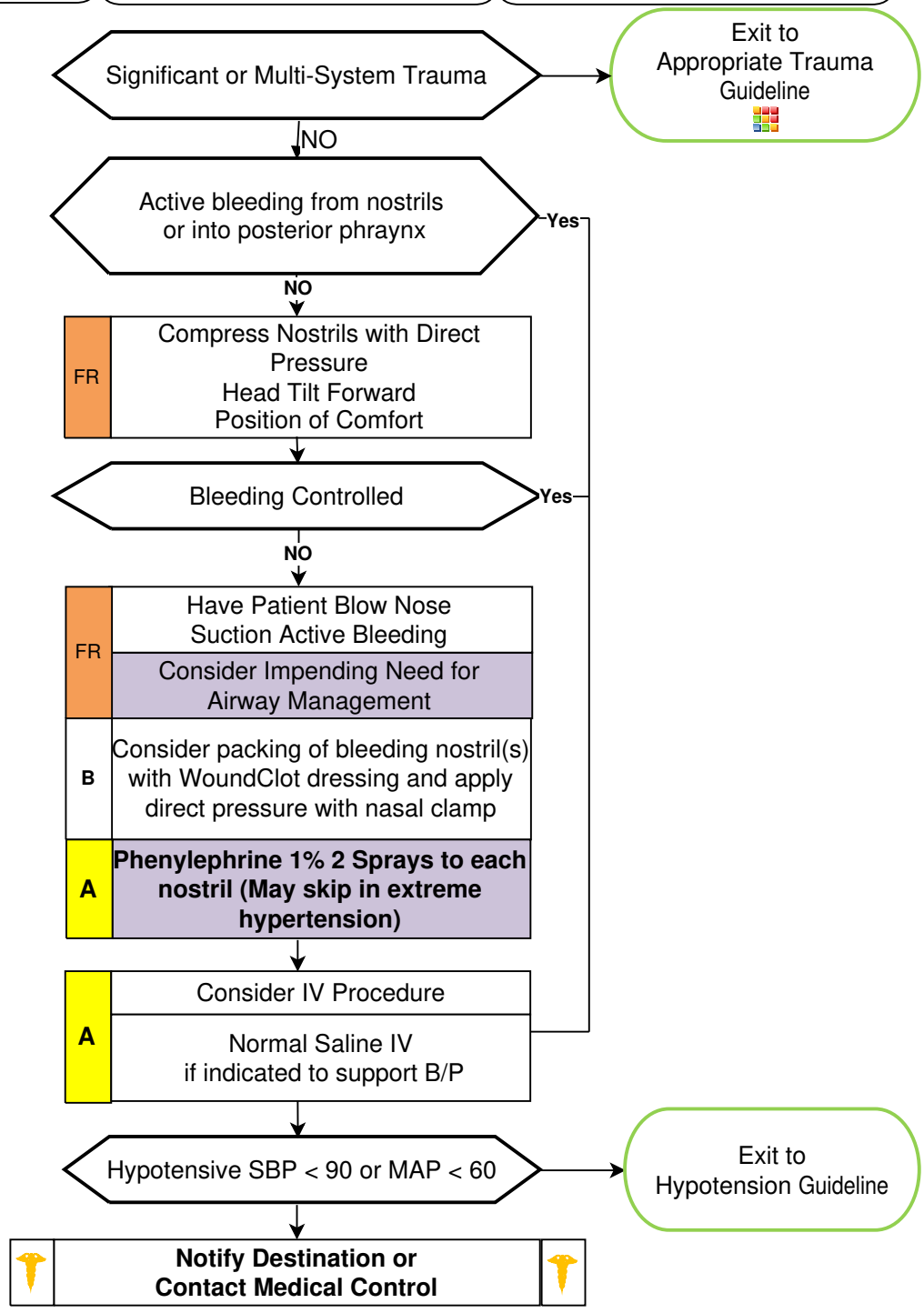
- Age
- Past medical history
- Medications (HTN, anticoagulants, aspirin, NSAIDs)
- Previous episodes of epistaxis
- Trauma
- Duration of bleeding
- Quantity of bleeding

### Signs and Symptoms

- Bleeding from nasal passage
- Pain
- Nausea
- Vomiting

### Differential

- Trauma
- Infection (viral URI or Sinusitis)
- Allergic rhinitis
- Lesions (polyps, ulcers)
- Hypertension



**Pearls**

- **Recommended Exam: Mental Status, HEENT, Heart, Lungs, Neuro**
- **It is very difficult to quantify the amount of blood loss with epistaxis.**
- **Bleeding may also be occurring posteriorly. Evaluate for posterior blood loss by examining the posterior pharynx.**
- **Anticoagulants include warfarin (Coumadin), heparin, enoxaparin (Lovenox), dabigatran (Pradaxa), rivaroxaban (Xarelto), and many over the counter headache relief powders.**
- **Anti-platelet agents like aspirin, clopidogrel (Plavix), aspirin/dipyridamole (Aggrenox), and ticlopidine (Ticlid) can contribute to bleeding.**

Confirm scene safety and use of appropriate BSI procedures.
Evaluate Mechanism of injury, number of patients, and the need for additional resources.

## B.L.S.

ABCs & LOC

Focused history & Exam

### Responsive

S.A.M.P.L.E.

Focused medical assessment

Baseline vital signs

Treatment decision BLS/ALS

Treat per appropriate guideline(s)

Transport

### Unresponsive

A.L.S. PATIENT If available

## A.L.S.

ABCs & LOC

Focused history & Exam

### Responsive

S.A.M.P.L.E.

Focused medical assessment

Baseline vital signs

Treatment decision BLS/ALS

Treat per appropriate guideline(s)

Transport

### Unresponsive

Rapid medical assessment

Baseline vital signs

S.A.M.P.L.E.

Treatment decision ALS

Treat per appropriate guideline(s)

Transport

**Upon arrival, all equipment should be taken to the patient, with intent to transport.**

- Monitor
- ALS bag
- Airway bag

These can easily be placed on the cot before initial patient contact

Adult medical patients with any of the following should be transported **ALS**: any abnormal vital sign, abdominal pain, clinical signs of shock, need for IV fluids or medications, AMS, respiratory distress, chest discomfort, pain requiring analgesics. Patient's with weakness, dizziness, nausea or vomiting should be ALS due to possible metabolic, cardiac or vascular causes.

Where appropriate, Paramedics will institute the following care PRIOR to contacting Medical Control.

1. Establish an airway
2. Administer $O_2$
3. Establish an IV or IO with fluid resuscitation if necessary
4. Apply cardiac monitor, pulse oximetry, and capnography if indicated
5. Administered medications indicated
6. Obtain a temperature if indicated
7. Contact Medical Control for report, consult, or orders

In the event that contact with Medical Control **cannot** be established, EMS Personnel will treat patients under these guidelines until communications can be established.

# Adult - High Consequence Pathogens

The Missouri Department of Health and Senior Services (DHSS) activated a statewide public hotline for citizens or providers needing guidance regarding the novel coronavirus, or COVID-19. The hotline can be reached at **877-435-8411**. The hotline is being operated by medical professionals and is available 24 hours a day, 7 days a week.

## 911 Emergency Dispatch Center

1. Does victim have risk for Emerging Infectious Disease with chief complaints:
   **Flu-Like Symptoms, Respiratory Illness(cough, difficulty breathing), Breathing Problem, Headache, Sick Person**
2. Listen to medical dispatch ask the following questions or ask for calls not transferred to EMS Dispatch Centers:
   **In the past 14 days have you been to affected areas or been exposed to someone who has traveled to affected areas?** (Not needed once disease is in this area)
   **Have you or a victim had close contact with a person being with or being evaluated for the illness or a confirmed illness?**

**If Yes:**

Do you or victim have a fever? Do you or victim have chills?
Do you or victim have unusual sweating? Do you or victim have headache?
Do you or victim have unusual body aches?

YES

NO

**Do not rely solely on Dispatch personnel to identify a potential exposure patient:**

- ❑ Dispatch may be constrained by time and caller information
- ❑ Obtain a travel history / exposure history and assess for signs and symptoms
- ❑ Limit number of responders necessary for aid and limit potential exposures

**Immediate Concern**

- ❑ Traveler from area with known disease with or without symptoms
- ❑ Traveler from affected area within past 14 days

**AND**

| | | |
|---|---|---|
| **Fever** | **Headache** | **Joint or Muscle Aches** |
| **Weakness, Fatigue** | **Vomiting / Diarrhea** | **Cough / Difficulty Breathing** |

**WARN FIRST RESPONDERS** of Possible Infectious Disease

First Responder / EMS Protective Equipment / Limit to Essential Personnel only

**KEEP GREATER THAN 2 METER FOR INITIAL ASSESSMENT**

**Patient:**

- ❑ Place surgical mask on patient
- ❑ Use Non-rebreather mask if Oxygen needed
- ❑ Chest only CPR with NRB mask at 15L if no N95 available

**Providers:**

- ❑ Contact and Droplet Precautions as detailed on page 2
- ❑ Reminder: Driver needs to remain in appropriate level mask and eye protection while driving and in the driver compartment
- ❑ Window or divider should be closed between the driver compartment and patient care compartment

EMS Treatment Considerations

**Aerosol generating procedures (Airborne):**

- ❑ Consider epinephrine for bronchospasm
- ❑ Supraglottic airway, Intubation, suctioning, ventilator management, CPAP, and BiPAP must be managed in accordance with airborne precautions (page 2)
- ❑ Supraglottic airway, Intubation, suctioning and ventilator management
- ❑ Go to airborne precautions listed on page 2

**Patients Transported to the ED:**

- ❑ Do not take patient through triage if possible
- ❑ Identify patient as high risk in report

**Notify Destination or Contact Medical Control**

**Driver:**
- ❑ Should wear full PPE as described when caring for patient.
- ❑ Remove all PPE, except mask (N95 preferred or PAPR for airborne) and perform hand hygiene prior to entering cab of vehicle to prevent contamination of driver's compartment.

**Wash hands:**
- ❑ Thoroughly after transferring patient care and/or cleaning ambulance

**Maintain records:**
- ❑ Of all prehospital providers who were in the room with the patient at the scene and who were in ambulance during transport (self-monitoring for symptoms for 14 days is recommended, even if wearing appropriate PPE).
- ❑ This does not mean the providers can no longer work.
- ❑ If all prehospital provider names (students, observers, supervisors, first response etc.) are listed in the Patient Care Report then this is a sufficient

**afely clean vehicles used for transport:**
- ❑ Follow standard operating procedures for the containment and disposal of regulated medical waste.
- ❑ Follow standard operating procedures for containing and reprocessing used linen.

**Vear appropriate PPE when:**
- ❑ Removing soiled linen from the vehicle. Avoid shaking the linen.
- ❑ Clean and disinfect the vehicle in accordance with agency standard operating procedures.
- ❑ Personnel performing the cleaning should wear a disposable gown and gloves (a respirator should not be needed) during the clean-up process; the PPE should be discarded after use.
- ❑ All surfaces that may have come in contact with the patient or materials contaminated during patient care (e.g., stretcher, rails, control panels, floors, walls, work surfaces) should be thoroughly cleaned and disinfected using an **EPA-registered disinfectant** appropriate for SARS, MERS

## Pearls

- ❑ **Transport: All occupants of the vehicle should wear appropriate level mask for suspected agent. Limit number of providers in vehicle required to provide patient care in order to limit exposures. Ensure use of all PPE for crew and passengers when aerosol generating procedures utilized.**
- ❑ **Negative Pressure in care compartment:** Door or window available to separate driver's and care compartment space: Close door/window between driver's and care compartment and operate rear exhaust fan on full. No door or window available to separate driver's and care compartment space: Open outside air vent in driver's compartment and set rear exhaust fan to full. Set vehicle ventilation system to non-recirculating to bring in maximum outside air. Use recirculating HEPA ventilation system if equipped.
- ❑ **Airborne precautions:** Standard PPE with fit-tested N95 mask (or PAPR respirator) and utilization of a gown, change of gloves after every patient contact, and strict hand washing precautions. This level is utilized with Aspergillus, Tuberculosis, Measles (rubeola) Chickenpox (varicella-zoster), Smallpox, Influenza, Rhinovirus, Norovirus, and Rotavirus, or zoster (shingles).
- ❑ **Contact precautions:** Standard PPE with utilization of a gown, change of gloves after every patient contact, and strict hand washing precautions. This level is utilized with GI complaints, blood or body fluids, C diff, scabies, wound and skin infections, MRSA. Clostridium difficile (C diff) is not inactivated by alcohol-based cleaners and washing with soap and water is indicated.
- ❑ **Droplet precautions:** Standard PPE plus a standard surgical mask for providers and a surgical mask or NRB O2 mask for the patient. This level is utilized when Influenza, Meningitis, Mumps, Streptococcal pharyngitis, Pertussis, Adenovirus, Rhinovirus, SARS, and undiagnosed rashes.
- ❑ **All-hazards precautions:** Standard PPE plus airborne precautions plus contact precautions. This level is utilized during the initial phases of an outbreak when the etiology of the infection is unknown or when the causative agent is found to be highly contagious (e.g. SARS, MERS-CoV, COVID-19).

The following **alternate care guidelines** should be utilized during an ongoing or suspected outbreak of a high consequence pathogen with the understanding that any variation from what is listed below will significantly increase the risk of disease transmission:

B EMT-B Guideline | A Advanced-EMT Guideline | P EMT-P Guideline

- ❑ Airway and breathing:
  - ✓ A surgical face mask should be placed on any patient with suspected high consequence pathogen, even over the top of oxygen delivery devices. DO NOT utilize a N-95 for this purpose.
  - ✓ Aerosolizing procedures (CPAP, BiPAP, Nebulized breathing treatments, intubation, BVM, supraglottic airways, airway suctioning, inhalers) should be performed with extreme caution, and only once PPE has been escalated to Airborne Precautions.
  - ✓ Aerosolizing procedures (intubation, BVM, supraglottic airways, airway suctioning, MDI inhalers) should be performed with extreme caution, and only once PPE has been escalated to Airborne Precaution.
  - ✓ Instead of nebulized treatments, the provider may consider:
    - B A P - Utilization of patients own or system supplied albuterol MDI inhaler of 4 to 6 puffs (with preferred aero-chamber if equipped). Attempt to utilize MDI inhalers outside of the ambulance, prior to transport. Provider should attempt position greater than 3 meters from patient and wear PPE for airborne precautions AND/OR;
    - P - Utilization of **epinephrine 1:1000** 0.3mg IM (Pediatrics 0.15mg IM) in **severe** patients under 50 years with no cardiac hx, OR;
    - P - Utilization of **epinephrine 1:1000** 0.3mg IM (Pediatrics 0.15mg IM) in **severe** patients under 50 years with no cardiac hx BY MEDICAL CONTROL ONLY, OR;
    - P - Utilization of **epinephrine 1:100,000** (Push Dose) 10mcg IV q10 min (Pediatrics 0.1mc/kg IV) in **severe** patients under 50 years with no cardiac hx.
  - ✓ Infectious disease airway circuits with proper filtration should be utilized any time airway control is necessary.
  - ✓ Continuous filtered suction should be used when available with airway procedures.
- ❑ Respiratory failure with or without cardiac arrest:
  - ✓ ET tube should be cuffed and infectious disease airway circuits with proper filtration should be utilized. If placing an ET tube during CPR, chest compressions should be stopped during intubation and infectious disease airway circuit utilized. RSI with deep paralysis is preferred. Nasotracheal intubation should not be utilized.
  - ✓ If iGel is utilized and not able to safely be switched to an ET tube, infectious disease airway circuits with proper filtration should be utilized.
  - ✓ Provider N-95 mask required for all aerosolizing procedures and should be continued through the remainder of that patient's care.
- ❑ General Care and PPE:
  - ✓ High suspicion for disease with initial evaluation greater than 2 meters for all patients.
  - ✓ Surgical mask, eye protection, droplet and contact precautions should be used in any encounter of suspicion.

# Adult - Poisoning / Overdose

## History

- ngestion or suspected ingestion of a potentially toxic substance
- Substance ingested, route, quantity
- Time of ingestion
- Reason (suicidal, accidental, criminal)
- Available medications in home
- Past medical history, medications

## Signs and Symptoms

- Mental status changes
- Hypotension / hypertension
- Decreased respiratory rate
- Tachycardia, dysrhythmias
- Seizures
- S.L.U.D.G.E.
- D.U.M.B.B.E.L.S

## Differential

- Tricyclic antidepressants (TCAs)
- Acetaminophen (Tylenol)
- Aspirin
- Depressants
- Stimulants
- Anticholinergic
- Cardiac medications
- Solvents, Alcohols, Cleaning agents
- Insecticides (organophosphates)

Patent Airway/Adequate Respirations?

Airway Procedure

B — Cardiac Monitor / 12 Lead ECG / Capnography

B — Blood Glucose Analysis Procedure

A — IV Procedure | P — IO Procedure

FR — **Naloxone** Prefilled device (1 mL / nare) IN for BLS only

A — **Naloxone 0.4 mg increments IV** Naloxone is titrated to effect adequate ventilation and oxygenation

Altered Mental Status Guideline

Altered Mental Status?

Hypotension / Shock Guideline

Systolic BP < 90 or MAP <60?

Specific overdose or poison management depends upon the substance involved.

**Contact Medical Control or Poison Control - 1-800-222-1222 OK - 1-877-271-6998**

Consider Potential Cause. With serious Signs / Symptoms, Including Hypotension,

- Beta Blocker OD
- Calcium Channel Blocker OD
- Tricyclic Antidepressant OD
- Organophosphate
- Cyanide

P — Utilize Cardiac External Pacing Procedure Early for Severe Cases

P — **Calcium Chloride 1g IV/IO** Over 2 minutes May repeat

QRS ≥ 0.12 sec

P — **Sodium Bicarbonate 50 mEq IV/IO Ensure adequate ventilation**

P — **Consider Atropine 2 - 5 mg IV/IO** *Repeat as needed*

FR — Oxygen via NRB

P — Cyanokit If available (approved to use Cyanokit provided by Fire Departmetns)

Consider CPAP/BiPAP for patients with Carbon Monoxide poisoning

**Notify Destination or Contact Medical Control**

Adult - Medical - Poisoning / Overdose

Multiple observational studies have indicated that no short-term deaths were found in subsets of opioid overdose patients who received naloxone treatment in the field. Therefore the following guideline is in effect:

**Isolated Opioid Overdose Guideline**

1. To have the guideline applied, a patient must be age 18 or older and be suffering from an isolated opioid overdose, i.e. with depressed mental status or respiratory distress/ arrest from opioid overdose. Patients are treated as per page 1 of this guideline: Poisoning/Overdose.
2. The following conditions must be true:

a. The patient must never have been in cardiac arrest during this incident.
b. The patient must regain a normal mental and respiratory status after naloxone administration of up to 2 mg via IM, IV, or IN route.
c. The patient must consent to, and the paramedic may administer, another 2 mg dose of Naloxone by the IM route only.

3. If conditions a,b, and c are all met, and there is no other acute medical or traumatic condition requiring care, the patient is considered “medically clear” for consideration for alternate destination referral or the patient may refuse further treatment and transport.
4. If the patient was ever in cardiac arrest, does not regain normal mental or respiratory status then the patient should be transported to an appropriate local emergency department.

**Poison Control - 1-800-222-1222**

**OK - 1-877-271-6998**

**Pearls**

- **Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Abdomen, Extremities, Neuro**
- **Overdose or Toxin patients with significant ingestions/exposures should be monitored very closely and aggressively treated as indicated. Do not hesitate to contact medical control for advice as certain critically ill overdose patients may quickly overwhelm medication supplies. For example, patients with a tricyclic overdose with a wide QRS and altered mental status should receive multiple sodium bicarbonate boluses until QRS narrowing and clinical improvement; patients with organophosphate toxicity with SLUDGE syndrome may require more atropine than is usually carried on the ambulance.**
- **Do not rely on patient history of ingestion, especially in suicide attempts. Make sure patient is still not carrying other medications or has any weapons.**
- **Bring pill bottles, contents, emesis to the emergency department.**
- **S.L.U.D.G.E: Salivation, Lacrimation, Urination, Defecation, GI distress, Emesis**
- **D.U.M.B.B.E.L.S: Diarrhea, Urination, Miosis, Bradycardia, Bronchorrhea, Emesis, Lacrimation, Salivation.**
- **Tricyclic: 4 major areas of toxicity: decreased mental status, dysrhythmias, seizures, hypotension, then coma and death. There may be a rapid progression from alert mental status to death.**
- **Acetaminophen: initially normal or nausea/vomiting. If not detected and treated, causes irreversible liver failure**
- **Aspirin: Early signs consist of abdominal pain and vomiting. Tachypnea and altered mental status may occur later. Renal dysfunction, liver failure, and/or cerebral edema among other things can take place later.**
- **Depressants: decreased HR, decreased BP, decreased temperature, decreased respirations, non-specific pupils**
- **Stimulants: increased HR, increased BP, increased temperature, dilated pupils, seizures**
- **Anticholinergic: increased HR, increased temperature, dilated pupils, mental status changes**
- **Cardiac Medications: dysrhythmias and mental status changes**
- **Solvents: nausea, coughing, vomiting, and mental status changes**
- **Insecticides: increased or decreased HR, increased secretions, nausea, vomiting, diarrhea, pinpoint pupils**
- **Consider restraints if necessary for patient's and/or personnel's protection per the Restraint Procedure.**
- **Nerve Agent Antidote kits contain 2 mg of Atropine and 600 mg of pralidoxime in an autoinjector for self administration or patient care. These kits may be available as part of the domestic preparedness for Weapons of Mass Destruction.**
- **EMT may administer naloxone by IN route only. May administer from EMS supply.**
- **Consider contacting the Poison Control Center for guidance.**

# Adult - Seizure

## History

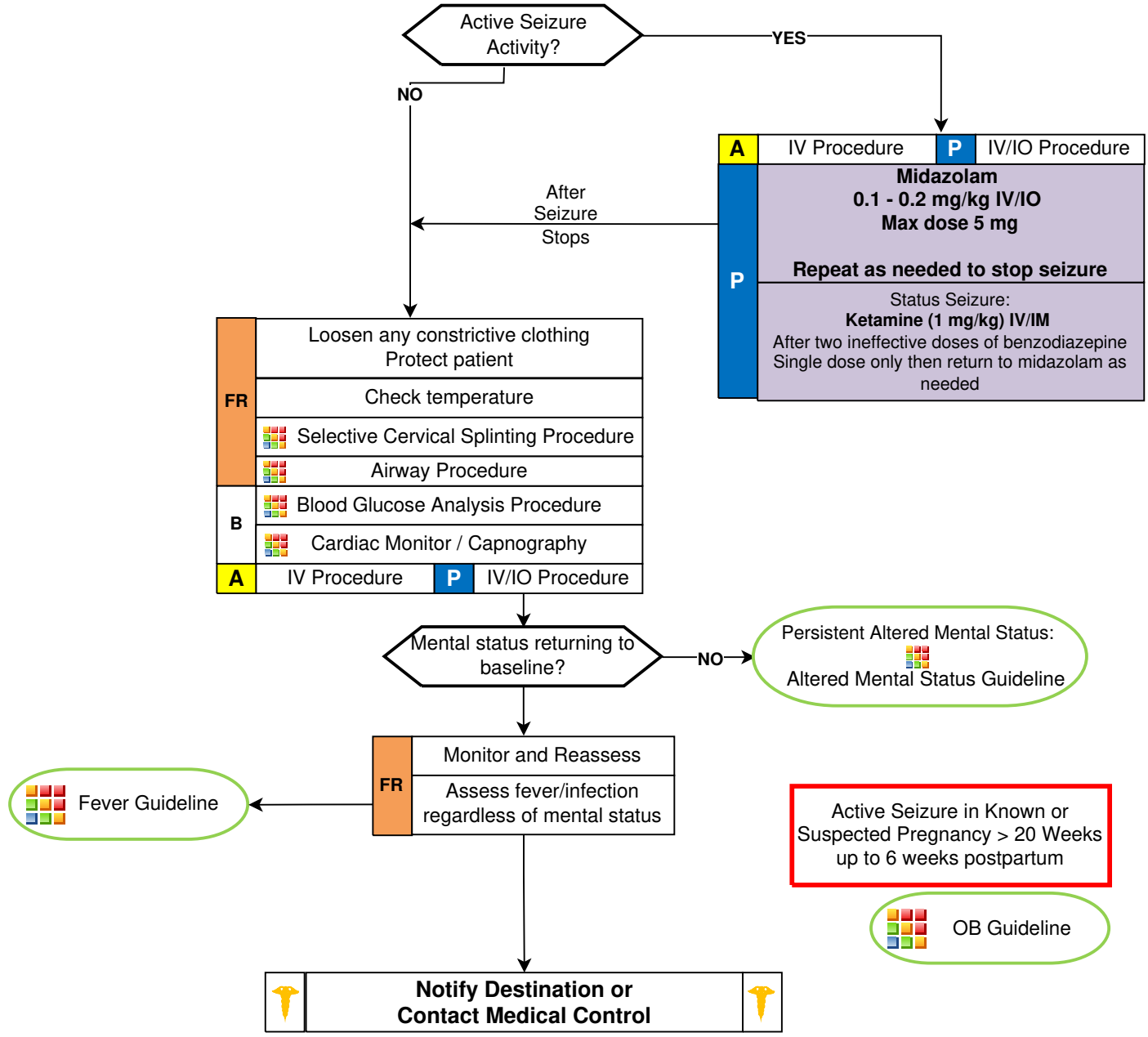
- Reported / witnessed seizure activity
- Previous seizure history
- Medical alert tag information
- Seizure medications
- History of trauma
- History of diabetes
- History of pregnancy
- Time of seizure onset
- Document number of seizures
- Alcohol use, abuse or abrupt cessation
- Fever

## Signs and Symptoms

- Decreased mental status
- Sleepiness
- Incontinence
- Observed seizure activity
- Evidence of trauma
- Unconscious

## Differential

- CNS (Head) trauma
- Tumor
- Metabolic, Hepatic, or Renal failure
- Hypoxia
- Electrolyte abnormality (Na, Ca, Mg)
- Drugs, Medications, Non-compliance
- Infection / Fever
- Alcohol withdrawal
- Eclampsia
- Stroke
- Hyperthermia
- Hypoglycemia



Benzodiazepines should be used to break status seizures. Airway control may be necessary due to respiratory depression/arrest.
RSI should be used with caution. Paralysis only masks the manifestation of seizures, not the seizure itself.

**Pearls**

Recommended Exam: Mental Status, HEENT, Heart, Lungs, Extremities, Neuro
Grand mal seizures (generalized) are associated often with loss of consciousness, incontinence, and tongue trauma.
Petit mal seizures (partial) affect only a part of the body and are not usually associated with a loss of consciousness
For status seizures, follow the algorithm: after two ineffective benzodiazepine doses, give the listed single ketamine dose, then return to midazolam as needed.
Be prepared for airway problems and continued seizures Assess possibility of occult trauma and substance abuse.
Be prepared to assist ventilations and/or manage the airway especially if midazolam is used.
For active seizures in known or suspected pregnancy > 20 weeks through 6 weeks postpartum, follow the OB guideline.

# Adult - Sepsis / Septic Shock

**History**

- Suspected or known infection
- Known Lactate levels > 4
- Recent changes in behavior
- Impaired immune system
- Recent surgeries or invasive procedures
- Recent antibiotic use

**Signs and Symptoms**

- Temperature > 100.4$^{o}$ or < 96.8$^{o}$
- Respiratory rate > 20
- Heart rate > 90
- Altered mental status
- Decreased skin perfusion
- Diaphoresis
- Malaise

**Differential**

- Hypovolemic shock
- Acute kidney injury
- Cardiogenic shock
- Toxic shock syndrome
- Salicylate toxicity
- Adrenal insufficiency
- Diabetic ketoacidosis
- Drug overdose

**Continuously monitor $EtCO_2$ and expect $CO_2$ to be low. A decreasing $EtCO_2$ could indicate worsening Sepsis.**

Known or Suspected Sepsis / Septic Shock

**FR** Obtain Temperature

**B** Cardiac Monitor, 12 Lead EKG / Capnography

Altered Mental Status Guideline

Airway Procedure

**A** IV

**P** IO

**A** Isotonic crystalloid solution up to 3 L

BP <100 or MAP <60

**NO**

**YES**

**P2** Consider:
Push dose pressor procedure concurrent with fluids

**P**
If no penicillin or cephalosporin allergy
Administer Ceftriaxone in flushed line without other medications.
Weight > 120 kg administer 2 g
Weight ≥ 20 - 120 kg administer 1 g
Mix in 100 mL D5W/NS and run in over 5-10 minutes

**Notify Destination or Contact Medical Control**

## Evaluation for Sepsis

- ☐ Temperature > 100.4°F or < 96.8°F
- ☐ Heart rate >90
- ☐ Respiratory rate >20 or mechanical ventilation
- ☐ Signs of poor perfusion (such as SBP<90 mmHg

*Is the patient's presentation suggestive of any of the following infections or conditions*

- ☐ Pneumonia (cough/thick sputum)
- ☐ Urinary Tract Infection
- ☐ Acute AMS Change
- ☐ Blood stream/Catheter related
- ☐ Abdominal pain / Diarrhea
- ☐ Wound infection
- ☐ Skin/soft tissue infection
- ☐ WBC >12,000 or <4,000

### SIRS CRITERIA

Temperature >100.9$^{O}$ or <96.8$^{O}$
Heart Rate >90
Respiratory Rate >20 or $EtCO_2$ <32
WBC >12,000 or <4,000
New Onset Altered Mental Status

### SEPSIS DEFINED

At least 2 SIRS criteria + a suspected or documented infection.

### SEVERE SEPSIS DEFINED

Sepsis + Acute Organ Dysfunction + Hypotension +Lactate >4 mmol

### SEPTIC SHOCK DEFINED

Severe Sepsis + Persistent Hypotension

Pearls

- Recommended Exam: Mental Status, Skin, HEENT, Neck, Heart, Lung, Abdomen, Back, Extremities, Neuro
- Withhold antibiotics if suspected meningitis, endocarditis, or osteomyelitis
- ETCO2 correlates to serum lactate levels. An ETCO2 of <25 mmHg is strongly correlated to a serum lactate of >2.0 mm/L.
- Septic shock has a high mortality rate and must be treated aggressively. It is a true TCD
- Septic patients are at an increased risk of acute lung injury related to positive pressure ventilation. If PPV is required, avoid excessive Vt.

# Adult - Childbirth

## History

- Due date
- Time contractions started / how often
- Rupture of membranes
- Time / amount of any vaginal bleeding
- Sensation of fetal activity
- Past medical and delivery history
- Medications
  - Gravida / Para Status
    High Risk pregnancy

## Signs and Symptoms

- Spasmodic pain
- Vaginal discharge or bleeding
- Crowning or urge to push
- Meconium

## Differential

- Abnormal presentation
  - Buttock
  - Foot
  - Hand
- Prolapsed cord
- Placenta previa
- Abruptio placenta

Abnormal Vaginal Bleeding / Hypertension / Hypotension → Obstetrical Emergency Guideline

FR: Inspect Perineum (No digital vaginal exam)

**No Crowning**

FR: Monitor and Reassess
Document frequency and duration of contractions

**Crowning >36 Weeks Gestation**

FR: Childbirth Procedure
A: IV Guideline

**Priority symptoms:**
**Crowning at <36 weeks gestation**
**Abnormal presentation**
**Severe vaginal bleeding**
**Multiple gestation**

B: Expedite transport

**Normal Birth**

FR: Dry and warm newborn
Assess breathing and tone

**Prolapsed Cord Shoulder Dystocia**

FR: Hips Elevated Knees to Chest
Insert fingers into vagina to relieve pressure on cord
Shoulder Dystocia: McRoberts Maneuver

**Postpartum Hemorrhage**

FR: Massage the fundus
Put the baby to nurse
A: Rapidly infuse IV fluids, treat for shock.
Titrate fluid to maintain B/P

**Breech Birth**

FR: Transport Unless delivery imminent
Encourage Mother to refrain from pushing
Support Presenting Parts
Do Not Pull

P: Oxytocin 20 units in 1,000 mL NS IV diluted infusion, wide open
After every delivery of palcenta

Postpartum bleeding ≥500 mL:
TXA 2 g IV over 10 minutes
Within 3 hours of birth; one time

**Notify Destination or Contact Medical Control**

**Following Delivery**

**Go to Neonatal Rescucitation Guideline**

Adult - OB - Childbirth

**Prolapsed Cord**

Lift the presenting part off the cord.

Transport in the knee-to-chest position.

**APGAR (1 min and 5 min)**

**A**ppearance
- Body and extremities blue = 0
- Body pink extremities blue = 1
- Completely pink = 2

**P**ulse Rate
- Absent = 0
- <100 = 1
- >100 = 2

**G**rimace
- No Response = 0
- Grimace = 1
- Cough Sneeze Cry = 2

**A**ctivity
- Limp = 0
- Some flexion of extremities = 1
- Active motion = 2

**R**espiratory effort
- Absent = 0
- Slow or irregular = 1
- Strong Cry = 2

**Pearls**

- **Recommended Exam (of Mother): Mental Status, Heart, Lungs, Abdomen, Neuro**
- Document all times (delivery, contraction frequency, and length).
- If maternal seizures occur, refer to the Obstetrical Emergencies Guideline.
- After delivery, massaging the uterus (lower abdomen) will promote uterine contraction and help to control post-partum bleeding.
- Some perineal bleeding is normal with any childbirth. Large quantities of blood or free bleeding are abnormal.

- Record APGAR at 1 minute and 5 minutes after birth.

# Adult - OB / Gynecological Emergencies

### History

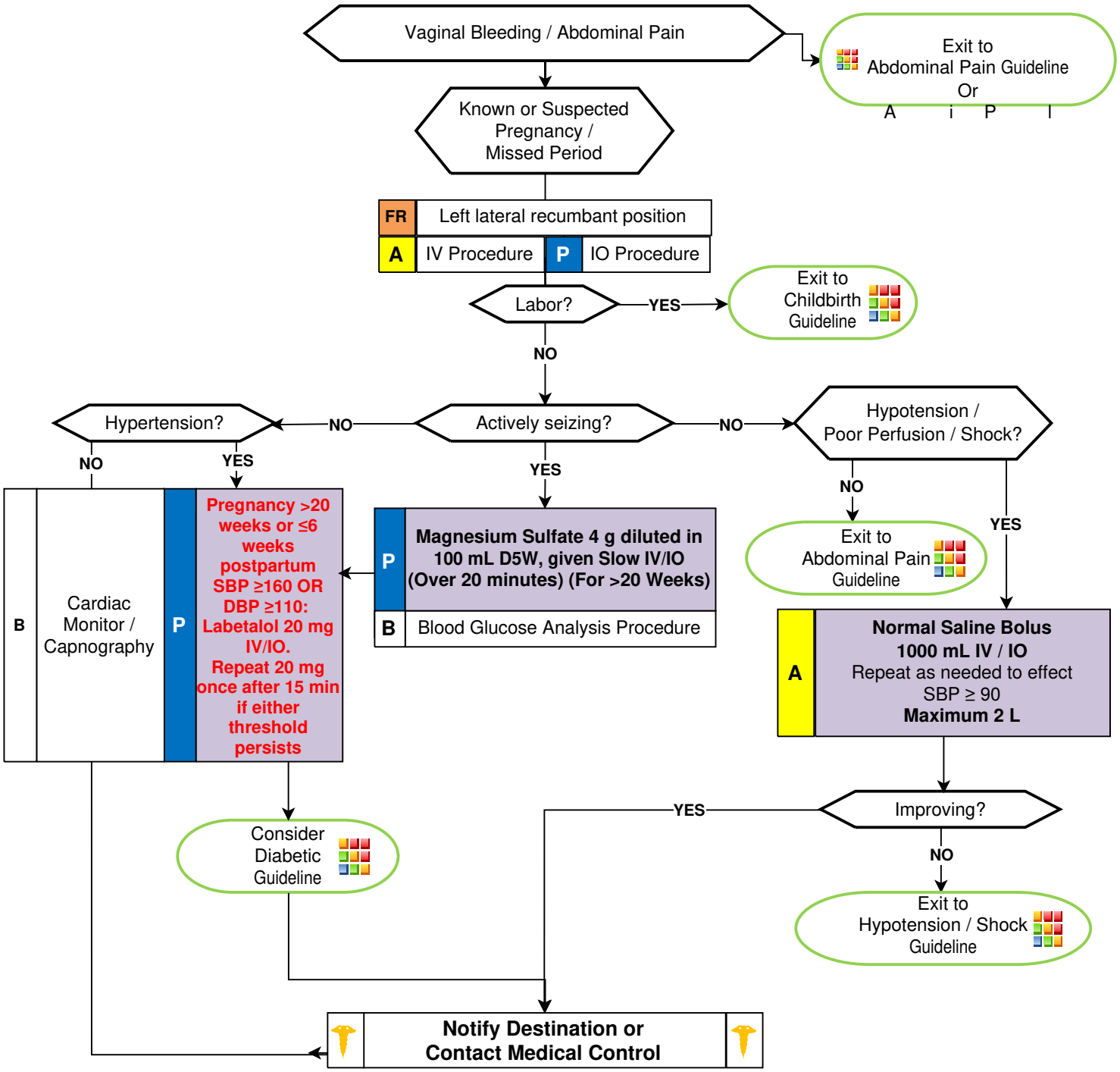
- Age
- Past medical history
- Hypertension meds
- Prenatal care
- Prior pregnancies / births
- Gravida / Para

### Signs and Symptoms

- Vaginal bleeding
- Abdominal pain
- Seizures
- Hypertension
- Severe headache
- Visual changes
- Edema of hands and face

### Differential

- Pre-eclampsia / Eclampsia
- Placenta previa
- Placenta abruptio
- Spontaneous abortion



**Pearls**

Recommended Exam: Mental Status, Abdomen, Heart, Lungs, Neuro
Severe headache, vision changes, RUQ pain, abnormal weight gain, edema in face, hands, and ankles may indicate preeclampsia.
Follow the algorithm for pregnancy > 20 weeks or up to 6 weeks postpartum: treat severe hypertension at SBP ≥ 160 or DBP ≥ 110 using the listed labetalol regimen.
With hypertension, consider dimming the lights in the ambulance, avoid loud noises, and consider non- emergent transport.
Ask patient to quantify bleeding - number of pads used per hour.
Any pregnant patient involved in a MVC should be seen immediately by a physician for evaluation.
Greater than 20 weeks generally require several hours of fetal monitoring.
DO NOT suggest that the patient needs an ultrasound.
Magnesium may cause hypotension and decreased respiratory drive.

# Adult - Congestive Heart Failure

**History**

- Congestive heart failure
- Past medical history
- Medications (digoxin, Lasix, Viagra / sildenafil, Levitra / vardenafil, Cialis / tadalafil
- Cardiac history --past myocardial infarction

**Signs and Symptoms**

- Respiratory distress, bilateral rales
- Apprehension, orthopnea
- Jugular vein distention
- Pink, frothy sputum
- Peripheral edema, diaphoresis
- Hypotension, shock
- Chest pain

**Differential**

- Myocardial infarction
- Congestive heart failure
- Asthma
- Anaphylaxis
- Aspiration
- COPD
- Pleural effusion
- Pneumonia
- Pulmonary embolus
- Pericardial tamponade
- Toxic Exposure

Signs / Symptoms consistent with CHF / Pulmonary Edema

Adult Airway Guideline(s)

Airway Patent
Ventilations adequate
Oxygenation adequate

Chest Pain and STEMI Guideline

| | |
|---|---|
| B | Cardiac Monitor / 12 Lead ECG / Capnography |
| | Consider CPAP Procedure |
| P | **OR** BiPAP Procedure |
| A | IV Procedure **P** IV/IO Procedure |

Assess Symptom Severity

**MILD**
Normal Heart Rate
Elevated or Normal BP

| | |
|---|---|
| P | **Nitroglycerin 0.4 mg SL** Repeat every 3-5 minutes |
| P2 | **OR Push Dose Nitroglycerin Procedure** |

Improving?

**MODERATE / SEVERE**
Elevated Heart Rate
Elevated BP

| | |
|---|---|
| B | **Albuterol 2.5 mg if indicated by an obstructed capnography waveform** |
| P | **Nitroglycerin 0.4 mg SL** Repeat every 3-5 minutes |
| P2 | **OR Push Dose Nitroglycerin Procedure** |
| P | ***For extended transports consider*** **Furosemide 40 mg IV or 80 mg IV for patients currently on diuretics** |

**CARDIOGENIC SHOCK**
Tachycardia followed by bradycardia
Hypertension followed by hypotension

| | |
|---|---|
| A | Remove CPAP, but only ***while hypotensive (SBP < 90)*** |
| P2 | **Consider Push Dose Pressor Procedure** |

Airway Guideline(s) ***if indicated***

**Notify Destination or Contact Medical Control**

Adult - Respiratory - Congestive Heart Failure

**Pearls**

- **Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro**
  **Furosemide and Opioids have NOT been shown to improve the outcomes of EMS patients with pulmonary edema. Even though this historically has been a mainstay of EMS treatment, it is no longer routinely recommended. May consider furosemide in patients with extended transports.**
  **Caution with 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.**
  **Caution with Nitroglycerin in patients with heart rate abover 100.**
  **Carefully monitor the level of consciousness, BP, and respiratory status with the above interventions.**
  **If CHF / Cardiogenic shock resulting from inferior (II, III, aVF) MI, consider Right Sided ECG. If ST elevation is noted in transposed V3 or V4, Nitroglycerin and / or opioids may cause hypotension requiring fluid boluses.**
  If patient has taken his own nitroglycerin without relief, consider potency of the medication.
  Consider myocardial infarction in all of these patients. Diabetics, geriatric and female patients often have atypical pain, or only generalized complaints.
  Allow the patient to be in a position of comfort to maximize their breathing effort.
  Document CPAP application using the CPAP procedure in the PCR with a flow rate of 15 lpm.
  Consider anxiolytic or DSI procedure to assist with CPAP compliance.

# Adult - Respiratory Distress

### History

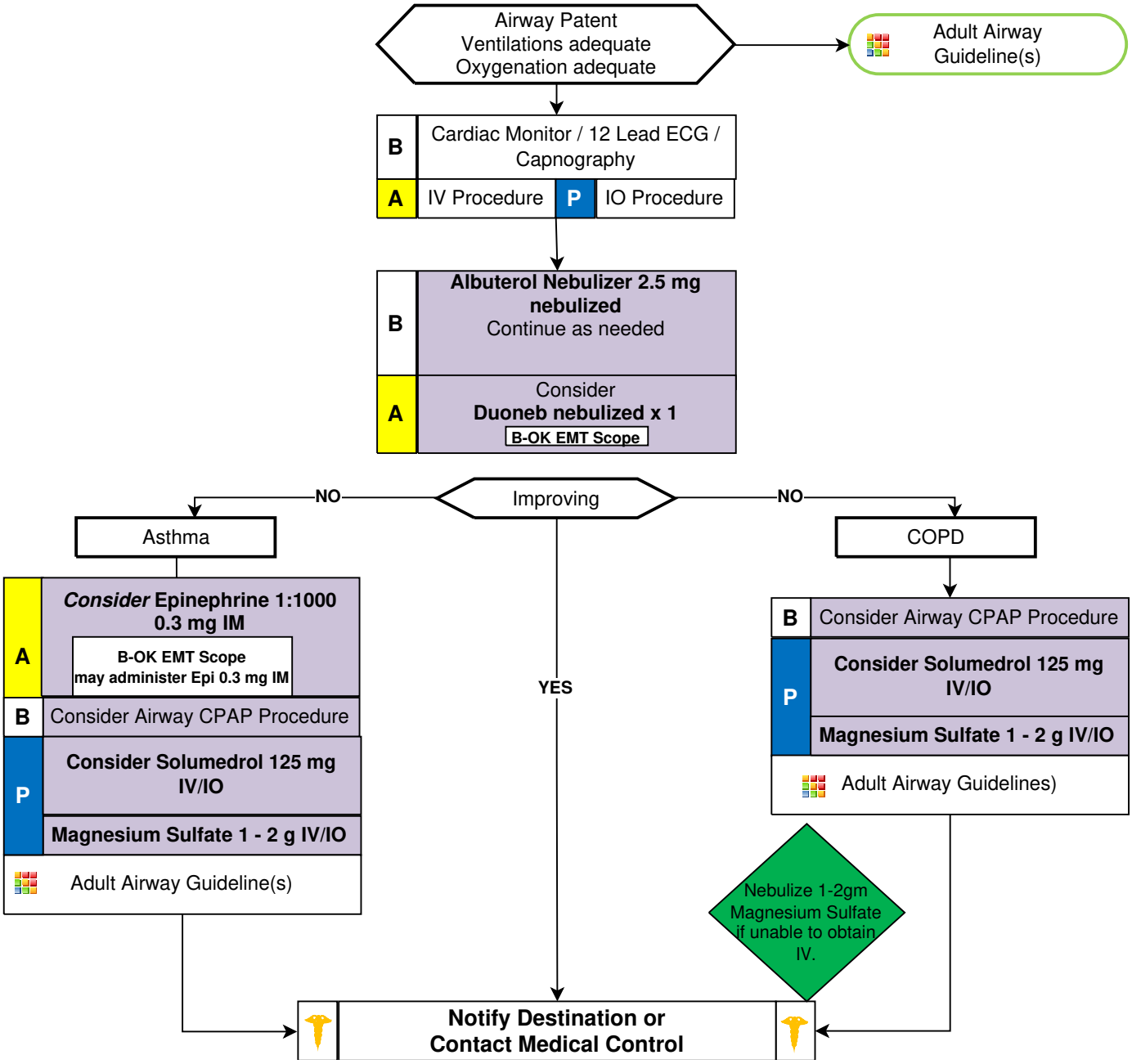
- Asthma; COPD -- chronic bronchitis, emphysema, congestive heart failure
- Home treatment (oxygen, nebulizer)
- Medications (theophylline, steroids, inhalers)
- Toxic exposure, smoke inhalation

### Signs and Symptoms

- Shortness of breath
- Pursed lip breathing
- Decreased ability to speak
- Increased respiratory rate and effort
- Wheezing, rhonchi
- Use of accessory muscles
- Fever, cough
- Tachycardia

### Differential

- Asthma
- Anaphylaxis
- Aspiration
- COPD (Emphysema, Bronchitis)
- Pleural effusion
- Pneumonia
- Pulmonary embolus
- Pneumothorax
- Cardiac (MI or CHF)
- Pericardial tamponade
- Hyperventilation
- Inhaled toxin (Carbon monoxide, etc.)



## Pearls

**Recommended Exam: Mental Status, HEENT, Skin, Neck, Heart, Lungs, Abdomen, Extremities, Neuro**

**Patients who are ≥ 55 years of age, have a history of cardiac disease, take Beta-Blockers / Digoxin or patients who have heart rates ≥ 150 be cautious with epinephrine administration. These patients should receive a 12 lead ECG at some point in their care, but this should NOT delay administration of epinephrine.**

**Pulse oximetry and End-Tidal Waveform Capnography should be monitored continuously for patients in persistent distress.**

A silent chest in respiratory distress is a pre-respiratory arrest sign.

BVM or any mechanical ventilation will require an extended expiratory phase to keep from dynamic hyperinflation.

Peep should be minimized if possible to limit hyperinflation.

Use PPV or CPAP with caution.

BiPAP is always preferred over CPAP when available.

Nebulized Medications may be administered by the BLS provider, if an ALS provider is available they should attend the patient during transport.

# Adult - Burns

**History**

- Type of exposure (heat, gas, chemical)
- Inhalation injury
- Time of Injury
- Past medical history and Medications
- Other trauma
- Loss of Consciousness
- Tetanus/Immunization status

**Signs and Symptoms**

- Burns, pain, swelling
- Dizziness
- Loss of consciousness
- Hypotension/shock
- Airway compromise/distress could be indicated by hoarseness/wheezing

**Differential**

- Superficial red - painful
- Partial Thickness - blistering
- Full Thickness - painless/charred or leathery skin
- Thermal injury
- Chemical - Electrical injury
- Radiation injury
- Blast injury

Assess Burn / Concomitant Injury Severity

## Minor Burn

**Superficial and/or <10% TBSA Partial Thickness**
No inhalation injury, Not Intubated, Normotensive
GCS 14 or Greater

- FR: Remove Rings, Bracelets / Constricting Items
- FR: Dry Clean Sheet or Dressings
- Adult Airway Guideline(s)
- A: IV Procedure
- A: **Plasma-Lyte** ***TKO***
- Pain Management Procedure

## Serious Burn

**10-20% TBSA Partial or any Full Thickness larger than 3cm Burn**
Suspected inhalation injury or requiring intubation for airway stabilization
Hypotension or GCS 13 or Less
*(Transport to a Burn Center)*

## Criticial Burn

**>20% TBSA Partial/Full Thickness Burn**
Burns with Multiple Trauma
Burns with definitive airway compromise
*(Transport to a Burn Center)*

- FR: Remove Rings, Bracelets / Constricting Items
- FR: Dry Clean Sheet or Dressings
- Adult Airway Guideline(s)
- A: IV Procedure
- P: IO Procedure
- P: IO Procedure
- A: **Plasma-Lyte**
  **≤ 5 years - 125 mL/hr**
  **6 - 13 years - 250 mL/hr**
  **≥ 14 years - 500 mL/hr**
- Pain Management Procedure

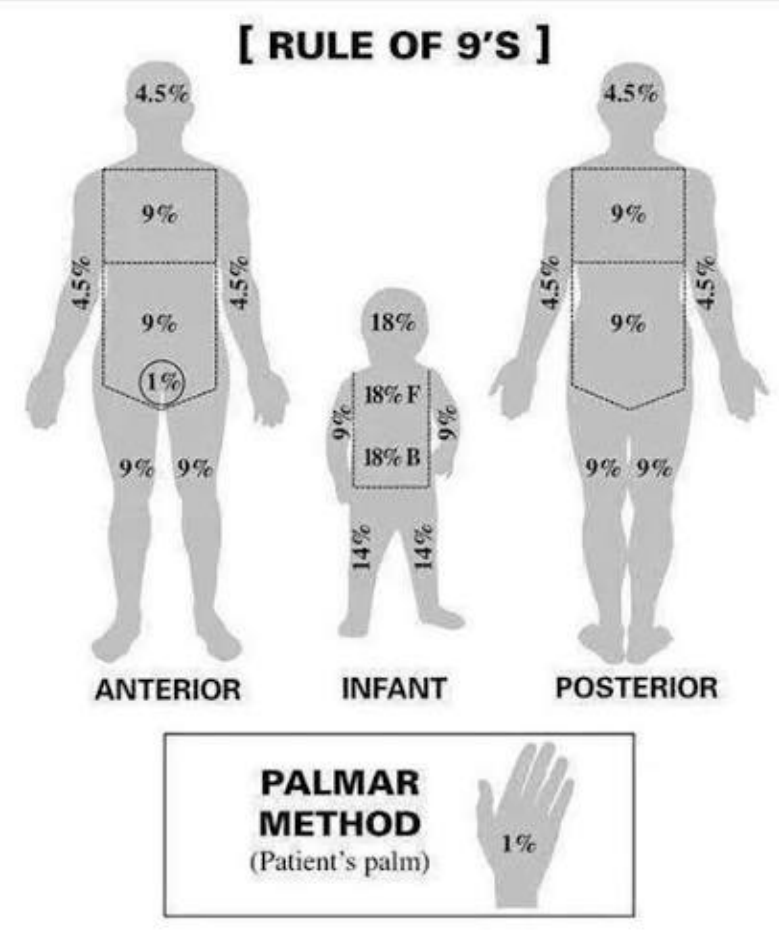
Cyanide Exposure → Poisoning / Overdose Guideline

- B: Transport to Facility of Choice; Consider Burn Center for burns on the face, hands, perineum, or feet as well as any electrical or lightning burn
- B: **Rapid Transport** to Burn Center

Consider CPAP/BiPAP for patients with Carbon Monoxide poisoning

**Notify Destination or Contact Medical Control**
Utilize Trauma Triage Guideline

Adult - Trauma - Burns




## Rule of Nines

- Seldom do you find a complete isolated body part that is injured as described in the Rule of Nines.
- More likely, it will be portions of one area, portions of another, and an approximation will be needed.
- For the purpose of determining the extent of serious injury, differentiate the area with minimal or superficial burn from those of partial or full thickness burns.
  For the purpose of determining Total Body Surface Area (TBSA) of burn, include only Partial and Full Thickness burns. Report the observation of other superficial burns but do not include those burns in your TBSA estimate.

Estimate spotty areas of burn by using the size of the patient's palm as 1 %

## Pearls

**Recommended Exam: Mental Status, HEENT, Neck, Heart, Lungs, Abdomen, Extremities, Back, and Neuro**

**Green, Yellow and Red In burn severity do not apply to the Start / JumpStart Triage System.**

**Critical or Serious Burns:**

***> 20% total body surface area (TBSA) partial and full thickness burns, or***
***circumferential burns of extremities, or***
***electrical or lightning injuries, or***
***suspicion of abuse or neglect, or***
***inhalation injury, or***
***chemical burns, or***
***burns of face, hands, perineum, or feet***

- Require direct transport to a Burn Center. Local facility should be utilized only if critical interventions such as airway management are not possible in the field.
- Burn patients are often trauma patients, evaluate for multisystem trauma.
- Assure whatever has caused the burn is no longer contacting the injury. (Stop the burning process!)
- Early intubation is required when the patient experiences significant inhalation injuries. If the patient requires airway management that cannot be achieved in the field, go to the nearest emergency department for stabilization prior to transfer to the Burn Center.
- Circumferential burns to extremities are dangerous due to potential vascular compromise secondary to soft tissue swelling.
- Burn patients are prone to hypothermia - never apply ice or cool the burn, must maintain normal body temperature. Evaluate the possibility of child abuse with children and burn injuries.

# Adult - Crush Syndrome

**History**

- Entrapped and crushed under heavy load > 30 minutes
- Extremity / body crushed
- Building collapse, trench collapse, industrial accident, pinned under heavy equipment

**Signs and Symptoms**

- Hypotension
- Hypothermia
- Abnormal ECG findings
- Pain
- Anxiety

**Differential**

- Entrapment without crush syndrome
- Entrapment without significant crush
- Altered mental status

**B** Cardiac Monitor / 12 Lead / Capnography

**A** IV Procedure **P** IO Procedure

**A** **Normal Saline or Plasmalyte Titrate to B/P 90 Systolic**

Pain Management Procedure

Consider IV/IO x 2 in trauma patients

Peaked T Waves
QRS ≥ 0.12 seconds
QT ≥ 0.46 seconds
Loss of P wave

**P** **Sodium Bicarbonate 1 mEq/kg IV / IO**

Consider
Age Appropriate Trauma Guideline
Hypothermia / Hyperthermia Guideline(s)

Abnormal ECG /
Hemodynamically unstable

**P** **Immediately Prior to Extrication**
**Sodium Bicarbonate 1 mEq/kg IV / IO**
**AND**
**Normal Saline / Plasmalyte Wide Open**

**Hypovolemic shock (B/P < 90 or MAP <60, HR > 115, pallor, diaphoresis)**

**P** Consider Tranexamic Acid (TXA) 2g IV/IO

**A** Monitor and Reassess
Monitor for fluid overload

Asystole / PEA
VF / VT

**P** **Sodium Bicarbonate 1 mEq/kg IV / IO**

Exit to
Age Appropriate Cardiac Arrest / Pulseless Arrest / Arrhythmia Guideline(s)

**Notify Destination or Contact Medical Control**
Utilize Trauma Triage Guideline

Adult - Trauma - Crush Syndrome

**Pearls**

**Recommended exam: Mental Status, Musculoskeletal, Neuro**

**Scene safety is of paramount importance as typical scenes pose hazards to rescuers. Call for appropriate resources.**

Hyperkalemia from crush syndrome can produce ECG changes described in guideline, but may also cause a bizarre, wide complex rhythm. Wide complex rhythms should also be treated using the VF/Pulseless VT Guideline.

**Consider Calcium Chloride administration for suspected Hyperkalemia.**

Patients may become hypothermic even in warm environments.

Pediatric IV Fluid maintenance rate: 4 mL per first 10 kg of weight + 2 mL per second 10 kg of weight + 1 mL for every additional kg in weight.

# Adult - Drowning

### History

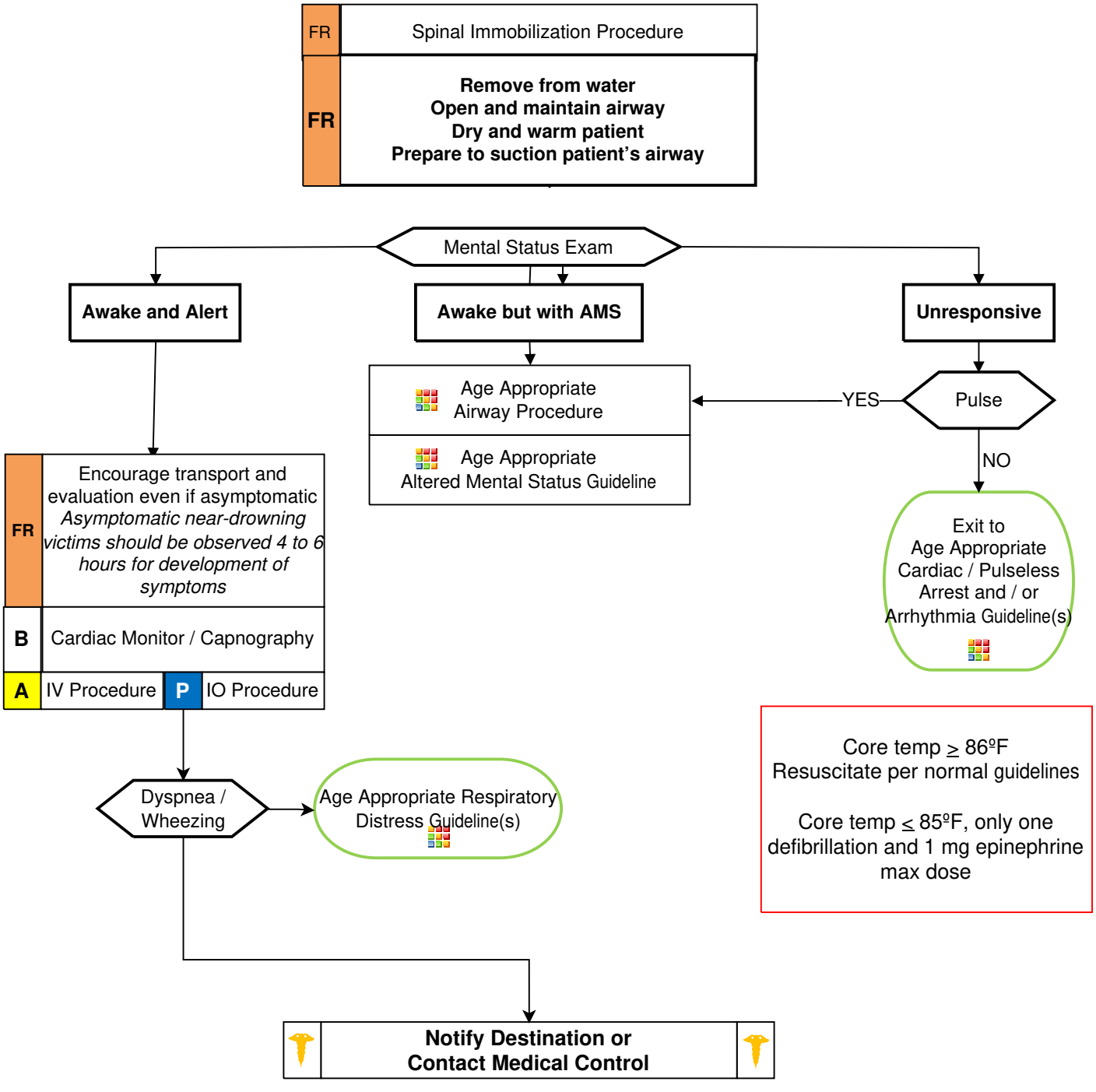
- Submersion in water regardless of depth
- Possible history of trauma ie: diving board
- Duration of submersion
- Temperature of water or possibility of hypothermia
- Degree of water contamination

### Signs and Symptoms

- Unresponsive
- Mental status changes
- Decreased or absent vital signs
- Vomiting
- Coughing, Wheezing, Rales, Rhonchi, Stridor
- Apnea

### Differential

- Trauma
- Pre-existing medical problem
- Pressure injury (diving)
- Barotrauma
- Decompression sickness
- Post-immersion syndrome



Thermometer must be in “Monitor” mode. After you remove the probe, while the thermometer is doing its self check, push and hold the “Pulse Timer” button until “Monitor Mode” appears.

**Pearls**

**Recommended Exam: Trauma Survey, Head, Neck, Chest, Abdomen, Pelvis, Back, Extremities, Skin, Neuro**
**Ensure scene safety. Drowning is a leading cause of death among would-be rescuers.**
**Allow appropriately trained and certified rescuers to remove victims from areas of danger.**
**With cold water no time limit -- resuscitate all. These patients have an increased chance of survival.**
**Rapid transport to closest facility for continued rewarming.**
**Consider CPAP for those with respiratory distress after emersion.**
**Multiple attempts at defibrillation and ACLS medications are not effective in severe hypothermic states - focus should be on high quality CPR and rewarming.**
Have a high index of suspicion for possible spinal injuries.
Hypothermia is often associated with drowning and submersion injuries.
**All victims should be transported for evaluation due to potential for worsening over the next several hours.**
With pressure injuries (decompression / barotrauma), consider transport to, or availability of, a hyperbaric chamber.
Post-drowning patients who are awake and cooperative, but present with respiratory distress, may benefit from CPAP.
**Cold water or water exposure pulmonary edema can develop immediately, or be delayed, with fast or slow onset (monitor respiratory status closely following water emersion).**
Monitor patient with capnography.

# Adult - Eye Injury

**History**

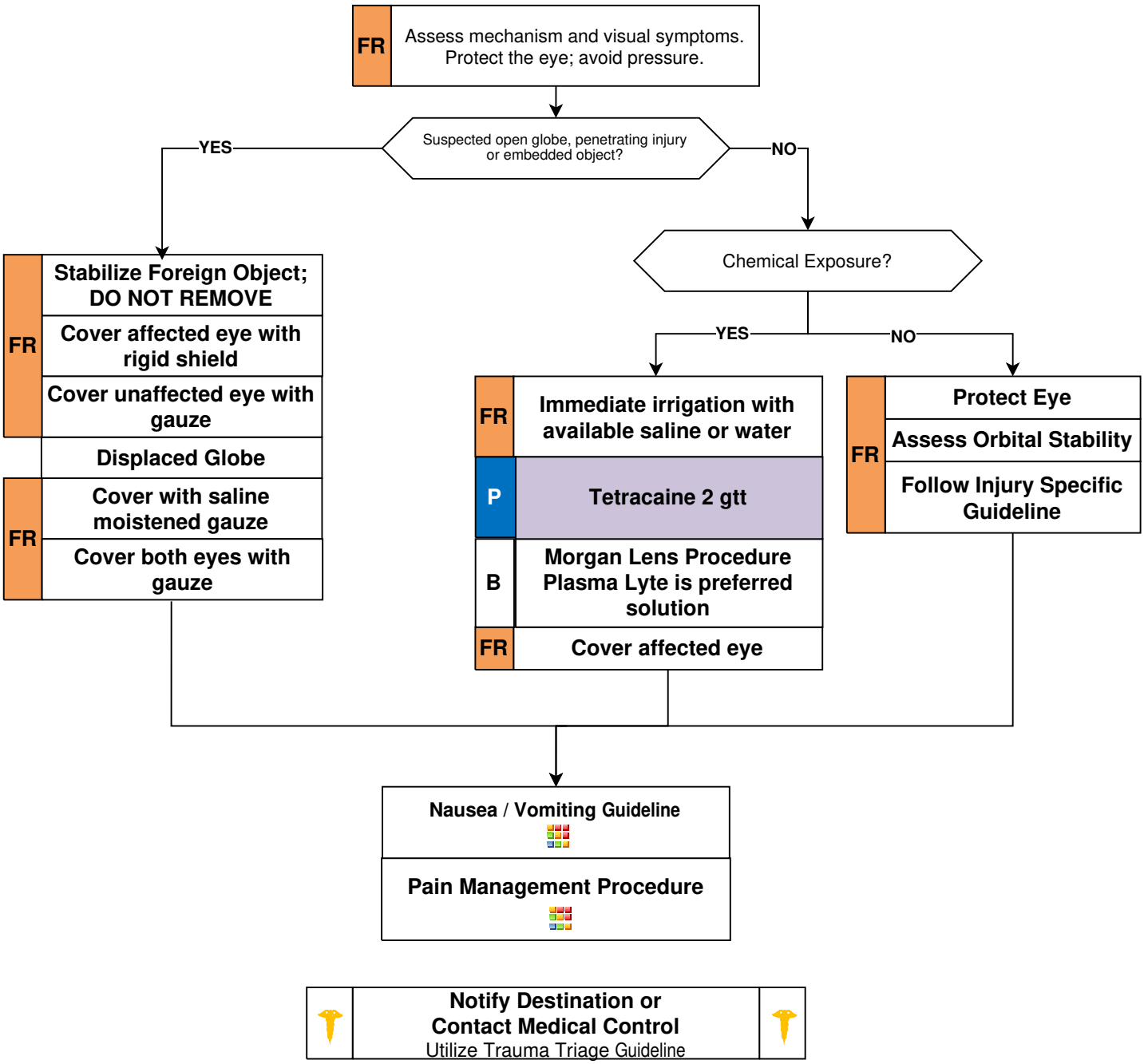
- Time of injury/onset
- Blunt/penetrating/chemical
- Open vs. closed injury
- Involved chemicals/MSDS
- Wound Contamination
- Medical History
- Tetanus status
- Normal visual acuity
- Medications

**Signs and Symptoms**

- Pain, swelling, blood
- Deformity, contusion
- Visual deficit
- Leaking aqueous/vitreous humor
- Upwardly fixed eye
- "Shooting" or "streaking" light
- Visible contaminants
- Rust ring
- Lacrimation

**Differential**

- Abrasion/Laceration/Hyphema
- Globe rupture
- Retinal nerve damage/detachment
- Chemical/thermal burn/agent of terror
- Orbital fracture
- Orbital compartment symdrome
- Neurological event
- Acute glaucoma
- Retinal artery occlusion





**Pearls:**

- **Remove contact lens whenever possible.**
- **Any chemical or thermal burn to the face/eyes should raise suspicion of respiratory insult**
- **Orbital fractures raise concern of globe or nerve injury and need repeated assessments of visual status**

**Always cover both eyes to prevent further injury.**
**Use shields, not pads, for physical trauma to eyes. Pads OK for unaffected eye.**
**Do not remove impaled objects**
**Suspected globe rupture or compartment syndromes require emergent in-facility intervention.**

# Adult - General Trauma Assessment

Confirm scene safety and use of appropriate BSI procedures.
Evaluate Mechanism of injury, number of patients, and the need for additional resources.

## B.L.S.

ABCs & LOC

Focused history & Exam

### Minor Trauma

Focused trauma assessment

Baseline vital signs

S.A.M.P.L.E.

Transport decision

Detailed assessment

Treat per appropriate guideline(s)

### Major Trauma

A.L.S. PATIENT
If available

## A.L.S.

ABCs & LOC

Focused history & Exam

### Minor Trauma

Focused trauma assessment

Baseline vital signs

S.A.M.P.L.E.

Transport decision

Detailed assessment

Treat per appropriate guideline(s)

### Major Trauma

Rapid trauma assessment

Baseline vital signs

S.A.M.P.L.E.

Transport decision

Detailed assessment

Treat per appropriate guideline(s)

Upon arrival, all equipment should be taken to the patient, with intent to transport.

- Monitor
- ALS bag
- Airway bag

These can easily be placed on the cot before initial patient contact

**When called to the scene of a trauma patient, consider your proximity to the nearest trauma facility. When 10 minutes or less from a trauma facility consider rapid transport rather than time consuming interventions at the scene. If transport to the nearest facility is in the patient's best interest, then consider loading the patient and treating in transit.**

# Adult - General Trauma Assessment

**Measure vital signs and level of consciousness**
GCS < 14 or Systolic BP < 90 mmHg or Respiratory rate < 10 or > 29 BPM (<20 in infant)

YES → **Take to trauma center with the highest level of care in the system.**

NO

**Assess anatomy of injury**
- All Penetrating Injuries to head, neck, torso, and extremities proximal to the elbow and knee.
- Flail chest
- Two or more proximal long-bone fractures
- Crushed de-gloved or mangled extremity
- Amputation proximal to the wrist or ankle
- Pelvic fractures
- Open or depressed skull fractures
- Paralysis

NO

**Assess for evidence of high energy impact**

**Falls**
- Adults >Greater than height of patient
- Children > Greater than height of patient

**High Risk Auto Crash**
- Intrusion: > 12 in occupant site; >18 in. any site
- Ejection from automobile (Partial or complete)
- Death in same passenger compartment

**Auto v. pedestrian/bicyclist thrown, run over, or significant (>20 mph) impact**

YES → **Contact medical control and consider transport to a trauma center or a specific resource hospital.**

NO

**Assess special patient or system considerations**

**Age**
- Older adults: Risk of injury death increase after age 55
- Children: Should be triaged preferentially to pediatric capable trauma centers

**Anticoagulation and bleeding disorders**

**Burns**
- Without other trauma mechanism: triage to burn center
- With trauma mechanism: triage to trauma center

**Time sensitive extremity injury**
**End-stage renal disease requiring dialysis**
**Pregnancy > 20 weeks**

YES → **Contact medical control and consider transport to a trauma center or a specific resource hospital.**

As recommended by:
CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

Adult - Trauma - General Trauma Assessment

# Adult - Head / Chest / Maxillofacial Trauma

### History

- Time and mechanism of injury
- Damage to structure or vehicle
- Location in structure or vehicle
- Others injured or dead
- Speed and details of MVC
- Restraints / protective equipment
- Past medical history
- Medications

### Signs and Symptoms

- Pain, swelling
- Altered sensation / motor function
- Deformity, lesions, bleeding
- Altered mental status or unconscious
- Hypotension or shock
- Vomiting
- Arrest

### Differential

- Brain injury
- Spine fracture / Cord injury
- HEENT (Airway obstruction)
- Chest: Tension pneumothorax
  Flail chest
  Pericardial tamponade
  Open chest wound
  Hemothorax

**FR** Control External Hemorrhage

Airway Procedure

**Cervical Splinting Procedure**

**B** Cardiac Monitor / Capnography

**A** IV Procedure **P** IO Procedure

**A** Normal Saline titrated to B/P 90 or MAP >60 Systolic for chest trauma >100 or MAP >65 Systolic for Head trauma

Consider Rapid Transport / Limit Scene Time

Chest Trauma

Maxillofacial Trauma

Head Trauma

**FR** Chest seal/occlusive dressing for open wounds

**P2** Consider Needle Thoracostomy Procedure

**P3** Consider Finger Thoracostomy Procedure

**FR** Consider packing dental wound trauma with WoundClot

Consider H-BOMBS

**Hypovolemic shock (B/P < 90 MAP <60, HR > 115, pallor, diaphoresis)**

YES

NO

**P** Consider Tranexamic Acid (TXA) Mix 2 g in 100 mL D5W run in over 10 min

Pain Management Procedure

Nausea / Vomiting Procedure

**Notify Destination or Contact Medical Control**
Utilize Trauma Triage Guideline

Adult - Trauma - Head / Chest / Maxillofacial Trauma

## Head / Chest Checklist

Does the head injury require cervical splinting.

Consider 30° head elevation with no other spine trauma

Control for H-BOMBS; hypotension, hypocapnia, hypoxia and hypercapnia in head injury.

Frequent re-evaluation in trauma patients.

Occlusive dressings on penetrating chest, upper abdominal, axilla, and supraclavicular injuries.

Consider permissive hypotension in trauma other than head injuries.

Brain Herniation

- Drop of two or more in GCS
- Unequal pupils
- Posturing

Maintain $EtCO_2$ 35-40 mmHg

**Pearls**

**Recommended Exam: Mental Status, Skin, HEENT, Heart, Lung, Abdomen, Extremities, Back, Neuro**
**Transport Destination is chosen based on the EMS System Trauma Plan with EMS pre-arrival notification.**
**Scene times should not be delayed for procedures. These should be performed en route when possible.**
**Rapid transport of the unstable trauma patient to the appropriate facility IS the goal.**
**For hemorrhage control, consider direct pressure, bandaging, WoundClot, wound packing and tourniquet application. .**
**Bag valve mask is an acceptable method of managing the airway if pulse oximetry can be maintained ≥ 90%**
Geriatric patients should be evaluated with a high index of suspicion. Often occult injuries are more difficult to recognize and patients can decompensate unexpectedly with little warning.
Mechanism is the most reliable indicator of serious injury.
Remember occlusive dressings are an important part of initial chest trauma treatment.
In prolonged extrications or serious trauma, consider air transportation for reduced transport times.
Do not overlook the possibility of associated domestic violence or abuse.

# Adult - Hyperthermia

## History

- Age, very young and old
- Exposure to increased temperatures and/or humidity
- Past medical history / Medications
- Time and duration of exposure
- Poor PO intake, extreme exertion
- Fatigue and/or muscle cramping

## Signs and Symptoms

- Altered mental status / coma
- Hot, dry or sweaty skin
- Hypotension or shock
- Seizures
- Nausea

## Differential

- Fever (Infection)
- Dehydration
- Medications
- Hyperthyroidism (Storm)
- Delirium tremens (DTs)
- Heat cramps, exhaustion, stroke
- CNS lesions or tumors

**FR** Remove from heat source to cool environment
**FR** Passive cooling measures
Remove tight clothing

**FR** Temperature Measurement Procedure

**B** Blood Glucose Analysis Procedure

Assess Symptom Severity

**HEAT CRAMPS**
Normal to elevated body temperature
Warm, moist skin
Weakness, Muscle cramping

**FR** PO Fluids as tolerated
Monitor and Reassess

**HEAT EXHAUSTION**
Elevated body temperature
Cool, moist skin
Weakness, Tachypnea

**FR** Active cooling measures. Consider TACO Procedure

**HEAT STROKE**
High body temperature, usually > 104
Hot, dry skin
Hypotension, Anxious, AMS / Coma

**FR** **RAPID cooling in the field until below 102º** TACO Procedure

Airway Guideline(s)

Altered Mental Status Guideline

**B** Cardiac Monitor / 12 Lead ECG / Capnography

**A** IV Procedure **P** IO Procedure

**A** **COLD Normal Saline Bolus 1000 mL IV / IO**
Repeat to effect SBP > 90 or MAP of >60
**Maximum 2 L**

Seizure Activity
Actively Cool Patient
Go to
Seizure Guideline

Hypotension / Poor perfusion

Exit to Age Appropriate Hypotension / Shock / Trauma Guideline(s)

**B** Monitor and Reassess

**Notify Destination or Contact Medical Control**

Adult - Trauma - Hyperthermia

## PASSIVE COOLING

- Remove Clothing
- Move to shade or Air Conditioned Ambulance
- Moisten patient's skin with normal saline or water
- Fan patient

## ACTIVE COOLING

- Ice packs to groin and axilla
- Cold IV fluids

**Pearls**

**Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Neuro**
**Temperatures should be evaluated by rectal probe for most accurate reading in the prehospital setting.**
Extremes of age are more prone to heat emergencies (i.e. young and old). Obtain and document patient temperature if able.
Predisposed by use of: tricyclic antidepressants, phenothiazines, anticholinergic medications, and alcohol.
Cocaine, Amphetamines, and Salicylates may elevate body temperatures.

Intense shivering may occur as patient is cooled.

**Heat Cramps** consists of benign muscle cramping 2° to dehydration and is not associated with an elevated temperature.
**Heat Exhaustion** consists of dehydration, salt depletion, dizziness, fever, mental status changes, headache, cramping, nausea and vomiting. Vital signs usually consist of tachycardia, hypotension, and an elevated temperature.
**Heat Stroke** consists of dehydration, tachycardia, hypotension, temperature >104° F (40° C), and altered mental status.
**If ice bath/tank is unavailable at scene consider TACO procedure to actively cool patient to 102$^{o}$F before initiating transport.**

# Adult - Hypothermia

### History

- Age, very young and old
- 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 and Symptoms

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

### Differential

- Sepsis
- Environmental exposure
- Hypoglycemia
- CNS dysfunction
- Stroke
- Head injury
- Spinal cord injury

| | | | |
|---|---|---|---|
| FR | Remove wet clothing<br>Dry / Warm Patient | FR | Temperature Measurement Procedure |
| | Passive warming measures | B | Blood Glucose Analysis Procedure |

Hypothermia / Frost Bite

**Localized Cold Injury**

| | |
|---|---|
| FR | Monitor and Reassess |
| | General Wound Care |
| | DO NOT Rub Skin to warm |
| | DO NOT allow refreezing |

**Systemic Hypothermia**

**Unresponsive?**

Pulse — **YES** / **NO**

Respiratory Distress?

- Age Appropriate Airway Procedure
- Age Appropriate Altered Mental Status Guideline

| | | | |
|---|---|---|---|
| B | Active warming measures | | |
| | Cardiac Monitor / 12 Lead ECG / Capnography | | |
| A | IV Procedure | P | IO Procedure |
| A | **WARM Normal Saline Fluid Bolus 500 mL IV / IO**<br>Repeat to effect SBP > 90<br>**Maximum 2 L** | | |

- Age Appropriate Hypotension/ Shock or Multiple Trauma Guideline

| | |
|---|---|
| P | Core temperature BELOW 86 F:<br>ONE shock if shockable;<br>ONE epinephrine dose (1 mg max).<br>No further shocks or epinephrine until core temperature reaches 86 F.<br><br>AT OR ABOVE 86 F:<br>Usual arrest guideline for the shockable or nonshockable rhythm. |

| | |
|---|---|
| FR | Monitor, Reassess and Passive Rewarming |

**Notify Destination or Contact Medical Control**

Adult - Trauma - Hypothermia

**Pearls**

**Recommended Exam: Mental Status, Heart, Lungs, Abdomen, Extremities, Neuro**

**Rapid transport, facility rewarming is typically far superior to field rewarming**

**Hypothermia categories:**

Mild 90 - 95 degrees F ( 32 - 35 degrees C)
Moderate 82 - 90 degrees F ( 28 - 32 degrees C)
Severe < 82 degrees F ( < 28 degrees C)

**Mechanisms of hypothermia:**

Radiation: Heat loss to surrounding objects via infrared energy ( 60 % of most heat loss.)
Convection: Direct transfer of heat to the surrounding air.
Conduction: Direct transfer of heat to direct contact with cooler objects (important in submersion.)
Evaporation: Vaporization of water from sweat or other body water losses.

- Contributing factors of hypothermia: Extremes of age, malnutrition, alcohol or other drug use.
  If the temperature is unable to be measured, treat the patient based on the suspected temperature.

**CPR:**

**Severe hypothermia may cause cardiac instability and rough handling of the patient theoretically can cause ventricular fibrillation. This has not been demonstrated or confirmed by current evidence. Intubation and CPR techniques should not be withheld due to this concern.**
**Intubation can cause ventricular fibrillation so it should be done gently by most experienced person.**
**Below 86 degrees F (30 degrees C) anti-arrhythmics may not work and if given should be given at reduced intervals due to slower absorption. Contact medical control for direction. Epinephrine can be administered one time to max dose of 1 mg.**
**Below 86 degrees F (30 degrees) pacing should NOT be done**
**Below 86 degrees with PEA warming should be considered before CPR.**
**If the patient is below 86 degrees F (30 degree C) then defibrillate 1 time if defibrillation is required.**
**Hypothermia may produce severe bradycardia so take extra care to palpate a pulse.**

Hot packs can be activated and placed in the armpit and groin area if available. Care should be taken not to place the packs directly against the patient's skin.

# Adult - Torso / Extremity / Spinal Trauma

### History

- Time and mechanism of injury
- Damage to structure or vehicle
- Location in structure or vehicle
- Others injured or dead
- Speed and details of MVC
- Restraints / protective equipment
- Past medical history
- Medications

### Signs and Symptoms

- Pain, swelling
- Altered sensation / motor function
- Deformity, lesions, bleeding
- Altered mental status or unconscious
- Hypotension or shock
- Arrest

### Differential

- Intra-abdominal bleeding
- Pelvis / Femur fracture
- Spine fracture / Cord injury
- Extremity fracture / Dislocation
- Hypothermia

Control External Hemorrhage

Airway Procedure

Selective Cervical Splinting Procedure

**B** Cardiac Monitor

**A** IV Procedure **P** IO Procedure

Consider isotonic crystalloid titrated to BP >90 Systolic or MAP >60

**Consider Rapid Transport / Scene Time**

- Abdominal Trauma
  - Cover eviscerations with moist sterile dressings
- Extremity Trauma
  - **FR** Splint Suspected Fractures
  - **P** If open fracture Consider Cefazolin IV
    Administer 2 g
    Mix in 100 mL D5W/NS and run in over 10 min
- Spinal Trauma

**Hypovolemic shock (B/P < 90 or MAP <60, HR > 115, pallor, diaphoresis)**

YES → **P** Consider Tranexamic Acid (TXA) 2g IV/IO

NO

Pain Management Procedure

Nausea / Vomiting Procedure

**Notify Destination or Contact Medical Control**
Utilize Trauma Triage Guideline

**Pearls**

**Recommended Exam: Mental Status, Skin, HEENT, Heart, Lung, Abdomen, Extremities, Back, Neuro**
**Transport Destination is chosen based on the EMS System Trauma Plan with EMS pre-arrival notification.**
**Scene times should not be delayed for procedures. These should be performed en route when possible.**
**Rapid transport of the unstable trauma patient to the appropriate facility IS the goal.**
**For hemorrhage control, consider direct pressure, bandaging, WoundClot, wound packing and tourniquet application.**

**Routine use of pelvic binders should be avoided. If one is placed PTA by a 1st response agency or E.R., it may be left in place.**

**Bag valve mask is an acceptable method of managing the airway if pulse oximetry can be maintained ≥ 90%**

Geriatric patients should be evaluated with a high index of suspicion. Often occult injuries are more difficult to recognize and patients can decompensate unexpectedly with little warning.
Mechanism is the most reliable indicator of serious injury.
In prolonged extrications or serious trauma, consider air transportation for transport times.
Do not overlook the possibility of associated domestic violence or abuse.
Early antibiotic administration is beneficial in open fractures. Consider antibiotics especially in cases in which transport may be delayed (i.e. entrapment, crush, MCI, collapse scenarios), but only after providing other emergency care including hemorrhage control.

# Adult - Traumatic Cardiac Arrest

**History**

- Events leading to arrest
- Estimated downtime
- Past medical history
- Medications
- Existence of terminal illness

**Signs and Symptoms**

- Unresponsive
- Apneic
- Pulseless

**Differential**

- Medical vs. Trauma
- VF vs. Pulseless VT
- Asystole
- PEA
- Primary Cardiac event vs. Respiratory arrest or Drug overdose

**Criteria for Death / No Resuscitation**
**Review DNR / TPOP Form**

YES → Exit to Termination of Resuscitation Policy

NO

**FR** — ***Begin Continuous CPR Compressions (Consider Mechanical Compression Device if available)***
***Change Compressors every 2 minutes***
***(Limit pauses to AED analyze or defibrillation)***

Place multi-function pads on patient without interrupting compressions

**FR** AED | **B** Cardiac Monitor

Non-Shockable Rhythm | Shockable Rhythm

**Ventilate with BVM ONLY every 12 compressions without stopping compressions.**

- Use one handed three finger technique to achieve chest rise
- PEEP set to 5 $cmH_2O$
- Attach capnography if available
- Intubate only if i-gel or supraglottic method fails
- IO/IV Access only after below priorities:

1. Continuous Compressions
2. AED or Monitor Placement / Analyze / Defibrillation
3. Ventilation (i-gel preferred with $O_2$ and BVM)

**Non-Shockable Rhythm**

**FR** — Continue CPR
Changing compressors every 2 min

**B** — Place i-gel with $O_2$ tubing to port at 8 L/min and attach capnography / BVM

**P2** — Consider Bilateral Needle Thoracostomy Procedure

**P3** — Consider Bilateral Finger Thoracostomy Procedure

**FR** — Prefilled Device IN
Or
**A** Naloxone 0.1 mg/kg IV/IO
After priority medications

Follow age appropriate Asystole / PEA Airway Guideline(s) ***as indicated***

**Shockable Rhythm**

**FR** — Shock Delivery (Manual Delivery by Paramedic only)

**FR** — Immediately continue CPR
Changing compressors every 2 min

Follow age appropriate VF / VT Tachycardia Airway Guideline(s) ***as indicated***

**AT ANY TIME**

**Return of Spontaneous Circulation**

**Go to Post Resuscitation Guideline**

Adult - Trauma - Traumatic Cardiac Arrest




**Pearls**

Traumatic Arrest has a low likelihood of survival.
In most cases transport should be considered with ROSC after addressing these immediate life threats: Life threatening hemorrhage Airway obstruction Tension pneumo/hemothorax Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated.
Consider early Humeral and/or femoral IO placement if available and / or difficult IV access anticipated.
Tibial IO placement has little benefit even with high quality chest compressions.
DO NOT HYPERVENTILATE: If advanced airway is in place ventilate 8-10 breaths per minute (ONLY once per every 12 compressions) with continuous, uninterrupted compressions.
Do not interrupt compressions to place endotracheal tube.
Consider i-gel first to limit interruptions.
Do not interrupt compressions for AED / Monitor pad placement or airway placement.
Resuscitation is based on proper planning and organized execution.
Procedures require space and patient access.
Make room to work.
Utilize Team Focused Approach assigning responders to predetermined tasks and use the Cardiac Arrest Checklist and Code Commander when personnel are available to do so.
Reassess, document advanced airway placement and EtCO 2 frequently, after every move, and at transfer of care.
Maternal Arrest - Treat mother per appropriate guideline with immediate notification to Medical Control and rapid transport as per Cardiac Arrest Destination Plan.
Place mother supine and perform Manual Left Uterine Displacement moving uterus to the patient's left side.
IV/IO access preferably above diaphragm.
Defibrillation is safe at all energy levels.
Cardiac Arrest in pregnant patients should have consideration of early transport for post- mortem c-section.
Naloxone: use a prefilled IN device or 0.1 mg/kg IV/IO after priority medications, as directed by the algorithm.

MERCY EMS

# Pediatric Guidelines

2026 Clinical Operating Guidelines

## Open Pediatric Contents

# Pediatric - Asystole / PEA

### History

- Past medical history
- Medications
- Events leading to arrest
- End stage renal disease
- Estimated downtime
- Suspected hypothermia
- Suspected overdose
- Tricyclic
- Digitalis
- Beta blockers
- Calcium channel blockers
- DNR, TPOP, or Living Will

### Signs and Symptoms

- Pulseless
- Apneic
- No electrical activity on ECG
- No heart tones on auscultation

### Differential

- Reversible Causes

| | |
|---|---|
| FR | Continue CPR |
| | Establish & Maintain Airway & Ventilate 100% $O_2$<br>Capnography (if available) |
| | Search for Reversible Causes |
| A | IV Procedure **P** IO Procedure |
| | **Epinephrine (1:10,000) 0.01 mg/kg IV/IO**<br>Repeat every 3 to 5 minutes<br>**(0.01 mg/kg = 0.1 mL/kg)** |
| P | Consider Chest Decompression Procedure |
| FR | Prefilled Device IN<br>or<br>**A** Naloxone 0.1 mg/kg IV/IO<br>After priority medications |

If unable to establish any access, consider IM Epinephrine 0.02-0.06 mg/kg One Time Dose Only

**AT ANY TIME**

**Return of Spontaneous Circulation**

**Go to Post Resuscitation Guideline**

**Reversible Causes**

Hypovolemia
Hypoxia
Hydrogen ion (acidosis)
Hypothermia
Hypo / Hyperkalemia
Hypoglycemia

Tension pneumothorax
Tamponade; cardiac
Toxins
Thrombosis; pulmonary (PE)
Thrombosis; coronary (MI)

**Consider Early for PEA**

1. Isotonic Crystalloid Bolus for possible hypovolemia (20 mL/kg)
2. Dextrose 10% 0.1 g/kg IV/IO

Utilize available resources for drug doses and equipment sizes

Reassess ryhthm every 2 minutes; if shockable, Exit to Pediatric VF/Pulseless Vtach Guideline

**Notify Destination or Contact Medical Control**

Pediatric - Cardiac - Asystole / PEA

**Pearls**

- SURVIVAL FROM PEA OR ASYSTOLE is based on identifying and correcting the CAUSE: consider a broad differential diagnosis, with early and aggressive treatment of possible causes.
- **EARLY attention should be given to good oxygenation/ventilation. Many pediatric arrests are the result of airway and/or ventilation problems.**
- **Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated. Consider early IO placement if available and/or difficult IV access anticipated.**
- **DO NOT HYPERVENTILATE: Ventilate 12-20 breaths per minute with continuous, uninterrupted compressions, or as guided by $EtCO_2$.**
- **Do not interrupt compressions to place endotracheal tube. Consider supraglottic airway first to limit interruptions. MOST PEDIATRIC PATIENTS CAN BE VENTILATED ADAQUATELY WITH BVM IN TRANSPORT**
- Success is based on proper planning and execution. Procedures require space and patient access; make room to work.
- Potential association of PEA with hypoxia so placing airway with oxygenation early may provide benefit.
- PEA caused by sepsis or severe volume loss may benefit from higher volume of normal saline administration.
- Return of spontaneous circulation after Asystole / PEA requires continued search for underlying cause of cardiac arrest.
- Treatment of hypoxia and hypotension are important after resuscitation from Asystole / PEA.
- Discussion with Medical Control can be a valuable tool in developing a differential diagnosis and identifying possible treatment options.
- Confirm Asystole in 2 leads.

# Pediatric - Bradycardia

### History

- Past medical history
- Foreign body exposure
- Respiratory distress or arrest
- Apnea
- Possible toxic or poison exposure
- Congenital disease
- Medication (maternal or infant)

### Signs and Symptoms

- Decreased heart rate
- Delayed capillary refill or cyanosis
- Mottled, cool skin
- Hypotension or arrest
- Altered level of consciousness

### Differential

- Respiratory failure
- Foreign body
- Secretions
- Infection (croup, epiglotitis)
- Hypovolemia (dehydration)
- Congenital heart disease
- Trauma
- Tension pneumothorax
- Hypothermia
- Toxin or medication
- Hypoglycemia
- Acidosis

Bradycardia
Causing Hypotension / AMS
Poor Perfusion / Shock

Airway Procedure

B: Identify underlying cause
B: Blood Glucose Analysis Procedure
B: Cardiac Monitor

A: IV Procedure
P: IO Procedure

Heart Rate < 60
Poor Perfusion / Shock

NO → Exit to Appropriate Guideline

**Start CPR if HR remains <60/min with poor perfusion despite effective oxygenation and ventilation. If pulseless, follow Pediatric Cardiac Arrest Guidelines**

A: **Isotonic Crystalloid Bolus**
**20 mL/kg IV/IO**

P: **Epinephrine - Push Dose**
1 mcg/kg IV/IO; Max 10 mcg
10 mcg/mL (1:100,000)
0.1 mL/kg; max 1 mL
May repeat once

P: **Consider Cardiac Pacing Procedure**

P: *For pacing, consider* **Procedural Tolerance Procrdure**

**Notify Destination or Contact Medical Control**

Pediatric - Cardiac - Bradycardia

**Pearls**

Recommended Exam: Mental Status, HEENT, Skin, Heart, Lungs, Abdomen, Back, Extremities, Neuro
Use Handtevy Drug dosage reference for drug dosages if applicable.
The majority of pediatric arrests are due to airway problems.
Most maternal medications pass through breast milk to the infant.
Hypoglycemia, severe dehydration and narcotic effects may produce bradycardia.
Pediatric patients requiring transcutaneous pacing require the use of pads appropriate for pediatric patients when available Use epinephrine and transcutaneous pacing as directed by the algorithm.
Transcutaneous pacing should be considered early in bradycardic patients with shock.

# Pediatric - Cardiac Arrest

**History**

- Events leading to arrest
- Estimated downtime
- Past medical history
- Medications
- Existence of terminal illness

**Signs and Symptoms**

- Unresponsive
- Apneic
- Pulseless

**Differential**

- Medical vs. Trauma
- VF vs. Pulseless VT
- Asystole
- PEA
- Primary Cardiac event vs. Respiratory arrest or Drug overdose

**Criteria for Death / No Resuscitation**
**Review DNR / TPOP Form**

YES → Exit to Termination of Resuscitation Guideline

**FR** — ***Begin Continuous CPR Compressions (Consider Mechanical Compression Device if available)***
***Change Compressors every 2 minutes***
***(Limit pauses to AED analyze or defibrillation)***

Place multi-function pads on patient without interrupting compressions

Ventilate early with i-gel or BVM

**FR** AED | **B** Cardiac Monitor

Non-Shockable Rhythm / Shockable Rhythm

**FR** Continue CPR Changing compressors every 2 min

**FR** Shock Delivery (Manual Delivery by Paramedic only)
Immediately continue CPR Changing compressors every 2 min

**B** Place i-gel with $O_2$ tubing to port at 8 L/min and attach capnography / BVM

Follow age appropriate Asystole / PEA Airway Guideline(s) ***as indicated***

Follow age appropriate VF / VT Tachycardia Airway Guideline(s) ***as indicated***

**AT ANY TIME**

**Return of Spontaneous Circulation**

**Go to Post Resuscitation Guideline**

**Pediatric patients will benefit with early and aggressive ventilation in cardiac arrest**



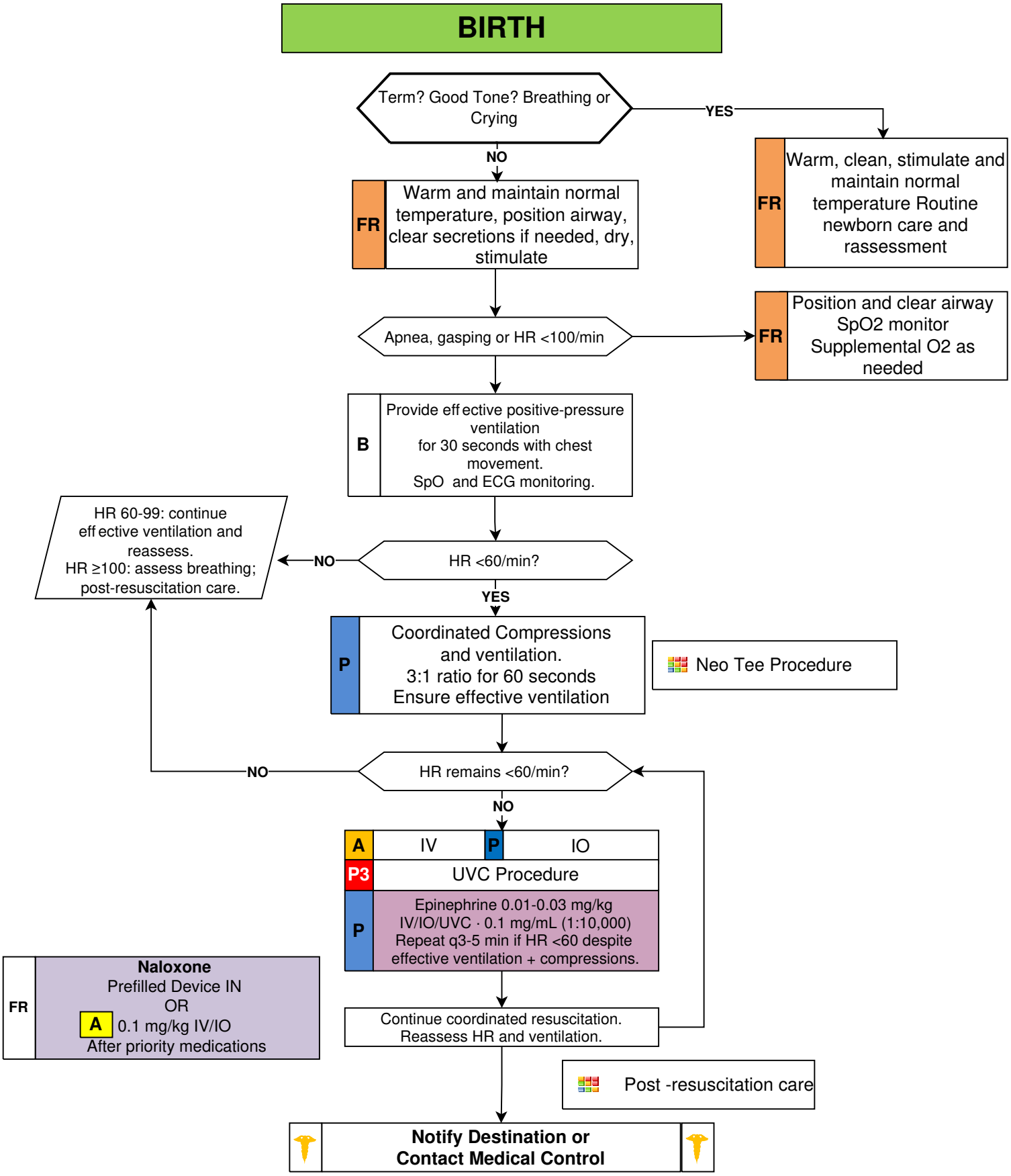

**Transport Considerations**
**We should consider early transport for any cardiac arrest In which the following interventions have been performed.**

Cardiac monitor placed
Continuous compressions for 10-minutes (5 full cycles)
Epinephrine Provided when indicated
CPR Compression Device Utilized
ETCO2 >30

Any patients who do not meet these criteria should be worked at the scene per guideline.

## Pearls

Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated.
Consider early Humeral or Femoral IO placement if available and / or difficult IV access anticipated.
Tibial IO placement has little benefit even with high quality chest compressions.
Ventilate early with an i-gel or BVM, as directed by the algorithm.
Avoid hyperventilation and minimize interruptions in compressions.
Do not interrupt compressions to place endotracheal tube.
Consider i-gel first to limit interruptions.
Do not interrupt compressions for AED / Monitor pad placement or airway placement.
Resuscitation is based on proper planning and organized execution.
Procedures require space and patient access.
Make room to work.
Utilize Team Focused Approach assigning responders to predetermined tasks and use the Cardiac Arrest Checklist and Code Commander when personnel are available to do so.
Reassess, document advanced airway placement and EtCO 2 frequently, after every move, and at transfer of care.
Naloxone: use the prefilled IN device or 0.1 mg/kg IV/IO after priority medications, as directed by the rhythm-specific algorithm.


BIRTH
Term? Good Tone? Breathing or Crying
YES
NO
FR
Warm and maintain normal temperature, position airway, clear secretions if needed, dry, stimulate
FR
Warm, clean, stimulate and maintain normal temperature Routine newborn care and rassessment
Apnea, gasping or HR <100/min
FR
Position and clear airway SpO2 monitor Supplemental O2 as needed
B
Provide eff ective positive-pressure ventilation for 30 seconds with chest movement. SpO and ECG monitoring.
HR 60-99: continue eff ective ventilation and reassess. HR ≥100: assess breathing; post-resuscitation care.
NO
HR <60/min?
YES
P
Coordinated Compressions and ventilation. 3:1 ratio for 60 seconds Ensure effective ventilation
Neo Tee Procedure
NO
HR remains <60/min?
NO
A
IV
P
IO
P3
UVC Procedure
P
Epinephrine 0.01-0.03 mg/kg IV/IO/UVC · 0.1 mg/mL (1:10,000) Repeat q3-5 min if HR <60 despite effective ventilation + compressions.
FR
Naloxone
Prefilled Device IN
OR
A
0.1 mg/kg IV/IO
After priority medications
Continue coordinated resuscitation. Reassess HR and ventilation.
Post -resuscitation care
Notify Destination or Contact Medical Control

| | Sign | 2 | 1 | 0 |
|---|---|---|---|---|
| A | Appearance (skin color) | Normal over entire body | Normal except extremities | Cyanotic or pale all over |
| P | Pulse | >100 bpm | <100 bpm | Absent |
| G | Grimace (reflex irritability) | Sneezes, coughs, or vigorous cry | Grimaces | No response |
| A | Activity (muscle tone) | Active | Arms and legs flexed | Absent |
| R | Respirations | Good, crying | Gasping, irregular | Absent |

**Pearls**

- Most infants will not require resuscitation. Usually stimulation and warmth will make the baby respond well.
  Pre-ductal SpO2 Target

1 min - 60%-65%
2 min - 65%-70%
3 min - 70%-75%
4 min - 75%-80%
5 min - 80%-85%
10 min - 85%-95%

# Pediatric - Post-Resuscitation Care

| History | Signs and Symptoms | Differential |
|---|---|---|
| • Respiratory arrest<br>• Cardiac arrest | • Return of pulse | • Continue to address specific differentials associated with the original dysrhythmia |

| | | | |
|---|---|---|---|
| FR | Monitor Vital Signs/Reassess | B | Cardiac Monitor / 12 Lead ECG / Capnography |
| B | **Optimize Ventilation and Oxygenation**<br>Maintain $SpO_2$ = 94-99%<br>Advanced airway ***if indicated***<br>Obtain vital signs and 12/15 lead ECG<br>DO NOT HYPERVENTILATE - monitor $CO_2$ | | |
| A | IV Procedure | P | IO Procedure |

Hypotension

Consider Push Dose Pressor Procedure

NO

PRIOR TO PATIENT MOVEMENT CREW SHOULD REMAIN ON SCENE TO COMPLETE CHECKLIST ON PAGE 2

Symptomatic Bradycardia

Pediatric Bradycardia Guideline

NO

Antiarrhythmic given

Arrhythmias are common and usually self limiting after ROSC and may not need further meds or drips.

If Arrhythmia Persists follow Rhythm Appropriate Guideline

NO

P2 Consider RSI for ETT Only When Necessary

**Notify Destination or Contact Medical Control**

**Post ROSC Cardiac Arrest Checklist**

ASSESS $CO_2$ (should be >20 with good waveform)

Finger on pulse, continuous evaluation of pulse prior to movement.
Full set of vitals, EKG and blood sugar. DO NOT MOVE the patient until complete
Continuous visualization of cardiac monitor rhythm
Check $O_2$ supply and pulse Ox to TITRATE to $SaO_2$ 94-99%

Do not try to obtain a “normal” $EtCO_2$ by increasing respiratory rate

If STEMI evident, notify hospital of STEMI
Assess for & TREAT bradycardias < 60 bpm
Evaluate for post-resuscitation airway placement (e.g. ETT). Strongly consider bougie use if airway change is indicated.
When patient is moved, perform CONTINUOUS PULSE CHECK and continuous monitoring of cardiac rhythm
Mask is available for BVM in case advanced airway fails
Once in ambulance, confirm pulse, breath sounds, $SaO_2$, $EtCO_2$, and cardiac rhythm

Appropriate personnel present in the back of the ambulance for transport

**Pearls**

**Recommended Exam: Mental Status, Neck, Skin, Lungs, Heart, Abdomen, Extremities, Neuro**
**Continue to search for potential cause of cardiac arrest during post-resuscitation care.**
**Hyperventilation is a significant cause of hypotension and recurrence of cardiac arrest in the post resuscitation phase and must be avoided at all costs.**
**Initial End tidal $CO_2$ may be elevated immediately post-resuscitation but will usually normalize. While goal is 35 - 45 mmHg, avoid hyperventilation.**
**Transport to facility capable of managing the post-arrest patient including hypothermia therapy, cardiac catheterization and intensive care service.**
Most patients immediately post resuscitation will require ventilatory assistance.
The condition of post-resuscitation patients fluctuates rapidly and continuously, and they require close monitoring.
Appropriate post-resuscitation management may require consultation with medical control.
Common causes of post-resuscitation hypotension include hyperventilation, hypovolemia, pneumothorax, and medication reaction to ALS drugs.

# Pediatric - Tachycardia

### History

- Past medical history
- Medications or Toxic Ingestion
- (Aminophylline, Diet pills, Thyroid supplements, Decongestants, Digoxin)
- Drugs (nicotine, cocaine)
- Congenital Heart Disease
- Respiratory Distress
- Syncope or Near Syncope

### Signs and Symptoms

- Heart Rate: Child > 180/bpm
- Infant > 220/bpm
- Pale or Cyanosis
- Diaphoresis
- Tachypnea
- Vomiting
- Hypotension
- Altered Level of Consciousness
- Pulmonary Congestion
- Syncope

### Differential

- Heart disease (Congenital)
- Hypo / Hyperthermia
- Hypovolemia or Anemia
- Electrolyte imbalance
- Anxiety / Pain / Emotional stress
- Fever / Infection / Sepsis
- Hypoxia
- Hypoglycemia
- Medication / Toxin / Drugs (see HX)
- Pulmonary embolus
- Trauma
- Tension Pneumothorax

**B** Cardiac Monitor / 12 Lead ECG

**A** IV Procedure **P** IO Procedure

Fluid challenge as appropriate

**Cardiopulmonary Compromise?**

**NO**

**QRS ≤ 0.09 seconds**

**B** Consider Vagal Maneuvers

**P** **Adenosine**
**0.1 mg/kg IV/IO rapid push**
**Maximum 6 mg**
May repeat
**Adenosine**
**0.2 mg/kg IV/IO**
**Maximum 12 mg**

**QRS > 0.09 seconds**

**P** Medical Control
**Amiodarone**
**5 mg/kg IV/IO**
Over 20-60 Minutes
**Maximum 150 mg**

**YES**

**QRS ≤ 0.09 seconds**

**B** Consider Vagal Maneuvers

**P** **Consider Adenosine**
**0.1 mg/kg IV/IO rapid push**
**Maximum 6 mg**
May repeat
**Adenosine**
**0.2 mg/kg IV/IO**
**Maximum 12 mg**

Synchronized Cardioversion Procedure

Procedural Tolerance Procedure

**QRS > 0.09 seconds**

**P** Synchronized Cardioversion Procedure

Procedural Tolerance Procedure

Medical Control
**Amiodarone**
**5 mg/kg IV/IO**
Over 20-60 Minutes
**Maximum 150 mg**

**Rhythm Converts?**

**YES**

**B** 12 Lead ECG Procedure / Capnography

**NO**

Synchronized Cardioversion Procedure

Procedural Tolerance Procedure

**Notify Destination or Contact Medical Control**

**Pediatric - Cardiac - Tachycardia**

## Pearls

Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
Serious Signs and Symptoms: Respiratory distress / failure.
Signs of shock / poor perfusion with or without hypotension.
Altered Mental Status Sudden collapse with rapid, weak pulse Narrow Complex Tachycardia (≤ 0.09 seconds): Sinus tachycardia: P waves present.
Variable R-R waves.
Infants usually < 220 beats/minute.
Children usually < 180 beats/minute.
SVT: > 90% of children with SVT will have a narrow QRS (≤0.09 seconds.) P waves absent or abnormal.
R-R waves not variable.
Usually abrupt onset.
Infants usually > 220 beats/minute.
Children usually > 180 beats/ minute.
Atrial Flutter / Fibrillation Wide Complex Tachycardia (> 0.09 seconds): SVT with aberrancy.
VT: Uncommon in children.
Rates may vary from near normal to > 200/minute.
Most children with VT have underlying heart disease / cardiac surgery / long QT syndrome / cardiomyopathy.
Torsades de Pointes / Polymorphic (multiple shaped) Tachycardia: Rate is typically 150 to 250 beats/minute.
Associated with long QT syndrome, hypomagnesaemia, hypokalemia, many cardiac drugs.
May quickly deteriorate to VT.
Vagal Maneuvers: Breath holding.
Blowing a glove into a balloon.
Have child blow out “birthday candles” or through an obstructed straw.
Infants: May put a bag of ice water over the upper half of the face careful not to occlude the airway.
Separating the child from the caregiver may worsen the child's clinical condition Monitor for respiratory depression and hypotension associated if Midazolam is used.
Continuous pulse oximetry is required for all SVT Patients if available.
Document all rhythm changes with monitor strips and obtain monitor strips with each therapeutic intervention.
Generally, the maximum sinus tachycardia rate is 220 - the patient’s age in years.

# Pediatric - Ventricular Fibrillation / Pulseless VT

**History**

- Estimated down time
- Past Medical History
- Medications
- Events leading to arrest
- DNR or TPOP form

**Signs and Symptoms**

- Unresponsive, apneic, pulseless
- Ventricular fibrillation or ventricular tachycardia on EKG

**Differential**

- Asystole
- Artifact / Device Failure
- Cardiac
- Endocrine / Medicine
- Drugs
- Pulmonary

Begin defibrillation at **2 J/kg** and escalate by 2 J/kg to a maximum of **10 J/kg** without exceeding max adult dose

**FR**

Continue CPR

Establish & Maintain Airway & Ventilate 100% $O_2$
Capnography (if available)

**AED Shock** | **P** | **Manual Defibrillation**

Resume CPR immediately after each shock for 2 minutes

Search for Reversible Causes

**A**

IV Procedure | **P** | IO Procedure

**Epinephrine (1:10,000) 0.01 mg/kg IV/IO**
Repeat every 3 to 5 minutes
**(0.01 mg/kg = 0.1 mL/kg)**

**P**

Consider Chest Decompression Procedure

**Amiodarone, 5 mg/kg IV/IO**
May repeat in 3 to 5 minutes with **15 mg/kg MAX**
OR
**Lidocaine, 1 mg/kg IV/IO** may repeat in 3-5 minutes at **0.5-1 mg/kg**. Total of **3 doses** OR 3 mg/kg MAX

For refractory VFIB/Pulseless VT, consider defibrillation procedure with new pad location

**FR**

**Naloxone**
Prefilled Device IN or
**A** 0.1 mg/kg IV/IO
After priority medications

**FR**

Reassess ryhthm every 2 minutes; if nonshockable, Exit to Asystole/PEA Guideline

**Notify Destination or Contact Medical Control**

**Reversible Causes**

Hypovolemia
Hypoxia
Hydrogen ion (acidosis)
Hypothermia
Hypo / Hyperkalemia
Hypoglycemia

Tension pneumothorax
Tamponade; cardiac
Toxins
Thrombosis; pulmonary (PE)
Thrombosis; coronary (MI)

Torsades de Pointes
Suspected Digitalis Toxicity

**P**

Consider **Magnesium Sulfate 25-50 mg/kg (Max 2g) IV/Nebulized. IV dose must be diluted in 100 mL N.S or D5W and given over 2 minutes**

**AT ANY TIME**

**Return of Spontaneous Circulation**

**Go to Post Resuscitation Guideline**

**Pediatric - Cardiac - Ventricular Fibrillation / Pulseless VT**



**Pearls**

Recommended Exam: Mental Status Early attention should be given to good oxygenation/ventilation.
Many pediatric arrests are the result of airway and/or ventilation problems.
Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated.
Consider early IO placement if available and difficult IV anticipated.
DO NOT HYPERVENTILATE: Ventilate 8 - 10 breaths per minute or as guided by EtCO 2 , with continuous, uninterrupted compressions.
Do not interrupt compressions to place endotracheal tube.
Consider supraglottic airway first to limit interruptions.
Consider elevating the head of the cot to 15 degrees if mechanical compression device available Effective CPR and prompt defibrillation are the keys to successful resuscitation.
Use the IV/IO medication doses and routes specified in the algorithm.
Reassess, document airway placement and EtCO 2 frequently, after every move, and at transfer of care.
Do not stop CPR to check for placement of airway device or to give medications.
If BVM is ventilating the patient successfully, intubation should be deferred until rhythm has changed or 4 or 5 defibrillation sequences have been completed.
Return of spontaneous circulation: Heart rate should be > 60 when initiating anti-arrhythmic infusions.
Sodium bicarbonate no longer recommended as a standard cardiac arrest medication.

# Pediatric - Abdominal Pain

## History

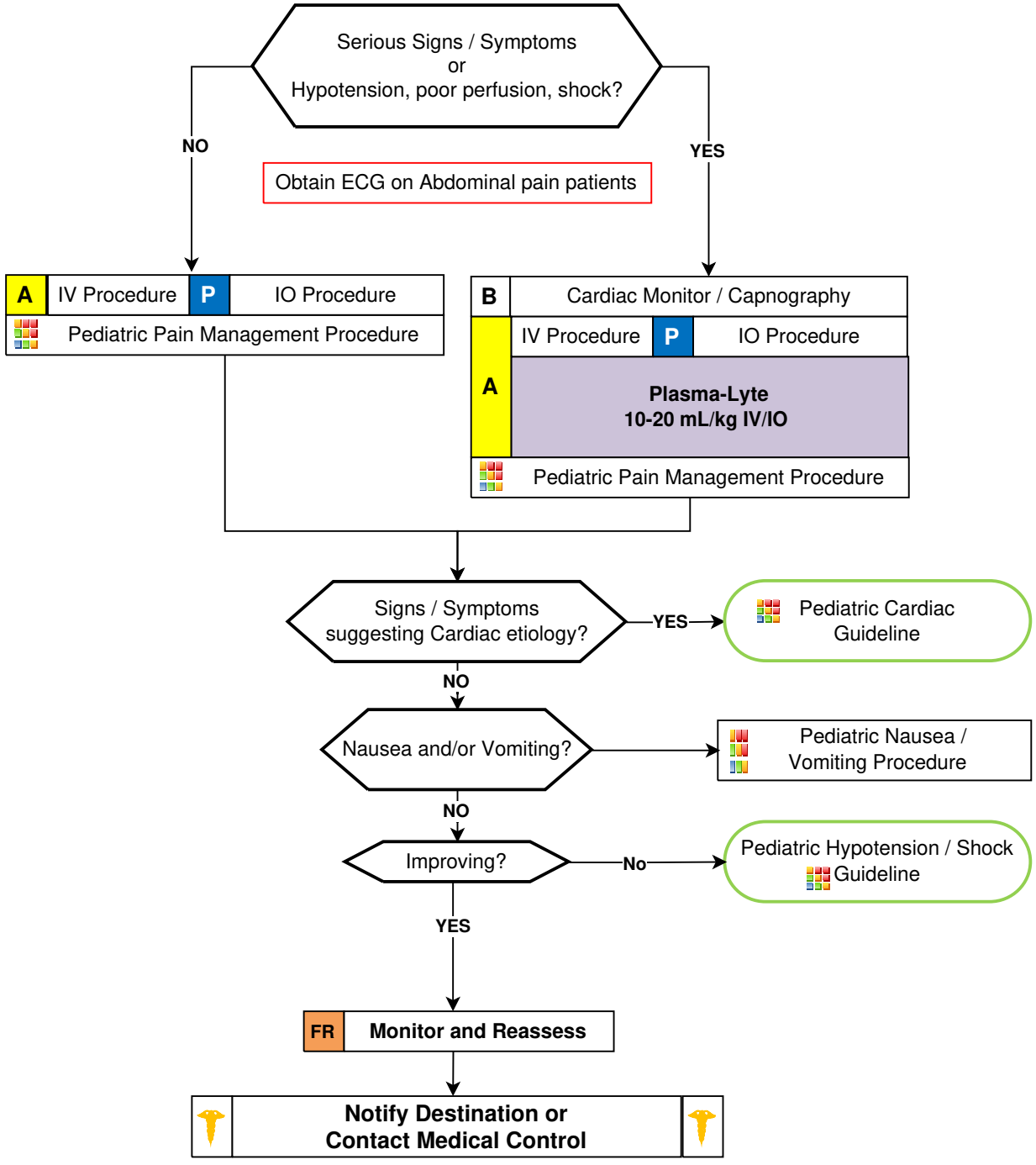
- Age
- Past medical / surgical history
- Medications
- OPQRST
- Fever
- Last meal eaten
- Last bowel movement / emesis
- Menstrual history (pregnancy)

## Signs and Symptoms

- Pain (location / migration)
- Tenderness
- Nausea
- Vomiting
- Diarrhea
- Dysuria
- Constipation
- Vaginal bleeding / discharge
- Pregnancy

## Differential

- Pneumonia or Pulmonary embolus
- Liver (hepatitis, CHF)
- Myocardial infarction
- Kidney stone
- Abdominal aneurysm
- Appendicitis
- Bowel obstruction
- Gastroenteritis (infectious)
- Ovarian and Testicular Torsion



## Pearls

The majority of abdominal pain cases should be treated and transported at the ALS level when available.
Recommended Exam: Mental Status, Skin, HEENT, Neck, Heart, Lung, Abdomen, Back, Extremities, Neuro
Document the mental status and vital signs prior to administration of anti-emetics Abdominal pain in women of childbearing age should be treated as pregnancy related until proven otherwise.
Antacids should be avoided in patients with renal disease.
Repeat vital signs after each fluid bolus.

# Pediatric - Altered Mental Status

## History

- Known diabetic, medic alert tag
- Drugs, drug paraphernalia
- Report of illicit drug use or toxic ingestion
- Past medical history
- Medications
- History of trauma
- Change in condition
- Changes in feeding or sleep habits

## Signs and Symptoms

- Decreased mental status or lethargy
- Change in baseline mental status
- Bizarre behavior
- Hypoglycemia
- Hyperglycemia

## Differential

- Head trauma
- CNS (stroke, tumor, seizure, infection)
- Cardiac (MI, CHF)
- Hypothermia
- Infection (CNS and other)
- Thyroid (hyper / hypo)
- Shock (septic, metabolic, traumatic)
- Diabetes (hyper / hypoglycemia)
- Toxicological or Ingestion
- Acidosis / Alkalosis
- Environmental exposure
- Pulmonary (Hypoxia)
- Electrolyte abnormality
- Psychiatric disorder

Selective Cervical Splinting Procedure

Airway Procedure

B: Blood Glucose Analysis Procedure; Cardiac Monitor / 12 Lead ECG / Capnography

A: IV Procedure | P: IO Procedure

### Stroke Suspicion

FR: Prehospital Stroke Screen

FR: RACE Assessment

Time Critical Diagnosis
Obtain accurate Last Seen Normal time and contact number of witness

Consider rapid transport and early notification to the receiving facility

### Blood Glucose ≤ 60 mg/dL

B: Consider Oral Glucose

P: 10% Dextrose 0.1 g/kg slow IV/IO
(1 mL/kg 250 mL bag)

If not available or IV/IO access failed, Oral Glucose could be given via NG/OG tube

If patient is on oral hypoglycemic or long acting insulin, and/or an IV/IO was inserted, the patient should be transported.
If PRC is obtained, patient must be left with a responsible caregiver.

### Consider toxin, environmental, metabolic, & infectious etiologies

Adequate Respirations / Oxygenation / Ventilation?

NO

FR: **Naloxone 2 mg (1 mL / nare) IN for BLS only**

A: **Naloxone 0.1 mg/kg** IV/IO/IM repeat prn Naloxone is titrated to effect adequate ventilation and oxygenation up to **2 mg**

YES

**Notify Destination or Contact Medical Control**

Pediatric - Medical - Altered Mental Status

| Cincinnati Prehospital Stroke Scale | |
|---|---|
| Face | Both sides move normally |
| | One side is weak or is flaccid |
| Arm | Both arms have equal normal strength |
| | One arm is weak or doesn't move at all |
| Speech | Speech is normal and appropriate |
| | Speech is slurred, inappropriate words or mute |

R.A.C.E Stroke Scale
Rapid Arterial oCclusion Evaluation Scale

| Item | Instruction | Score | NIHSS Equivalent |
|---|---|---|---|
| Facial palsy | Ask patient to smile | Absent = 0<br>Mild = 1<br>Moderate to severe = 2 | 0-3 |
| Arm motor function | Extend patient's arm 90 degrees if sitting, 45 if supine | Normal to mild = 0<br>Moderate = 1<br>Severe = 2 | 0-4 |
| Leg motor function | Extend patient's leg 30 degrees in supine position | Normal to mild = 0<br>Moderate = 1<br>Severe = 2 | 0-4 |
| Head & gaze deviation | Observe deviation to one side | Absent = 0<br>Present = 1 | 0-2 |
| Aphasia (right side) | Ask patient to close their eyes and make a fist | Normal = 0<br>Moderate = 1<br>Severe = 2 | 0-2 |
| Agnosia (left side) | Ask patient to recognize familiar objects | Normal = 0<br>Moderate = 1<br>Severe = 2 | 0-2 |
| Patient RACE scale total | | 6 | |

Medscape

☐ Consider trauma, look for signs of injury

☐ Consider toxin, HAZMAT, drugs and alcohol (pupils, diaphoresis)

☐ Consider blood glucose

☐ Consider additional causes in those known to have drugs and alcohol

**Pearls**

- **Recommended Exam: Mental Status, HEENT, Skin, Heart, Lungs, Abdomen, Back, Extremities, Neuro.**
- **Pay careful attention to the head exam for signs of bruising or other injury.**
  **Consider non-accidental trauma and head injuries in altered mental status and behavioral changes as well as the normal metabolic, vascular and infectious causes.**
  Be aware of AMS as presenting sign of an environmental toxin or Haz-Mat exposure and protect personal safety and that of other responders who may already be exposed.
  Recheck blood glucose after Dextrose.
  Do not let alcohol confuse the clinical picture. Alcoholics frequently develop hypoglycemia and may have unrecognized injuries.

# Pediatric - Anaphylaxis

## History

- Onset and location
- Insect sting or bite
- Food allergy / exposure
- Medication allergy / exposure
- New clothing, soap, detergent
- Past history of reactions
- Past medical history
- Medication history

## Signs and Symptoms

- Itching or hives
- Coughing / wheezing or respiratory distress
- Chest or throat constriction
- Difficulty swallowing
- Hypotension or shock
- Edema
- Nausea / Vomiting

## Differential

- Urticarial (rash only)
- Anaphylaxis (systemic effect)
- Shock (vascular effect)
- Angioedema (drug induced)
- Aspiration / Airway obstruction
- Vasovagal event
- Asthma or COPD
- CHF

Airway Procedure

FR: **$O_2$ via appropriate device**

B: **Cardiac Monitor / Capnography**

A: **IV Procedure** | P: **IO Procedure**

Assess Symptom Severity

### MILD

FR: Monitor and Reassess for Worsening Signs and Symptoms

A: **Diphenhydramine 1 - 2 mg/kg IV/IO**

### MODERATE

B: Consider Epinephrine Jr autoinjector 0.15 mg IM for >1yrs

Consider Epinephrine Jr autoinjector <1yr contact Medical Control

**Albuterol Nebulized 2.5 mg** Repeat as needed

A: *Consider* **Epinephrine 1:1000 0.01 mg/kg IM (Max 0.3 mg)** B-OK EMT Scope 0.15 mg

**Diphenhydramine 1 - 2 mg/kg IV/IO**

P2: **Epinephrine 1:100,000 (PDP) 0.1-0.2 mcg/kg slow IV/IO; Max 10 mcg**

**STEROIDS: Give one drug and one dose**

P: **Methylprednisolone (Solu-Medrol) 2 mg/kg IM/IV/IO Max 125 mg one time**
OR
**Dexamethasone 0.2 mg/kg PO/IM/IV/IO**

**Dexamethasone**:

The IV formulation of dexamethasone can be used PO but is bitter and may need to be mixed with a flavored liquid.

### SEVERE

B: Epinephrine Jr autoinjector 0.15 mg IM for >1yrs

Consider Epinephrine Jr autoinjector <1yr contact Medical Control

**Albuterol Nebulized 2.5 mg** Repeat as needed

A: **Epinephrine 1:1000 0.01 mg/kg IM (Max 0.3 mg)** B-OK EMT Scope 0.15 mg

**Diphenhydramine 1 - 2 mg/kg IV/IO**

**Duoneb Nebulized 3 mL** (ipratropium 0.5 mg - albuterol 2.5 mg) **Give only 1 time** B-OK EMT Scope

**Normal Saline** Titrated to maintain Blood Pressure

P2: **Epinephrine 1:100,000 (PDP) 0.1-0.2 mcg/kg slow IV/IO; Max 10 mcg**

**STEROIDS: Give one drug and one dose**

P: **Methylprednisolone (Solu-Medrol) 2 mg/kg IM/IV/IO Max 125 mg one time**
OR
**Dexamethasone 0.2 mg/kg PO/IM/IV/IO**

**Notify Destination or Contact Medical Control**

## Symptom Severity Classification:

**Mild symptoms:**

- Flushing
- Hives
- Itching
- Erythema
- Normal blood pressure and perfusion

**Moderate symptoms:**

- Flushing
- Hives
- Itching
- Erythema
- Respiratory (wheezing, dyspnea, hypoxia)
- Gastrointestinal symptoms (nausea, vomiting, abdominal pain)
- Normal blood pressure and perfusion.

**Severe symptoms:**

- **Skin symptoms may or may not be present**
- **Possible Itching, erythema**
- **Respiratory (wheezing, dyspnea, hypoxia)**
- **Gastrointestinal symptoms (nausea, vomiting, abdominal pain)**
- **Hypotension and poor perfusion.**

**Allergic reactions may occur with only respiratory and gastrointestinal symptoms and have no rash / skin involvement.**

### Pearls

Recommended Exam: Mental Status, Skin, Heart, Lungs.
Anaphylaxis is an acute and potentially lethal multisystem allergic reaction.
Epinephrine is the drug of choice and the first drug that should be administered in acute anaphylaxis (Moderate / Severe Symptoms.) IM Epinephrine should be administered as a priority before or during attempts at IV or IO access.
To improve patient safety, Use an auto-injector to deliver IM epinephrine any time one is available.
For IV/IO epinephrine, use the 1:100,000 push-dose regimen specified in the algorithm, at the indicated provider level.
Contact Medical Control for refractory anaphylaxis.
Lateral thigh is the preferred site for IM injection of epinephrine.
Angioedema is seen in moderate to severe reactions and is swelling involving the face, lips or airway structures. This can also be seen in patients taking ACE-inhibitor blood pressure medications like Prinivil / Zestril (lisinopril)-typically end in -il.
Administer epinephrine according to the provider-level designations in the algorithm, including the B-OK EMT scope designation.
The shorter the onset from symptoms to contact, the more severe the reaction.
Early use of epinephrine has shown significantly better outcomes for patients in anaphylaxis.

# Pediatric - Behavioral Emergencies

### History

- Situational crisis
- Psychiatric illness/medications
- Injury to self or threats to others
- Medic alert tag
- Substance abuse / overdose
- Diabetes

### Signs and Symptoms

- Anxiety, agitation, confusion
- Affect change, hallucinations
- Delusional thoughts, bizarre behavior
- Combative violent
- Expression of suicidal / homicidal thoughts

### Differential

- Altered Mental Status differential
- Alcohol Intoxication
- Toxin / Substance abuse
- Medication effect / overdose
- Withdrawal syndromes
- Depression
- Bipolar (manic-depressive)
- Schizophrenia
- Anxiety disorders

**Danger to Self/Others**

Expressing s/s of paranoia, disorientation, hyper- aggression, hallucination, acts of violence, threats of violence

**NO**

Responds to verbal de-escalation, police standby, and/or family. Mild anxiety

**P**

**Midazolam 0.1-0.2 mg/kg IM/IV/IN**
***(Max of 5 mg)*** for anxiety,
***Repeat as needed***

**And/Or**

**Haldol**
**0.1 mg/kg IV/IM** for psychosis

Patients receiving antipsychotics should have an EKG obtained when possible

**YES**

**B**

Consider Restraint Physical Procedure

Cardiac Monitor / Capnography

**A**

IV Procedure

**P**

*CONSIDER:*
**Haldol 0.1 mg/kg IM/IV *may repeat x1*** for psychosis

**AND/OR**

*CONSIDER:*
**Midazolam 0.1-0.2 mg/kg IM/IV/IN**
***(Max of 5 mg)*** for anxiety,
***Repeat as needed***

*CONSIDER:*
**Ketamine 1 mg/kg IV/IO or 4 mg/KG IM.** May repeat at 0.5 mg/kg IV/IO

If Ketamine given you must be able to monitor the airway with Capnogrpahy

**Notify Destination or Contact Medical Control**

**Pearls**

- **Recommended Exam: Mental Status, Skin, Heart, Lungs, Neuro**
- **Crew / responders safety is the main priority. SEE PHYSICAL RESTRAINT PROCEDURE**
- **Any patient who is handcuffed or restrained by Law Enforcement and transported by EMS must be accompanied by law enforcement in the ambulance.**
- **Consider antipsychotics (Haloperidol) for patients with history of psychosis or extreme alcohol intoxication, or a benzodiazepine for patients with other presumed substance abuse. While benzodiazepines may be indicated for patients with alcohol intoxication, consider that alcohol and benzodiazepines together may lead to respiratory depression.**
- **All patients who receive either physical restraint OR anxiolytic/antipsychotic medication must be continuously observed by ALS personnel on scene or immediately upon their arrival.**
- **Be sure to consider all possible medical/trauma causes for behavior (hypoglycemia, overdose, substance abuse, hypoxia, head injury, infection etc.)**
- **Do not overlook the possibility of associated domestic violence or child abuse.**
- **Do not position or transport any restrained patient is such a way that could impact the patients respiratory or circulatory status.**

**Extrapyramidal reactions:**

Condition causing involuntary muscle movements or spasms typically of the face, neck and upper extremities. May present with contorted neck and trunk with difficult motor movements. Typically an adverse reaction to antipsychotic drugs like Haloperidol and may occur with your administration. When recognized give **Diphenhydramine 1 mg/kg IV/IO/IM to a max of 25 mg** in pediatrics.

### History

- Recent Illness
- Recent Surgical Procedures
- History of illness or disease
- History of diabetes
- History of pregnancy
- Drug use
- Alcohol use, abuse or abrupt cessation
-

### Signs and Symptoms

- Skin warm to touch
- Fussiness, irritability
- Lethargy
- Decreased appetite
- Increased thirst
- Headache
- Sore Throat
- Vomiting
- Diarrhea

### Differential

- Viral Infections
- Bacterial Infections
- UTI/Pyelonephritis
- Pneumonia
- Sinusitis
- Croup
- Meningitis
- Encephalopathy
- Sepsis
- Cellulitis

Fever is considered >100.4°F
Assess appearance, hydration and perfusion

B: Cardiac Monitor / Capnography
B: Blood Glucose Analysis Procedure
A: IV Procedure
P: IO Procedure

Shock, poor perfusion or altered mental status?

YES → Shock Guideline
YES → AMS Guideline

NO

FR: Comfort measures; avoid excess clothing.
Assess for infection or heat illness.
No routine active cooling for infectious fever.

Distress/Discomfort and age ≥6 months?

NO → No antipyretic below 6 months.
Contact Medical Control.
Monitor and reassess.

YES

A: **Acetaminophen**
15 mg/kg PO
Only if Acetaminophen has not been given in the last four hours.

OR

15 mg/kg IV over 15 mins

**Ibuprofen**
10 mg/kg PO
Only if ibuprofen has not been administered in the last six hours or Acetaminophen has been ineffective.

Monitor and reassess; account for all prior antipyretic products, routes and daily totals.

**Notify Destination or Contact Medical Control**

Pediatric - Medical - Fever

**Pearls**

- **Recommended Exam: Mental Status, HEENT, Heart, Lungs, Extremities, Neuro**
- **Assess possibility of occult trauma and substance abuse.**
- **Be prepared to assist ventilations and/or manage the airway**

Confirm scene safety and use of appropriate BSI procedures.
Evaluate Mechanism of injury, number of patients, and the need for additional resources.

## B.L.S.

ABCs & LOC

Focused history & Exam

### Responsive

S.A.M.P.L.E.

Focused medical assessment

Baseline vital signs

Treatment decision BLS/ALS

Treat per appropriate guideline(s)

Transport

### Unresponsive

A.L.S. PATIENT
If available

## A.L.S.

ABCs & LOC

Focused history & Exam

### Responsive

S.A.M.P.L.E.

Focused medical assessment

Baseline vital signs

Treatment decision BLS/ALS

Treat per appropriate guideline(s)

Transport

### Unresponsive

Rapid medical assessment

Baseline vital signs

S.A.M.P.L.E.

Treatment decision ALS

Treat per appropriate guideline(s)

Transport

Upon arrival, all equipment should be taken to the scene, with intent to transport.

- Monitor
- ALS bag
- Airway bag

These can easily be placed on the cot before initial patient contact

Adult medical patients with any of the following should be transported ALS:
Systolic <100, PR <60 or >120, RR <12 or >30, clinical signs of shock, need for IV fluids or medications, AMS, respiratory distress, chest discomfort, pain requiring analgesics. Patient's with weak, dizzy, nausea, vomiting should be ALS due to possible metabolic, cardiac or vascular causes.

Pediatric medical patients with any of the following should be transported ALS:
Systolic <90 if older than 10 years, <70 + (2 x age in years) if 1-9 years, <70 for 1 month to 1 year, <60 for under 1 month.

PR >200 at any age, <85 or >200 - newborn to 3 months, <100 or >190 - 3 months to 2 years, <60 or >140 - 2 to 10 years.

RR >60 at any age, >40 - infants to 1 year, >30 - 1 to 4 years, >25 - school age, >20 - adolescent.

Any AMS, Respiratory distress, Clinical signs of shock, Chest discomfort, Need for IV fluids, medications, or analgesics.

Where appropriate, Paramedics will institute the following care PRIOR to contacting Medical Control.

1. Establish an airway
2. Administer $O_2$
3. Establish an IV or IO with fluid resuscitation if necessary
4. Apply cardiac monitor, pulse oximetry, and capnography if indicated
5. Administered medications indicated
6. Obtain a temperature if indicated
7. Contact Medical Control for report, consult, or orders

In the event that contact with Medical Control **cannot** be established, EMS Personnel will treat patients under these guidelines until communications can be established.

# Pediatric - Poisoning / Overdose

## History

- Ingestion or suspected ingestion of a potentially toxic substance
- Substance ingested, route, quantity
- Time of ingestion
- Reason (suicidal, accidental, criminal)
- Available medications in home
- Past medical history, medications

## Signs and Symptoms

- Mental status changes
- Hypotension / hypertension
- Decreased respiratory rate
- Tachycardia, dysrhythmias
- Seizures
- S.L.U.D.G.E.
- D.U.M.B.B.E.L.S

## Differential

- Tricyclic antidepressants (TCAs)
- Acetaminophen (Tylenol)
- Aspirin
- Depressants
- Stimulants
- Anticholinergic
- Cardiac medications
- Solvents, Alcohols, Cleaning agents
- Insecticides (organophosphates)

Patent Airway/Adequate Respirations?

Airway Procedure

**FR** **Naloxone**
Prefilled device
(1 mL / nare) IN for BLS only

**A** **Naloxone 0.4 mg increments IV**
Naloxone is titrated to effect adequate ventilation and oxygenation

**B** Cardiac Monitor / 12 Lead ECG / Capnography

**B** Blood Glucose Analysis Procedure

**A** IV Procedure **P** IO Procedure

Altered Mental Status Guideline

Altered Mental Status?

Hypotension / Shock Guideline

Systolic BP < 90 or MAP <60?

Specific overdose or poison management depends upon the substance involved.

**Contact Medical Control or Poison Control - 1-800-222-1222 OK - 1-877-271-6998**

Consider Potential Cause. With serious Signs / Symptoms, Including Hypotension,

### Beta Blocker OD

**P** Utilize Cardiac External Pacing Procedure Early for Severe Cases

**P** **Calcium Chloride 20 mg/kg IV/IO**
Over 2 minutes
May repeat

### Calcium Channel Blocker OD

**P** Utilize Cardiac External Pacing Procedure Early for Severe Cases

**P** **Calcium Chloride 20 mg/kg IV/IO**
Over 2 minutes
May repeat

### Tricyclic Antidepressant OD

QRS ≥ 0.12 sec

**P** **Sodium Bicarbonate 0.5 mEq IV/IO**
**Ensure adequate ventilation**

### Organophosphate

**P** **Consider Atropine 0.5 mg/kg IV/IO**
*Repeat as needed*

### Cyanide

**FR** Oxygen via NRB

**P** Cyanokit
If available
70 mg/kg Max one time dose 5g
(approved to use Cyanokit provided by Fire D t t )

Consider CPAP/BiPAP for patients with Carbon Monoxide poisoning

**Notify Destination or Contact Medical Control**

Pediatric - Medical - Poisoning / Overdose

**Poison Control**
**1-800-222-1222**

**Pearls**

- Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Abdomen, Extremities, Neuro
- Overdose or Toxin patients with significant ingestions/exposures should be monitored very closely and aggressively treated as indicated. Do not hesitate to contact medical control for advice as certain critically ill overdose patients may quickly overwhelm medication supplies. For example, patients with a tricyclic overdose with a wide QRS and altered mental status should receive multiple sodium bicarbonate boluses until QRS narrowing and clinical improvement; patients with organophosphate toxicity with SLUDGE syndrome may require more atropine than is usually carried on the ambulance.
- Do not rely on patient history of ingestion, especially in suicide attempts. Make sure patient is still not carrying other medications or has any weapons.
- Bring pill bottles, contents, emesis to the emergency department.
- S.L.U.D.G.E: Salivation, Lacrimation, Urination, Defecation, GI distress, Emesis
- D.U.M.B.B.E.L.S: Diarrhea, Urination, Miosis, Bradycardia, Bronchorrhea, Emesis, Lacrimation, Salivation.
- Tricyclic: 4 major areas of toxicity: decreased mental status, dysrhythmias, seizures, hypotension, then coma and death. There may be a rapid progression from alert mental status to death.
- Acetaminophen: initially normal or nausea/vomiting. If not detected and treated, causes irreversible liver failure
- Aspirin: Early signs consist of abdominal pain and vomiting. Tachypnea and altered mental status may occur later. Renal dysfunction, liver failure, and/or cerebral edema among other things can take place later.
- Depressants: decreased HR, decreased BP, decreased temperature, decreased respirations, non-specific pupils
- Stimulants: increased HR, increased BP, increased temperature, dilated pupils, seizures
- Anticholinergic: increased HR, increased temperature, dilated pupils, mental status changes
- Cardiac Medications: dysrhythmias and mental status changes
- Solvents: nausea, coughing, vomiting, and mental status changes
- Insecticides: increased or decreased HR, increased secretions, nausea, vomiting, diarrhea, pinpoint pupils
- Consider restraints if necessary for patient's and/or personnel's protection per the Restraint Procedure.

**Consider contacting the Poison Control Center for guidance.**

# Pediatric - Seizure

### History

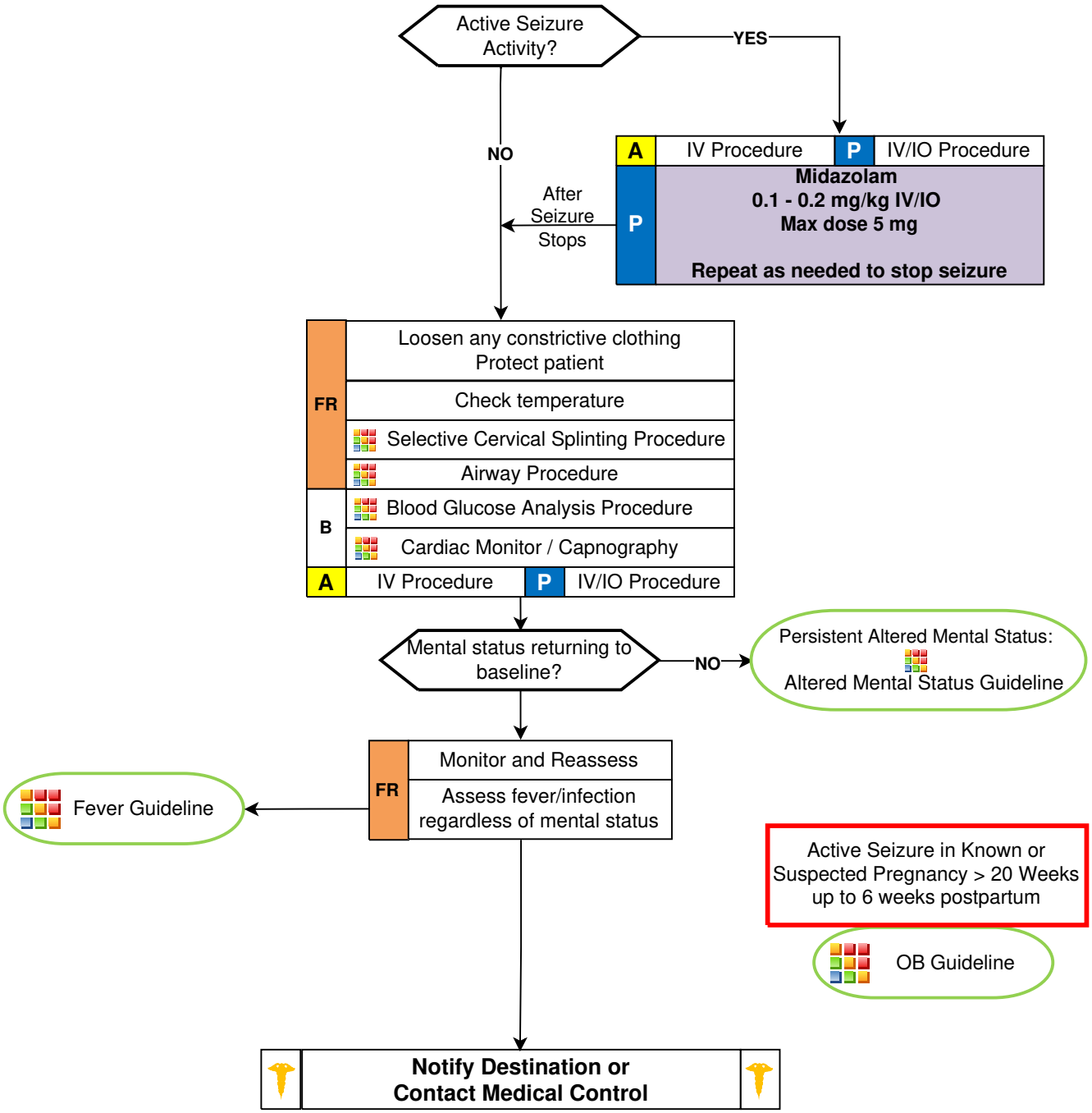
- Reported / witnessed seizure activity
- Previous seizure history
- Medical alert tag information
- Seizure medications
- History of trauma
- History of diabetes
- Time of seizure onset
- Document number of seizures
- Fever

### Signs and Symptoms

- Decreased mental status
- Sleepiness
- Incontinence
- Observed seizure activity
- Evidence of trauma
- Unconscious

### Differential

- CNS (Head) trauma
- Tumor
- Metabolic, Hepatic, or Renal failure
- Hypoxia
- Electrolyte abnormality
- Drugs, Medications
- Infection / Fever
- Stroke
- Hyperthermia
- Hypoglycemia



**Pearls**

- **Recommended Exam: Mental Status, HEENT, Heart, Lungs, Extremities, Neuro**
- **Grand mal seizures (generalized) are associated with loss of consciousness, incontinence, and tongue trauma.**
- **Focal seizures (petit mal) affect only a part of the body and are not usually associated with a loss of consciousness**
- **Be prepared for airway problems and continued seizures.**
- **Assess possibility of occult trauma and substance abuse.**
- **Be prepared to assist ventilations and/or manage the airway especially if midazolam is used.**

# Pediatric - Respiratory Emergencies

## History

- Time of onset
- Possibility of foreign body
- Past Medical History
- Medications
- Fever / Illness
- Sick Contacts
- History of trauma
- History / possibility of choking
- Ingestion / OD
- Congenital heart disease

## Signs and Symptoms

- Wheezing / Stridor / Crackles / Rales
- Nasal Flaring / Retractions / Grunting
- Increased Heart Rate
- AMS
- Anxiety
- Attentiveness / Distractability
- Cyanosis
- Poor feeding
- JVD / Frothy Sputum
- Hypotension

## Differential

- Asthma / Reactive Airway Disease
- Aspiration
- Foreign body
- Upper or lower airway infection
- Congenital heart disease
- OD / Toxic ingestion / CHF
- Anaphylaxis
- Trauma

**FR** $O_2$ via appropriate device

**B** Cardiac Monitor / Capnography

**A** IV Procedure **P** IO Procedure

### Acute Pulmonary Edema (CHF)

**B** **Albuterol 2.5 mg Nebulized**

*CONSIDER:*

**B** CPAP **P** BiPAP

**P** **Furosemide 1 mg/kg IV**

### Croup

**A** **Racemic Epinephrine 0.5 mL in 3 mL Normal Saline Nebulized**

**STEROIDS: Give one drug and one dose**

**P** *CONSIDER:*
**Methylprednisolone (Solu-Medrol) 125 mg IM/IV/IO**
**OR**
**Dexamethasone 0.2 mg/kg PO/IM/IV/IO**

**Dexamethasone**:

The IV formulation of dexamethasone can be used PO but is bitter and may need to be mixed with a flavored liquid.

### Asthma

**B** **Albuterol 2.5 mg Nebulized**
Repeat as needed

**A** Consider **Duoneb 3 mL** (ipratropium 0.5 mg - albuterol 2.5 mg) **Nebulized Give only 1 time**
**B-OK EMT Scope**

**P** Consider **Epinephrine 1:1000 0.01 mg/kg IM (Max single dose 0.3 mg)**
May repeat as needed

**P2** **Epinephrine 1:100,000 (PDP) 0.1-0.2 mcg/kg slow IV/IO; Max 10 mcg**

**P** Consider **Magnesium Sulfate 25-50 mg/kg (Max 2g)**

IV Preferred; Nebulized if no IV

IV dose must be diluted in 100 mL N.S or D5W and given over 10 minutes

**STEROIDS: Give one drug and one dose**

**P** *CONSIDER:*
**Methylprednisolone (Solu-Medrol) 125 mg IM/IV/IO**
**OR**
**Dexamethasone 0.2 mg/kg PO/IM/IV/IO**

**FR** **Monitor and Reassess**

**Notify Destination or Contact Medical Control**

Pediatric - Respiratory - Respiratory Emergencies

### Pearls

- **Recommended Exam: Mental Status, HEENT, Skin, Neck, Heart, Lungs, Abdomen, Extremities, Neuro**
- **Pulse oximetry should be monitored continuously in the patient with respiratory distress.**
- **Consider saline bolus of 20 mL/kg in pediatric patients in respiratory distress; these patients are often dehydrated.**
- Do not force a child into a position, allow them to assume position of comfort. They will protect their airway by their body position.
- The most important component of respiratory distress is airway control.
- Bronchiolitis is a viral infection typically affecting infants which results in wheezing which may not respond to beta-agonists. Consider Epinephrine if patient < 18 months and not responding to initial beta-agonist treatment.
- Croup typically affects children < 2 years of age. It is viral, possible fever, gradual onset, no drooling is noted.
- Epiglottitis typically affects children > 2 years of age. It is bacterial, with fever, rapid onset, possible stridor, patient wants to sit up to keep airway open, drooling is common. Airway manipulation may worsen the condition.

# Pediatric - Burns

**History**

- Type of exposure (heat, gas, chemical)
- Inhalation injury
- Time of Injury
- Past medical history and Medications
- Other trauma
- Loss of Consciousness
- Tetanus/Immunization status

**Signs and Symptoms**

- Burns, pain, swelling
- Dizziness
- Loss of consciousness
- Hypotension/shock
- Airway compromise/distress could be indicated by hoarseness/wheezing

**Differential**

- Superficial red - painful
- Partial Thickness - blistering
- Full Thickness - painless/charred or leathery skin
- Thermal injury
- Chemical - Electrical injury
- Radiation injury
- Blast injury

Assess Burn / Concomitant Injury Severity

## Minor Burn

**Superficial and/or <10% TBSA Partial Thickness**
No inhalation injury, Not Intubated, Normotensive
GCS 14 or Greater

- FR: Remove Rings, Bracelets / Constricting Items
- FR: Dry Clean Sheet or Dressings
- Adult Airway Procedure
- A: IV Procedure
- A: **Plasma-Lyte** ***TKO***
- Pain Management Procedure

## Serious Burn

**10-20% TBSA Partial or any Full Thickness larger than 3cm Burn**
Suspected inhalation injury or requiring intubation for airway stabilization
Hypotension or GCS 13 or Less
*(Transport to a Burn Center)*

## Criticial Burn

**>20% TBSA Partial/Full Thickness Burn**
Burns with Multiple Trauma
Burns with definitive airway compromise
*(Transport to a Burn Center)*

- FR: Remove Rings, Bracelets / Constricting Items
- FR: Dry Clean Sheet or Dressings
- Adult Airway Procedure
- A: IV Procedure
- P: IO Procedure
- P: IO Procedure
- A: **Plasma-Lyte**
  **≤ 5 years - 125 mL/hr**
  **6 - 13 years - 250 mL/hr**
  **≥ 14 years - 500 mL/hr**
- Pain Management Procedure

Cyanide Exposure → Poisoning / Overdose Guideline

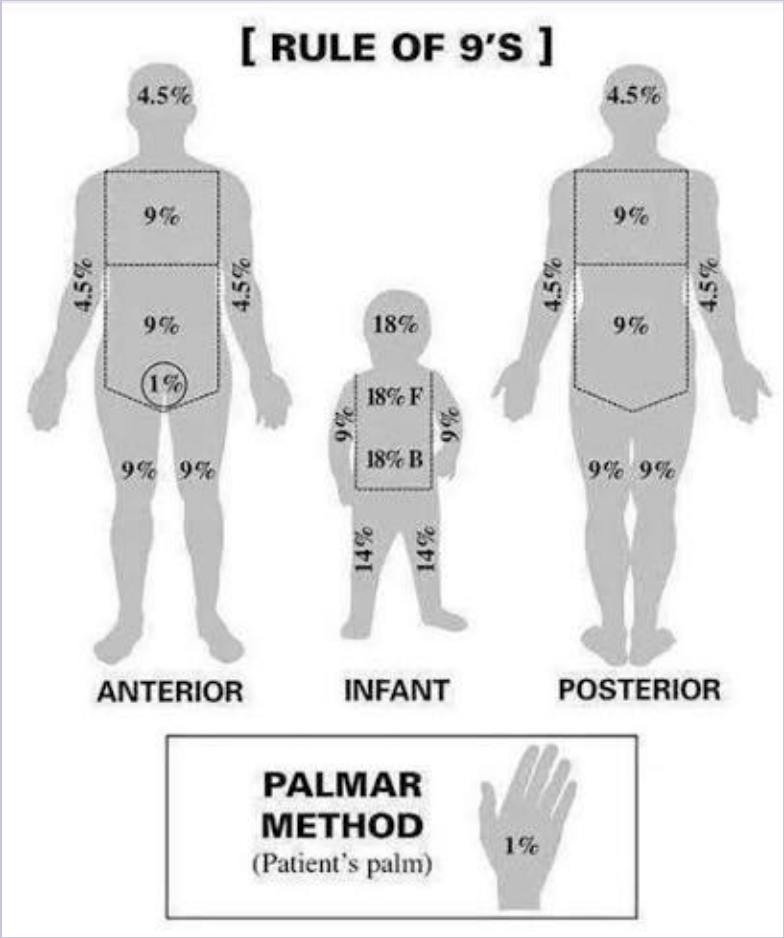
- B: Transport to Facility of Choice; Consider Burn Center for burns on the face, hands, perineum, or feet as well as any electrical or lightning burn
- B: **Rapid Transport** to Burn Center

Consider CPAP/BiPAP for patients with Carbon Monoxide poisoning

if pt does not tolerate CPAP/BiPAP can switch to NRB

**Notify Destination or Contact Medical Control**
Utilize Trauma Triage Guideline

Pediatric - Trauma - Burns




## Rule of Nines

- Seldom do you find a complete isolated body part that is injured as described in the Rule of Nines.
- More likely, it will be portions of one area, portions of another, and an approximation will be needed.
- For the purpose of determining the extent of serious injury, differentiate the area with minimal or superficial burn from those of partial or full thickness burns.
  For the purpose of determining Total Body Surface Area (TBSA) of burn, include only Partial and Full Thickness burns. Report the observation of other superficial burns but do not include those burns in your TBSA estimate.

Estimate spotty areas of burn by using the size of the patient's palm as 1 %

## Pearls

**Recommended Exam: Mental Status, HEENT, Neck, Heart, Lungs, Abdomen, Extremities, Back, and Neuro**

**Green, Yellow and Red In burn severity do not apply to the Start / JumpStart Triage System.**

**Critical or Serious Burns:**

***> 20% total body surface area (TBSA) partial and full thickness burns, or***
***circumferential burns of extremities, or***
***electrical or lightning injuries, or***
***suspicion of abuse or neglect, or***
***inhalation injury, or***
***chemical burns, or***
***burns of face, hands, perineum, or feet***

- Require direct transport to a Burn Center. Local facility should be utilized only if critical interventions such as airway management are not possible in the field.
- Burn patients are often trauma patients, evaluate for multisystem trauma.
- Assure whatever has caused the burn is no longer contacting the injury. (Stop the burning process!)
- Early intubation is required when the patient experiences significant inhalation injuries. If the patient requires airway management that cannot be achieved in the field, go to the nearest emergency department for stabilization prior to transfer to the Burn Center.
- Circumferential burns to extremities are dangerous due to potential vascular compromise secondary to soft tissue swelling.
- Burn patients are prone to hypothermia - never apply ice or cool the burn, must maintain normal body temperature. Evaluate the possibility of child abuse with children and burn injuries.

# Pediatric - Crush Syndrome

**History**

- Entrapped and crushed under heavy load > 30 minutes
- Extremity / body crushed
- Building collapse, trench collapse, industrial accident, pinned under heavy equipment

**Signs and Symptoms**

- Hypotension
- Hypothermia
- Abnormal ECG findings
- Pain
- Anxiety

**Differential**

- Entrapment without crush syndrome
- Entrapment without significant crush
- Altered mental status

**B** Cardiac Monitor / 12 Lead / Capnography

**A** IV Procedure **P** IO Procedure

**A** **Normal Saline or Plasmalyte Titrate to B/P >90 Systolic or MAP of >60**

Pain Management Procedure

Consider IV/IO x 2 in trauma patients

Peaked T Waves
QRS ≥ 0.12 seconds
QT ≥ 0.46 seconds
Loss of P wave

**P** **Sodium Bicarbonate 1 mEq/kg IV / IO**

Consider
Age Appropriate Trauma Guideline
Hypothermia / Hyperthermia Guideline(s)

Abnormal ECG /
Hemodynamically unstable

**P** **Immediately Prior to Extrication**
**Sodium Bicarbonate 1 mEq/kg IV / IO**
**AND**
**Normal Saline / Plasmalyte Wide Open**

**Hypovolemic shock (B/P < 90 or MAP <60, HR < 115, pallor, diaphoresis)**

**P** *Consider:*
**Tranexamic Acid (TXA) 15 mg/kg Max 2g**

**A** Monitor and Reassess
Monitor for fluid overload

Asystole / PEA
VF / VT

**P** **Sodium Bicarbonate 1 mEq/kg IV / IO**

Exit to
Age Appropriate Cardiac Arrest / Pulseless Arrest / Arrhythmia Guideline(s)

**Notify Destination or Contact Medical Control**
Utilize Trauma Triage Guideline

Pediatric - Trauma - Crush Syndrome

Pearls
Recommended exam: Mental status, musculoskeletal, and neurologic assessment.
Scene safety is essential. Request appropriate rescue resources. Crush injury releases muscle-cell contents
and electrolytes; systemic effects may develop over 1-4 hours.
Obtain IV/IO access and give normal saline or Plasma-Lyte, titrated to SBP > 90 or MAP > 60, as directed by
the algorithm. Immediately before extrication, give sodium bicarbonate 1 mEq/kg IV/IO and normal saline or
Plasma-Lyte wide open. Monitor and reassess for fluid overload.
Use the algorithm for additional sodium bicarbonate, TXA, rhythm management, and pain management.
Pediatric maintenance fluid reference: 4 mL/kg/hr for the first 10 kg, 2 mL/kg/hr for the next 10 kg, and 1 mL/kg/hr for each additional kilogram. Example: 28 kg = 40 + 20 + 8 = 68 mL/hr. This maintenance reference
does not replace the algorithm's resuscitation orders.
Shock is common. Bradycardia and hypotension may be late findings; a normal blood pressure does not exclude shock. Maintain the airway and keep the patient warm. Monitor closely for hyperkalemia and dysrhythmias.

# Pediatric - Drowning

### History

- Submersion in water regardless of depth
- Possible history of trauma ie: diving board
- Duration of submersion
- Temperature of water or possibility of hypothermia
- Degree of water contamination

### Signs and Symptoms

- Unresponsive
- Mental status changes
- Decreased or absent vital signs
- Vomiting
- Coughing, Wheezing, Rales, Rhonchi, Stridor
- Apnea

### Differential

- Trauma
- Pre-existing medical problem
- Pressure injury (diving)
- Barotrauma
- Decompression sickness
- Post-immersion syndrome

FR — Spinal Immobilization Procedure

**FR**

**Remove from water**
**Open and maintain airway**
**Dry and warm patient**
**Prepare to suction patient's airway**

Mental Status Exam

**Awake and Alert**

**FR** Encourage transport and evaluation even if asymptomatic
*Asymptomatic near-drowning victims should be observed 4 to 6 hours for development of symptoms*

**B** Cardiac Monitor / Capnography

**A** IV Procedure **P** IO Procedure

Dyspnea / Wheezing → Age Appropriate Respiratory Distress Guideline(s)

**Awake but with AMS**

Age Appropriate Airway Procedure

Age Appropriate Altered Mental Status Guideline

**Unresponsive**

Pulse — YES → Age Appropriate Airway Procedure

Pulse — NO → Exit to Age Appropriate Cardiac / Pulseless Arrest and / or Arrhythmia Guideline(s)

Core temp ≥ 86ºF
Resuscitate per normal guidelines

Core temp ≤ 85ºF, only one defibrillation and 1 mg epinephrine max dose

**Notify Destination or Contact Medical Control**

**Pediatric - Trauma - Drowning**

Thermometer must be in “Monitor” mode. After you remove the probe, while the thermometer is doing its self check, push and hold the “Pulse Timer” button until “Monitor Mode” appears.

**Pearls**

**Recommended Exam: Trauma Survey, Head, Neck, Chest, Abdomen, Pelvis, Back, Extremities, Skin, Neuro**
**Ensure scene safety. Drowning is a leading cause of death among would-be rescuers.**
**Allow appropriately trained and certified rescuers to remove victims from areas of danger.**
**With cold water no time limit -- resuscitate all. These patients have an increased chance of survival.**
**Rapid transport to closest facility for continued rewarming.**
**Consider CPAP for those with respiratory distress after emersion.**
**Multiple attempts at defibrillation and ACLS medications are not effective in severe hypothermic states - focus should be on high quality CPR and rewarming.**
Have a high index of suspicion for possible spinal injuries.
Hypothermia is often associated with drowning and submersion injuries.
**All victims should be transported for evaluation due to potential for worsening over the next several hours.**
With pressure injuries (decompression / barotrauma), consider transport to, or availability of, a hyperbaric chamber.
Post-drowning patients who are awake and cooperative, but present with respiratory distress, may benefit from CPAP.
**Cold water or water exposure pulmonary edema can develop immediately, or be delayed, with fast or slow onset (monitor respiratory status closely following water emersion).**
Monitor patient with capnography.

# Pediatric - Eye Injury

**History**

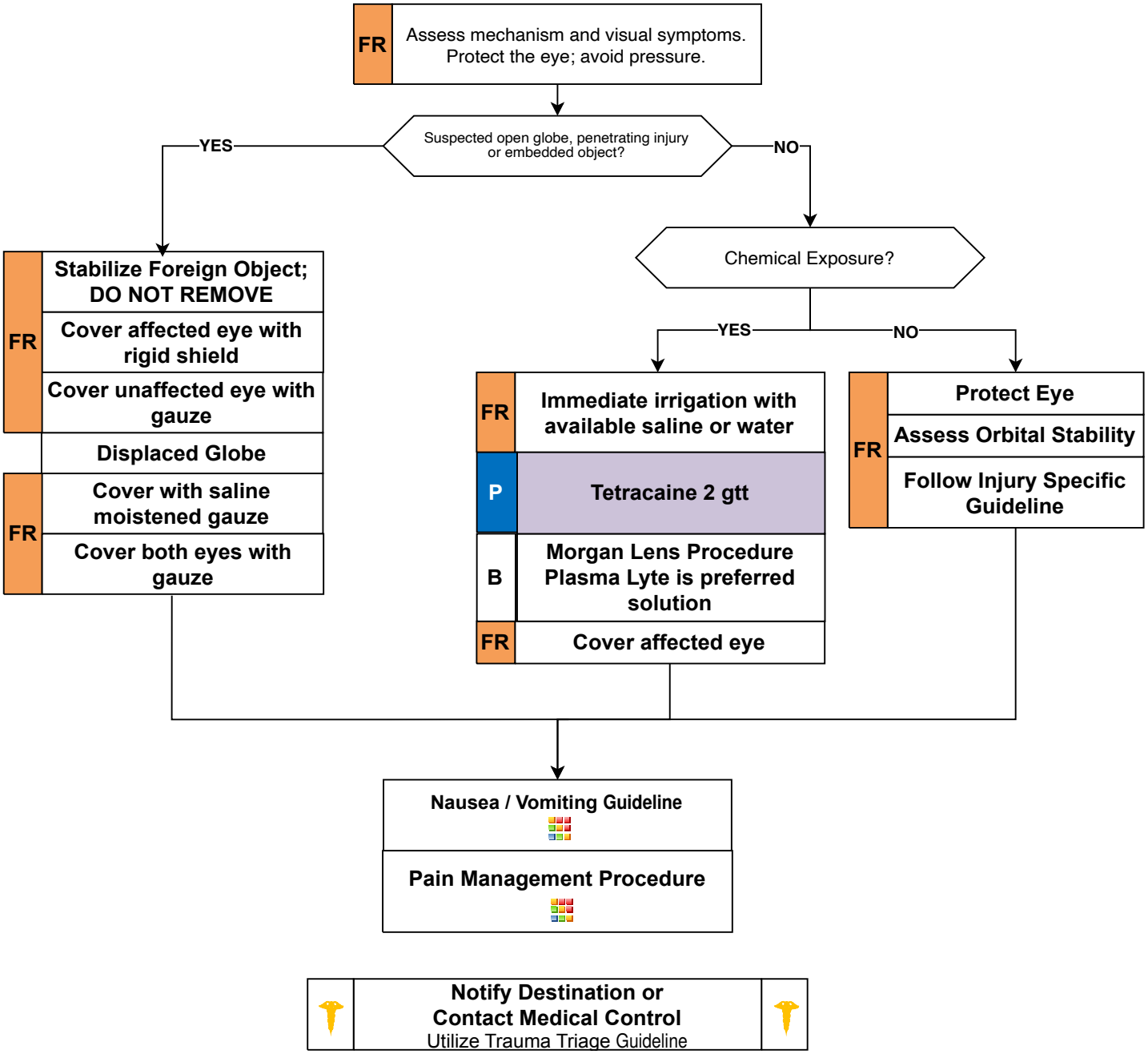
- Time of injury/onset
- Blunt/penetrating/chemical
- Open vs. closed injury
- Involved chemicals/MSDS
- Wound Contamination
- Medical History
- Tetanus status
- Normal visual acuity
- Medications

**Signs and Symptoms**

- Pain, swelling, blood
- Deformity, contusion
- Visual deficit
- Leaking aqueous/vitreous humor
- Upwardly fixed eye
- "Shooting" or "streaking" light
- Visible contaminants
- Rust ring
- Lacrimation

**Differential**

- Abrasion/Laceration/Hyphema
- Globe rupture
- Retinal nerve damage/detachment
- Chemical/thermal burn/agent of terror
- Orbital fracture
- Orbital compartment symdrome
- Neurological event
- Acute glaucoma
- Retinal artery occlusion



## Clinical Notes

Assess the mechanism, visual symptoms, injury pattern and associated trauma. Avoid pressure on the globe.

Chemical exposure without suspected open-globe injury: begin irrigation immediately. Do not delay irrigation while obtaining or placing a Morgan lens. Follow the Eye Irrigation Procedure.

Penetrating injury, suspected open globe or embedded object: use a rigid shield without pressure. Do not place gauze beneath the shield. Do not irrigate or use a Morgan lens. Stabilize an embedded object without removing it.

Displaced globe: do not attempt repositioning. Protect with a large rigid shield or cup that does not contact or press on the eye. Expedite transport.

Treat pain and nausea as indicated. Reassess and communicate findings to the receiving facility.

# Pediatric - General Trauma Assessment

Confirm scene safety and use of appropriate BSI procedures.
Evaluate Mechanism of injury, number of patients, and the need for additional resources.

## B.L.S.

ABCs & LOC

Focused history & Exam

| No significant M.O.I. | Significant M.O.I. |
|---|---|
| Focused trauma assessment | A.L.S. PATIENT If available |
| Baseline vital signs | |
| S.A.M.P.L.E. | |
| Transport decision | |
| Detailed assessment | |
| Treat per appropriate guideline(s) | |

## A.L.S.

ABCs & LOC

Focused history & Exam

| No significant M.O.I. | Significant M.O.I. |
|---|---|
| Focused trauma assessment | Rapid trauma assessment |
| Baseline vital signs | Baseline vital signs |
| S.A.M.P.L.E. | S.A.M.P.L.E. |
| Transport decision | Transport decision |
| Detailed assessment | Detailed assessment |
| Treat per appropriate guideline(s) | Treat per appropriate guideline(s) |

Upon arrival, all equipment should be taken to the patient, with intent to transport.

- Monitor
- ALS bag
- Airway bag

These can easily be placed on the cot before initial patient contact

**When called to the scene of a trauma patient, consider your proximity to the nearest trauma facility. When 10 minutes or less from a trauma facility consider rapid transport rather than time consuming interventions at the scene. If transport to the nearest facility is in the patient's best interest, then consider loading the patient and treating in transit.**

# Pediatric - General Trauma Assessment

**Measure vital signs and level of consciousness**
GCS < 14 or Systolic BP < 90 mmHg or Respiratory rate < 10 or > 29 BPM (<20 in infant)

NO

**Assess anatomy of injury**
- All Penetrating Injuries to head, neck, torso, and extremities proximal to the elbow and knee.
- Flail chest
- Two or more proximal long-bone fractures
- Crushed de-gloved or mangled extremity
- Amputation proximal to the wrist or ankle
- Pelvic fractures
- Open or depressed skull fractures
- Paralysis

YES → **Take to trauma center with the highest level of care in the system.**

NO

**Assess mechanism of injury and evidence of high energy impact**

**Falls**
- Adults >20 ft.
- Children > 10 ft.

**High Risk Auto Crash**
- Intrusion: > 12 in occupant site; >18 in. any site
- Ejection from automobile (Partial or complete)
- Death in same passenger compartment
- Vehicle telemetry data consistent with high risk of injury

**Auto v. pedestrian/bicyclist thrown, run over, or significant (>20 mph) impact**
**Motorcycle crash > 20 mph**

YES → **Transport to closes appropriate trauma center**. Depending on the trauma system this need not be the highest level trauma center.

NO

**Assess special patient or system considerations**

**Age**
- Older adults: Risk of injury death increase after age 55
- Children: Should be triaged preferentially to pediatric capable trauma centers

**Anticoagulation and bleeding disorders**

**Burns**
- Without other trauma mechanism: triage to burn center
- With trauma mechanism: triage to trauma center

**Time sensitive extremity injury**
**End-stage renal disease requiring dialysis**
**Pregnancy > 20 weeks**

YES → **Contact medical control and consider transport to a trauma center or a specific resource hospital.**

As recommended by:
CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

**Pediatric - Trauma - General Trauma Assessment**

# Pediatric - Head / Chest / Maxillofacial Trauma

**History**

- Time and mechanism of injury
- Damage to structure or vehicle
- Location in structure or vehicle
- Others injured or dead
- Speed and details of MVC
- Restraints / protective equipment
- Past medical history
- Medications

**Signs and Symptoms**

- Pain, swelling
- Altered sensation / motor function
- Deformity, lesions, bleeding
- Altered mental status or unconscious
- Hypotension or shock
- Vomiting
- Arrest

**Differential**

- Brain injury
- Spine fracture / Cord injury
- HEENT (Airway obstruction)
- Chest: Tension pneumothorax
  Flail chest
  Pericardial tamponade
  Open chest wound
  Hemothorax

| | |
|---|---|
| FR | **Control External Hemorrhage** |
| | Pediatric Airway Procedure |
| | **Cervical Splinting Procedure** |
| B | Cardiac Monitor / Capnography |
| A | IV Procedure / P: IO Procedure |
| A | Normal Saline titrated to BP >90 Systolic or MAP of >60 |

Consider Rapid Transport / Limit Scene Time

**Chest Trauma**

| | |
|---|---|
| FR | Chest seal/occlusive dressing for open wounds |
| P2 | Consider Needle Thoracostomy Procedure |
| P3 | Consider Finger Thoracostomy Procedure |

**Maxillofacial Trauma**

| | |
|---|---|
| FR | Consider packing dental wound trauma with WoundClot |

**Head Trauma**

Consider H-BOMBS

**Hypovolemic shock (B/P < 90 or MAP <60, HR > 115, pallor, diaphoresis)**

YES

| | |
|---|---|
| P | *Consider:* **Tranexamic Acid (TXA) 15 mg/kg Max 2g IV/IO** |

NO

Pediatric Pain Management Procedure

Pediatric Nausea / Vomiting Procedure

**Notify Destination or Contact Medical Control**
Utilize Trauma Triage Guideline

Pediatric - Trauma - Head / Chest / Maxillofacial Trauma

## Head / Chest Checklist

Does the head injury require cervical splinting.

Consider 30° head elevation with no other spine trauma

Control for H-BOMBS; hypotension, hypocapnia, hypoxia and hypercapnia in head injury.

Frequent re-evaluation in trauma patients.

Occlusive dressings on penetrating chest, upper abdominal, axilla, and supraclavicular injuries.

Consider permissive hypotension in trauma other than head injuries.

**Pearls**

Recommended Exam: Mental Status, Skin, HEENT, Heart, Lung, Abdomen, Extremities, Back, Neuro
Transport Destination is chosen based on the EMS System Trauma Plan with EMS pre-arrival notification.
Scene times should not be delayed for procedures.
These should be performed en route when possible.
Rapid transport of the unstable trauma patient to the appropriate facility IS the goal.
For hemorrhage control, consider direct pressure, bandaging, WoundClot, wound packing and tourniquet application.
Bag valve mask is an acceptable method of managing the airway if pulse oximetry can be maintained ≥ 90%
Mechanism is the most reliable indicator of serious injury.
Remember occlusive dressings are an important part of initial chest trauma treatment.
In prolonged extrications or serious trauma, consider air transportation for reduced transport times.
Do not overlook the possibility of associated domestic violence or abuse.

# Pediatric - Hyperthermia

## History

- Age, very young and old
- Exposure to increased temperatures and/or humidity
- Past medical history / Medications
- Time and duration of exposure
- Poor PO intake, extreme exertion
- Fatigue and/or muscle cramping

## Signs and Symptoms

- Altered mental status / coma
- Hot, dry or sweaty skin
- Hypotension or shock
- Seizures
- Nausea

## Differential

- Fever (Infection)
- Dehydration
- Medications
- Hyperthyroidism (Storm)
- Delirium tremens (DTs)
- Heat cramps, exhaustion, stroke
- CNS lesions or tumors

| | | | |
|---|---|---|---|
| FR | Remove from heat source to cool environment | FR | Temperature Measurement Procedure |
| | Passive cooling measures | B | Blood Glucose Analysis Procedure |
| | Remove tight clothing | | |

Assess Symptom Severity

**HEAT CRAMPS**
Normal to elevated body temperature
Warm, moist skin
Weakness, Muscle cramping

| | |
|---|---|
| FR | PO Fluids as tolerated |
| | Monitor and Reassess |

**HEAT EXHAUSTION**
Elevated body temperature
Cool, moist skin
Weakness, Tachypnea

| | |
|---|---|
| FR | Active cooling measures. Consider TACO Procedure |

**HEAT STROKE**
High body temperature, usually > 104°F
Hot, dry skin
Hypotension, Anxious, AMS / Coma

| | |
|---|---|
| FR | **RAPID cooling in the field until below 102º** TACO Procedure |
| | Airway Procedure |
| | Altered Mental Status Guideline |

| | | | |
|---|---|---|---|
| B | Cardiac Monitor / 12 Lead ECG / Capnography | | |
| A | IV Procedure | P | IO Procedure |
| A | **COLD Normal Saline Bolus**<br>**Bolus 20 mL/kg IV / IO**<br>Titrated to BP >90 Systolic or MAP of >60<br>**Maximum 60 mL/kg** | | |

Seizure Activity
Actively Cool Patient
Go to
Seizure Guideline

Hypotension / Poor perfusion

Hypotension / Shock / Trauma Guideline(s)

| | |
|---|---|
| B | Monitor and Reassess |

**Notify Destination or Contact Medical Control**

Pediatric - Trauma - Hyperthermia

## PASSIVE COOLING

- Remove Clothing
- Move to shade or Air Conditioned Ambulance
- Moisten patient's skin with normal saline or water
- Fan patient

## ACTIVE COOLING

- Ice packs to groin and axilla
- Cold IV fluids

**Pearls**

- **Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Neuro**
- **Temperatures should be evaluated by rectal probe for most accurate reading in the prehospital setting.**
- **Extremes of age are more prone to heat emergencies (i.e. young and old). Obtain and document patient temperature if able.**
- **Predisposed by use of: tricyclic antidepressants, phenothiazines, anticholinergic medications, and alcohol.**
- **Cocaine, Amphetamines, and Salicylates may elevate body temperatures.**
- **Intense shivering may occur as patient is cooled.**
- **Heat Cramps consists of benign muscle cramping 2° to dehydration and is not associated with an elevated temperature.**
- **Heat Exhaustion consists of dehydration, salt depletion, dizziness, fever, mental status changes, headache, cramping, nausea and vomiting. Vital signs usually consist of tachycardia, hypotension, and an elevated temperature.**
- **Heat Stroke consists of dehydration, tachycardia, hypotension, temperature >104° F (40° C), and altered mental status.**
- **If ice bath/tank is unavailable at scene consider TACO procedure to actively cool patient to 102$^{o}$F before initiating transport.**

# Pediatric - Hypothermia

### History

- Age, very young and old
- 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 and Symptoms

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

### Differential

- Sepsis
- Environmental exposure
- Hypoglycemia
- CNS dysfunction
- Stroke
- Head injury
- Spinal cord injury

| | | | |
|---|---|---|---|
| FR | Remove wet clothing<br>Dry / Warm Patient | FR | Temperature Measurement Procedure |
| | Passive warming measures | B | Blood Glucose Analysis Procedure |

Hypothermia / Frost Bite

**Localized Cold Injury**

| | |
|---|---|
| FR | Monitor and Reassess |
| | General Wound Care |
| | DO NOT Rub Skin to warm |
| | DO NOT allow refreezing |

**Systemic Hypothermia**

**Unresponsive?**

Pulse

YES

Respiratory Distress?

- Age Appropriate Airway Procedure
- Age Appropriate Altered Mental Status Guideline

| | |
|---|---|
| B | Active warming measures |
| | Cardiac Monitor / 12 Lead ECG / Capnography |
| A | IV Procedure / P IO Procedure |
| A | **WARM Normal Saline Fluid Bolus**<br>**Bolus 20 mL/kg IV / IO**<br>Repeat to effect Age appropriate<br>SBP ≥ 70 + 2 x Age<br>**Maximum 60 mL/kg** |
| | Pediatric Hypotension |

| | |
|---|---|
| FR | Monitor, Reassess and Passive Rewarming |

NO

| | |
|---|---|
| P | Core temperature ≤ 86 F:<br>ONE shock if shockable;<br>ONE epinephrine dose (1 mg max).<br>No further shocks or epinephrine until core temperature reaches 86 F.<br><br>≥ 85 F:<br>Usual arrest guideline for the shockable or nonshockable rhythm. |

**Notify Destination or Contact Medical Control**

**Pearls**

**Recommended Exam: Mental Status, Heart, Lungs, Abdomen, Extremities, Neuro**

**Rapid transport, facility rewarming is typically far superior to field rewarming**

**Hypothermia categories:**

Mild 90 - 95 degrees F ( 32 - 35 degrees C)
Moderate 82 - 90 degrees F ( 28 - 32 degrees C)
Severe < 82 degrees F ( < 28 degrees C)

**Mechanisms of hypothermia:**

Radiation: Heat loss to surrounding objects via infrared energy ( 60 % of most heat loss.)
Convection: Direct transfer of heat to the surrounding air.
Conduction: Direct transfer of heat to direct contact with cooler objects (important in submersion.)
Evaporation: Vaporization of water from sweat or other body water losses.

- Contributing factors of hypothermia: Extremes of age, malnutrition, alcohol or other drug use.
  If the temperature is unable to be measured, treat the patient based on the suspected temperature.

**CPR:**

**Severe hypothermia may cause cardiac instability and rough handling of the patient theoretically can cause ventricular fibrillation. This has not been demonstrated or confirmed by current evidence. Intubation and CPR techniques should not be withheld due to this concern.**
**Intubation can cause ventricular fibrillation so it should be done gently by most experienced person.**
**Below 86 degrees F (30 degrees C) anti-arrhythmics may not work and if given should be given at reduced intervals due to slower absorption. Contact medical control for direction. Epinephrine can be administered one time to max dose of 1 mg. Below 86 degrees F (30 degrees) pacing should NOT be done**
**Below 86 degrees with PEA warming should be considered before CPR.**
**If the patient is below 86 degrees F (30 degree C) then defibrillate 1 time if defibrillation is required.**
**Hypothermia may produce severe bradycardia so take extra care to palpate a pulse.**

Hot packs can be activated and placed in the armpit and groin area if available. Care should be taken not to place the packs directly against the patient's skin.

# Pediatric - Torso / Extremity / Spinal Trauma

### History

- Time and mechanism of injury
- Damage to structure or vehicle
- Location in structure or vehicle
- Others injured or dead
- Speed and details of MVC
- Restraints / protective equipment
- Past medical history
- Medications

### Signs and Symptoms

- Pain, swelling
- Altered sensation / motor function
- Deformity, lesions, bleeding
- Altered mental status or unconscious
- Hypotension or shock
- Arrest

### Differential

- Intra-abdominal bleeding
- Pelvis / Femur fracture
- Spine fracture / Cord injury
- Extremity fracture / Dislocation
- Hypothermia

Control External Hemorrhage

Airway Procedure

Selective Cervical Splinting Procedure

**B** Cardiac Monitor

**A** IV Procedure | **P** IO Procedure

Consider isotonic crystalloid titrated to BP >90 Systolic or MAP of >60

**Consider Rapid Transport / Scene Time**

Abdominal Trauma

Extremity Trauma

Spinal Trauma

Cover eviscerations with moist sterile dressings

**FR** Splint Suspected Fractures

**P** If open fracture
Consider **Cefazolin IV**
**50 mg/kg up to 2g**
Mix in 100 mL D5W/NS and run in over 10 min

**Hypovolemic shock (B/P < 90 or MAP of <60, HR > 115, pallor, diaphoresis)**

YES → **P** Consider Tranexamic Acid (TXA)
15 mg/kg IV/IO 2g max

NO

Pain Management Procedure

Nausea / Vomiting Procedure

**Notify Destination or Contact Medical Control**
Utilize Trauma Triage Guideline

**Pearls**

Recommended Exam: Mental Status, Skin, HEENT, Heart, Lung, Abdomen, Extremities, Back, Neuro
Transport Destination is chosen based on the EMS System Trauma Plan with EMS pre-arrival notification.
Scene times should not be delayed for procedures.
These should be performed en route when possible.
Rapid transport of the unstable trauma patient to the appropriate facility IS the goal.
For hemorrhage control, consider direct pressure, bandaging, WoundClot, wound packing and tourniquet application.
Routine use of pelvic binders should be avoided.
If one is placed PTA by a 1 st response agency or E.R., it may be left in place.
Bag valve mask is an acceptable method of managing the airway if pulse oximetry can be maintained ≥ 90%
Mechanism is the most reliable indicator of serious injury.
In prolonged extrications or serious trauma, consider air transportation for transport times.
Do not overlook the possibility of associated domestic violence or abuse.
Early antibiotic administration is beneficial in open fractures.
Consider antibiotics especially in cases in which transport may be delayed (i.e. entrapment, crush, MCI, collapse scenarios), but only after providing other emergency care including hemorrhage control.

# Pediatric - Traumatic Cardiac Arrest

**History**

- Events leading to arrest
- Estimated downtime
- Past medical history
- Medications
- Existence of terminal illness

**Signs and Symptoms**

- Unresponsive
- Apneic
- Pulseless

**Differential**

- Medical vs. Trauma
- VF vs. Pulseless VT
- Asystole
- PEA
- Primary Cardiac event vs. Respiratory arrest or Drug overdose

**Criteria for Death / No Resuscitation Review DNR / TPOP Form**

YES → Exit to Termination of Resuscitation Policy

**FR** — ***Begin Continuous CPR Compressions (Consider Mechanical Compression Device if available) Change Compressors every 2 minutes (Limit pauses to AED analyze or defibrillation)***

Place multi-function pads on patient without interrupting compressions

**FR** AED | **B** Cardiac Monitor

Non-Shockable Rhythm | Shockable Rhythm

**Ventilate with BVM ONLY every 12 compressions without stopping compressions.**

- Use one handed three finger technique to achieve chest rise
- PEEP set to 5 $cmH_2O$
- Attach capnography if available
- Intubate only if i-gel or supraglottic method fails
- IO/IV Access only after below priorities:

1. Continuous Compressions
2. AED or Monitor Placement / Analyze / Defibrillation
3. Ventilation (i-gel preferred with $O_2$ and BVM)

**FR** Continue CPR Changing compressors every 2 min

**FR** Shock Delivery (Manual Delivery by Paramedic only)

Immediately continue CPR Changing compressors every 2 min

**B** Place i-gel with $O_2$ tubing to port at 8 L/min and attach capnography / BVM

**P2** Consider Bilateral Needle Thoracostomy Procedure

**P3** Consider Bilateral Finger Thoracostomy Procedure

**FR** Prefilled Device IN
Or
**A** Naloxone 0.1 mg/kg IV/IO
After priority medications

Follow age appropriate Asystole / PEA Airway Guideline(s) ***as indicated***

Follow age appropriate VF / VT Tachycardia Airway Guideline(s) ***as indicated***

**AT ANY TIME**

**Return of Spontaneous Circulation**

**Go to Post Resuscitation Guideline**

**Pediatric - Trauma - Traumatic Cardiac Arrest**




Whenever feasible, transport the parent, immediate family member, or medical Durable Power of Attorney (DPOA) with the patient.

• The pathophysiology of traumatic cardiac arrest differs from medical cardiac arrest and is primarily due to one of or a combination of factors: hypovolemia, obstruction of blood flow, and hypoxia.

• The initial cardiac rhythm for most patients in survivable traumatic cardiac arrest is pulseless electrical activity (PEA). Traumatic cardiac arrest PEA is most often a very low output state due to hypovolemia

• Pediatric traumatic cardiac arrest patients undergoing resuscitation should be transported as quickly as possible to The closest appropriate hospital

Treat the reversible causes shown in the algorithm, including tension pneumothorax. Follow its rhythm-specific branches for medications and ongoing resuscitation.

## Pearls

Traumatic Arrest has a low likelihood of survival.
In most cases transport should be considered with ROSC after addressing these immediate life threats: Life threatening hemorrhage Airway obstruction Tension pneumo/hemothorax Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated.
Consider early Humeral and/or femoral IO placement if available and / or difficult IV access anticipated.
Tibial IO placement has little benefit even with high quality chest compressions.
DO NOT HYPERVENTILATE: If advanced airway is in place ventilate 8-10 breaths per minute (ONLY once per every 12 compressions) with continuous, uninterrupted compressions.
Do not interrupt compressions to place endotracheal tube.
Consider i-gel first to limit interruptions.
Do not interrupt compressions for AED / Monitor pad placement or airway placement.
Resuscitation is based on proper planning and organized execution.
Procedures require space and patient access.
Make room to work.
Utilize Team Focused Approach assigning responders to predetermined tasks and use the Cardiac Arrest Checklist and Code Commander when personnel are available to do so.
Reassess, document advanced airway placement and EtCO 2 frequently, after every move, and at transfer of care.
Naloxone: use a prefilled IN device or 0.1 mg/kg IV/IO after priority medications, as directed by the algorithm.

# Accessing Central Lines

P Paramedic P

## Indications for Accessing Central Lines:

- When a patient has a central line (PICC, Hickman, Groshong, Broviac, IJ) excluding Portacaths, and peripheral IV's cannot be established in a timely fashion or not at all, to prevent EZ IO insertion in a awake critically ill patient that needs emergent medication or fluids.
- These are all external lines with access outside the skin barrier. Any access below the skin barrier are not part of this procedure and should NOT be accessed by EMS without Medical Control direction/involvement.
- **Dialysis ports, which have blue and red ports (May be labeled TRIALYSIS). These are rarely accessed in the field, the blue side may be accessed for cardiac arrest when other options have failed (IV, IO). In all other emergent, life sustaining situations, dialysis ports may only be accessed after medical control contact and approval.**

## Contraindications:

- When a peripheral IV can be established
- Inability to easily aspirate 10 cc of fluid from central line.

## Procedure:

- Use clean gloves with every access attempt
- Clean port carefully with Chlorhexidine
- **ALWAYS** aspirate and waste at least 10 cc of fluid from device.
  - If difficulty withdrawing fluid use pulse or push pause method.
- After any medication administration flush with 10 cc of N.S.

## Certification Requirements:

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Adult Pain Management

## Procedure - Paramedic (P)

Indication: pain due to injury or illness. Contraindication: known allergy to the selected medication.

Before each repeat dose, reassess pain, sedation, respiratory status and blood pressure. Account for medications already given.

Fentanyl: 25-100 mcg IV/IO/IM/IN every 5-10 minutes as needed. Hydromorphone: 0.5-1 mg IV/IO/IM every 10-15 minutes as needed. The confirmed local order sets no cumulative maximum; retain these per-dose ranges and reassess before repeating.

IV acetaminophen once, over 15 minutes: ages ≥13 years and ≥50 kg, 1,000 mg; ages ≥13 years and <50 kg OR ages 2-12 years, 15 mg/kg (maximum 750 mg). Allow at least 6 hours since the prior acetaminophen dose. Count all products and routes. Daily maximum: ≥13 years and ≥50 kg, 4,000 mg; the lower-weight / 2-12-year group, 75 mg/kg (maximum 3,750 mg). This pain order does not extend to children under 2 years.

Ketorolac: 10 mg IV/IM once for nontraumatic back / flank pain.

Ketamine for pain refractory to opioids: 20 mg in 100 mL D5W IV/IO over 10-15 minutes. Stop the infusion if pain is controlled before the full dose.

Ketamine for extreme pain in rare situations, including severe burns, traumatic amputation or prolonged / chemical extrication with airway access: 1 mg/kg IV/IO. May repeat once at 0.5 mg/kg IV/IO at least 15 minutes after the initial dose. Provide dissociative-sedation monitoring and airway capability; administer IV doses slowly.

Histamine reaction: consider diphenhydramine 25 mg slow IV push. Monitor for nausea, vomiting and hypotension.

Certification: maintain knowledge of indications, contraindications, technique and complications. Assessment may include quality assurance, classroom demonstration and skills stations, with direct observation at least once per certification cycle.

# Medication Administration: Procedural Tolerance

**Indications for Procedural Tolerance:**

- Pain control during traumatic procedures

P Paramedic P

**Contraindications:**

- Known Allergy to Medications

**Procedure - Adult:**

- Consider Fentanyl (25-100mcg)
  - IV / IO
  - IM / IN
  - May repeat every 5-10 minutes as needed
- Consider hydromorphone (0.5 – 1mg)
  - IV / IO
  - IM
  - May repeat every 10-15 minutes as needed

Consider Benadryl 25mg slow IVP if histamine reaction occurs.

- Nausea
- Vomiting
- Hypotension

**In addition to narcotics for pain control, consider the following to treat extreme cases for traumatic procedures, severe burns, traumatic amputations, prolonged/chemical extrications when access to airway available and monitoring:**

- Midazolam (Versed) 2.5-5mg
  - IV/IO
  - IN
  - IM
  - May repeat as needed
- Ketamine
  - 1mg/kg IV/IO
  - May repeat as needed at 0.5mg/kg IV/IO

**Caution:**

**Use of benzodiazepines / Ketamine in combination with narcotics increases incidence of respiratory depression / Arrest.**

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Automated External Defibrillator

**Automated External Defibrillators (AED) are designed to analyze the hearts rhythm and deliver an electric shock if necessary. AED are designed to deliver a shock only to specific cardiac rhythms such as Ventricular Fibrillation and Pulseless Ventricular Tachycardia.**

FR First Responder FR




## Indications for Use:

- Sudden Cardiac Arrest
- Pulselessness in any age patient

## Contraindications:

- **Awake/Breathing patients**
- **DNR Orders**
- **Traumatic Cardiac Arrest**

## Caution should be used in the following circumstances:

- **Wet ground around the patient**
- **Flammable substances on or near the patient**




## Procedure:

- Confirm patient does not have a pulse
- Turn on device and follow voice prompts
- Remove all clothing covering the chest and dry if necessary
- Place one pad on the upper right chest
- Place the other pad on the lower left side of the chest
- Consider Anterior/Posterior placement for smaller frame or in circumstances where the pads may touch
- Plug pads connector into AED
- Press Analyze
- If shock is advised the device will charge itself
- When ready to deliver shock, ensure no one is touching the patient, in a loud clear voice say CLEAR
- When you are sure all personas are clear, press the shock button on the device
- Immediately resume CPR

## Certification Requirements:

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: BIAD i-Gel

**Clinical Indications for Blind Insertion Airway Device (BIAD) Use:**

- Inability to adequately ventilate a patient with a Bag Valve Mask or longer EMS transport distances require a more advanced airway.
- Intubation is not recommended because of patient care priorities, access, or difficult anatomy.
- Inability to secure an endotracheal tube in a patient who does not have a gag reflex where at least one failed intubation attempt has occurred.
- Patient must be unconscious.
- WARNING: This airway may not prevent aspiration of stomach contents!

| | | |
|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Procedure:**

1. Preoxygenate and hyperventilate the patient.
2. Select the appropriate tube size for the patient.
   a. #3 4-5 feet tall
   b. #4 5-6 feet tall
   c. #5 >6 feet tall
3. Inspect the cuff and tube for damage, and lubricate the gel cuff.
4. Position the head. The ideal head position for insertion of the i-Gel is with the head extended and neck flexed, unless contraindicated.
5. Hold the i-gel firmly along the bite block. With non-dominant hand, hold mouth open and apply chin lift unless contraindicated by C-spine precautions or patient position.
6. Position the device so that the i-gel cuff outlet is facing the patient. Introduce the leading soft tip into the mouth of the patient in the direction of the hard palate.
7. Glide the device downwards and backwards along the hard palate with a continuous but gentle push until a definitive resistance is felt.
8. Auscultate for breath sounds and sounds over the epigastrium and look for the chest to rise and fall.
9. Secure the tube with tape or other device.
10. **Confirm tube placement using end-tidal $CO_2$ detector.**
11. **It is required that the airway be monitored continuously through waveform Capnography and Pulse Oximetry.**
12. **Paramedics: Consider Procedural Tolerance**

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: BiPAP

P Paramedic P

**Indications for Bilevel Positive Airway Pressure (BiPAP) Use:**

- BiPAP should be considered in patients when inadequate ventilation is suspected and who have adequate mental status and respiratory drive to allow CPAP to function. This could be as a result of pulmonary edema, pneumonia, asthma, COPD, near drowning, etc.

**Contraindications for Bilevel Positive Airway Pressure (BiPAP) Use:**

- Facial features or deformities that prevent an adequate mask seal.
- Excessive respiratory secretions.
- Apnea

**Cautions for Bilevel Positive Airway Pressure (BiPAP) Use:**

- Gastric Distension
- Altered Mental Status (May be used, however manual control of mask should be maintained without straps and with continued observation for possible aspiration)

**Procedure:**

1. Prepare the equipment, and ensure adequate oxygen supply to ventilation device.
2. Explain the procedure to the patient. Patient must be cooperative, and claustrophobia can make this procedure difficult. Good communication is key.
3. Consider placement of a nasopharyngeal airway.
4. Place the delivery mask over the mouth and nose. Oxygen should be flowing through the device at this point. Instruct the patient to take slow, deep breaths. Be calming.
5. Secure the mask with provided straps starting with the lower straps until minimal air leak occurs. (When used for AMS or unconscious patient, manual control of mask should be maintained with continued observation for possible aspiration)
6. Set CPAP Mode with NPPV
7. Set Pressure Support (IPAP) at 10 and PEEP (EPAP) at 5. This will give BiPAP with essentially 15/5. (IPAP = 15; EPAP = 5)
8. Adjust PS or PEEP up or down depending on oxygenation. If low, increase inspiratory pressure. If circulation low (decreasing BP), decrease PEEP or IP.
9. This ventilator should be used for BiPAP instead of the O2 max CPAP device where and when available.
10. Evaluate the response of the patient assessing breath sounds, oxygen saturation, and general appearance.
11. Monitor patient for comfort, anxiety, nausea, or hypotension, and discontinue therapy as needed.
12. Document time and response on patient care report (PCR).

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed

# Medication Administration: Blood or Blood Products

P Paramedic P

**Indications for Blood or Blood Product Administration:**
- Patients with hemorrhagic shock
- Other conditions as directed by a Physician

**Contraindications:**
- Untyped blood recipient except those receiving O negative

**Key Information:**
- Do not add medication to blood
- Blood must not hand for more then 4 hours

**Procedure:**
- Universal Precautions
- Obtain baseline set of vital signs. Monitor patient temperature.
- Must have physician orders
- IV established with catheter, 18g or larger.
- Blood administration set setup:
- Hang 1000ml **.9% NaCl (Normal Saline)** on one of the Y adapters.
- Flush the tubing with the normal saline being sure to fill the filter chamber.
- Recheck contraindications.
- Spike the blood bag on the other part of the Y.
- Close the clamp to the Normal Saline side.
- Open the clamp to the blood, starting infusion.
- Set flow rate to prescribed rate.
- Blood tubing is rated at 10gtt/ml.
- Whole blood is run at least 50 gtt/min.
- Packed cells are administered at least 30 gtt/min.
- Reassess vital signs 10 minutes after start of infusion and repeatedly thereafter in accordance with the patient's condition. (Not to exceed 30 minutes).

Stay with the patient.
- Observe for S/S of transfusion reaction:
- Fever, chills, hives, skin flushing, headaches, backaches, nausea
- Hypotension, tachycardia, loss of consciousness

If any of the above signs / symptoms occur:
- Stop the infusion
- Replace the blood with normal saline
- Conduct a rapid primary assessment
- Administer high flow O2
- Contact Medical Control
- Consider use of diuretics or Benadryl with medical control approval to maintain renal function

# Medication Administration: Blood or Blood Products

P Paramedic P

If monitoring blood on a transport, watch for s/s of transfusion reaction and for signs of fluid overload including:

- Increased dyspnea
- Pulmonary congestion
- Edema
- Altered mental status

In case these signs/symptoms occur:

- Stop infusion immediately
- Administer normal saline at KVO rate
- Administer oxygen
- Contact medical control
- Document all vital signs any reactions or complications.
- Document the specific unit of blood using the tags on the blood IV bags.

**Certification Requirements:**
Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: Capnography (ETCO2)

| | | |
|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Capnography (ETCO2) Use:**

- All patients with either endotracheal tube or BIAD
- Patients with respiratory problems / complaints
- Altered Mental Status Patients
- Patients receiving narcotics/benzodiazepines
- Patients with possible or confirmed Sepsis/Acidosis

**Procedure:**

- Turn on the Monitor
- For the intubated/BIAD patient:
  - Disconnect the BVM or ventilator from the ET tube or BIAD.
  - Place the sensor on the top of the ET tube or BIAD and reconnect BVM or ventilator to the top of the adapter.
  - Resume ventilation and record Capnography reading
    - Normal ETCO2 range is 35 - 45 mm/hg
    - In cases of cardiac arrest or other poor perfusion states, the ETCO2 reading could be very low.
    - In these cases, the presence of ETCO2 changing with each ventilation confirms ETCO2.
- For non-Intubated patients utilize Nasal Cannula

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

P Paramedic P

**Indications for Cardiac Monitoring:**

- Activation of any ALS Guideline
- Respiratory Distress
- Chest Pathology of any Type

**Precautions:**

- None

**Procedure:**

1. Connect electrodes to the patient as follows:
2. RA (white electrode) attach to right arm
3. LA (black electrode) attach to left arm
4. LL (red electrode) attach to left leg
5. RL (green electrode) attach to right leg
6. Have patient remain still and record baseline rhythm strips.
7. If desired, precordial leads can be placed and the patient monitored in Lead $V_{1.}$

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Cot Loading Cross-Check

| ACTION | CONTROL OPERATOR | ASSISSTING OPERATOR |
|---|---|---|
| **Begin cross-check** | "Cross-check." | "Ready." |
| **Assess readiness** | "All straps buckled, we're at load height, the bumper is up; do you confirm?" | "Confirmed." |
| **Discuss procedure with patient (await patient confirmation as appropriate)** | "We are about to load you into the ambulance. You will feel some lifting and a few bumps, but please keep your arms safely on your lap." | |
| **Begin advancing cot until safety latch has been visualized to go over hook – DO NOT PULL BACK ON SAFETY HOOK** | | "Hooked." |
| **Prepare to lift wheels** | | "Raise" |
| **Cot lifted, undercarriage raised to load.** | Controls are activated | Cot legs raised on manual cot. On power cot, visualize legs raising all the way |
| **Prepare to load cot into ambulance** | | "Roll" |
| **Load cot into ambulance, lock into securing mechanism** | "We're latched." | |

# RED FLAGS of Lost Situational Awareness and Errors in Production

Situational Awareness is the ability to identify, process, and comprehend the critical elements of your team's actions with regard to achieving your team's goals.

**Red flags are signs that you or someone on your team has lost situational awareness and a verification is needed.**



- Intuition or a "bad gut feeling"
- Rushing
- Poor Communication
- Disagreement
- Task Saturation
- Trying Something New Under Pressure
- Interruptions
- Ambiguity
- Preoccupation
- Confusion






Establish a collective awareness by:




- Review the situation out loud **(SBAR)**
  - **S**ituation
  - **B**ackground
  - **A**ssessment
  - **R**ecommendation
- Defer to expertise
- Look it up (i.e. guidelines, SOP)
- Contact the Supervisor or Medical Director




**Be the voice of the patient!**

SLOW IS SMOOTH. SMOOTH IS FAST!

# Cot Unloading Cross-Check

| ACTION | CONTROL OPERATOR | ASSISSTING OPERATOR |
|---|---|---|
| **Begin cross-check** | "Cross-check." | "Ready." |
| **Assess readiness** | "All straps buckled, the bumper is up; do you confirm?" | "Confirmed." |
| **Discuss procedure with patient (await patient confirmation as appropriate)** | "We are about to remove you from the ambulance. You will feel some lifting and a few bumps, but please keep your arms safely on your lap." | |
| **Check surroundings** | "Are we clear?" | "Clear." |
| **Begin removing patient** | Unlatch securing mechanism, and begin slowly removing cot. | |
| **Stop removing cot before the safety bar engages the safety catch.** | | "Stop." |
| **Prepare to lower undercarriage** | | "Drop." |
| **Lower undercarriage** | Operates controls | Assists manual cot undercarriage to the ground. Visualizes power cot undercarriage lowered to correct height. |
| | | "Wheels are down." |
| **Prepare to roll cot away from ambulance.** | | Unhooks safety bar from safety catch. "Roll." |

# Airway: CPAP

| | | |
|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Continuous Positive Airway Pressure (CPAP) Use:**

- CPAP should be considered in patients when inadequate ventilation is suspected and who have adequate mental status and respiratory drive to allow CPAP to function. This could be as a result of pulmonary edema, pneumonia, asthma, COPD, near drowning, etc.

**Contraindications for Continuous Positive Airway Pressure (CPAP) Use:**

- Facial features or deformities that prevent an adequate mask seal.
- Excessive respiratory secretions.
- Apnea

**Cautions for Continuous Positive Airway Pressure (CPAP) Use:**

- Gastric Distension
- Altered Mental Status (May be used, however manual control of mask should be maintained without straps and with continued observation for possible aspiration)

**Procedure:**

1. Prepare the equipment, and ensure adequate oxygen supply to ventilation device.
2. Explain the procedure to the patient. Patient must be cooperative, and claustrophobia can make this procedure difficult. Good communication is key.
3. Consider placement of a nasopharyngeal airway.
4. Place the delivery mask over the mouth and nose. Oxygen should be flowing through the device at this point. Instruct the patient to take slow, deep breaths. Be calming.
5. Secure the mask with provided straps starting with the lower straps until minimal air leak occurs. (When used for AMS or unconscious patient, manual control of mask should be maintained without straps and with continued observation for possible aspiration)
6. The Positive End Expiratory Pressure (PEEP) is adjustable on the CPAP device at preset levels of 5, 7.5, and 10 $cmH_20$. Start high, and titrate PEEP to effect.
7. Evaluate the response of the patient assessing breath sounds, oxygen saturation, and general appearance.
8. Titrate oxygen levels to the patient's response. Many patients respond to low FIO2 (30-50%).
9. Encourage the patient to allow forced ventilation to occur. Observe closely for signs of complications. The patient must be breathing for use of the CPAP device.
10. Monitor patient for comfort, anxiety, nausea, or hypotension, and discontinue therapy as needed.
10. Document time and response on patient care report (PCR).

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: Delayed Sequence Intubation

P2 Paramedic 2 P2

- **Indications for Delayed Sequence Intubation (RSI):**
  - Procedural sedation for oxygenation.
  - Critical need for airway control:
    - Despite attempts to adequately oxygenate the patient they remain too hypoxic to safely intubate or RSI
    - Persons with impending respiratory failure
    - Combative patients with compromised airway
    - Patient with hypoxia refractory to oxygen
    - Agitation / Anxiety with oxygenation attempts
- **Relative Contraindications:**
  - Benefit of Airway control must be weighed against risk.
  - Hypersensitivity to drug
- **Absolute Contraindications:**
  - Patients in whom a cric would be difficult or impossible.
  - Massive Neck Trauma / swelling
  - Patients who would be impossible to intubate or ventilate after paralysis
  - Acute Epiglottitis
  - Upper Airway Obstruction
- **Procedure:**
  - Assemble necessary equipment and personnel.
  - Position Patient properly.
  - Assure at least 1 secure well running IV Line.
  - Pulse Oximeter, Capnography & Cardiac Monitor attached
  - Assign specific duties. (Bagging patient, application of cricoid pressure, pushing of medications).
  - Allow patient to breath 100% Oxygen for 4-5 minutes if possible, or Ventilate patient with BVM at 100% for 1-2 minutes. (4 Vital Capacity Breaths)
  - Premedicate Patient as indicated:
    - **Ketamine 1 mg/kg**
    - **NRB with NC** both on high flow
    - **CPAP/BiPAP with NC or BVM and NC with PEEP**
    - **If CPAP/BiPAP is used for patient with AMS, it should be manually held in place with continued observation for possible aspiration.**
    - When adequately oxygenated, determine if intubation is required, if so proceed with paralytic
    - **Rocuronium 1.5mg/kg or**
    - **Succinylcholine 1.5mg/kg** if Rocuronium is unavailable.
  - Perform Intubation and confirm placement while monitoring SPO2, Cardiac Rate and rhythm. Tube must be confirmed with Capnography.
  - Make sure the patient is Sedated (Watch the heart rate)
  - Continue tube tolerance as per **Procedural Tolerance Procedure**

# Airway: Delayed Sequence Intubation

P2 Paramedic P2

**When utilizing DSI, even with adequate sedation, the patient may still be aware of the situation. Please inform the patient of any procedures you will be performing, just as you would in an awake patient.**

## REQUIRED EQUIPMENT

- Suction unit and catheter
- BVM w/correct mask
- Appropriate size ET Tubes
- Working Laryngoscope
- Appropriate Drugs (drawn in syringes)
- Pulse Oximeter
- ETCO2 Monitor (if Available)
- Cardiac Monitor
- Cricothyrotomy Equipment
- Alternate Airways

**Consider Procedural Tolerance Procedure**

## FAILED AIRWAY

- In the event that the patient cannot be intubated after paralysis is achieved
  - Place OPA, NPA, i-gel or other airway.
  - Assist ventilations with BVM
  - If unable to ventilate the patient perform cricothyrotomy.

**Certification Requirements:**
Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

| | | |
|---|---|---|
| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Emergency Childbirth:**

- Patient in labor
  - Crowning / Imminent Delivery

**Contraindications:**

- Deliveries that require a C-Section and are unable to be delivered in the field:
  - Prolapsed Umbilical Cord
  - Single Limb Presentation
  - Placenta Previa

**Procedure:**

- PPE including gloves, gown, mask and goggles
- Pull the ambulance over or prepare on scene.
- General Medical Guideline, Apply oxygen
- General Assessment per Antepartum Emergency Guidelines.
- Place mother supine; drape if time allows
- Prepare OB and Neonate equipment.
- Don Sterile gloves just prior to delivery

**Normal Cephalic Delivery Procedure:**

- As the head crowns control it with gentle pressure.
- If amniotic sac is intact carefully puncture it before head delivers.
- Check for the umbilical cord around the baby's neck. If present, slip the umbilical cord from around baby's neck if necessary. If cord is too tight, clamp twice and cut between the clamp
- After baby's head delivers, suction not recommended with most deliveries.
- With the next contraction guide the baby's head downward to allow the top shoulder to deliver.
- Guide the head upward to deliver the lower shoulder.
- Keep the baby level with the vagina to prevent over or under transfusion.
- Place an umbilical clamp about 6" from the baby and another about 2" towards the mother. Cut between the clamps with the sterile scalpel provided in the OB kit.
- Dry, warm, and stimulate the infant to breathe.
- In the event of neonatal problems, refer to pediatric guideline on neonatal resuscitation.
- Wrap the baby in a blanket making sure to cover the head. Allow the mother to hold the infant. This will facilitate warming.
- Note Time of Delivery.
- Obtain and document 1 and 5 minute APGAR scores.
- If placenta delivers before arrival, save it in the bag provided.
- After the placenta has delivered provide ***Pitocin*** (Oxytocin) per guideline

**Postpartum Hemorrhage:**

- Greater than 500ml of blood loss and / or mother showing signs of shock
  - Massage the fundus of the uterus
  - Put the baby to breast which will help balance the hormones
  - Rapidly infuse IV fluids, treat for shock
  - Administer TXA 2 gram IV per guideline

**Breech Presentation:**

- Rapid transport is indicated
- If baby's body delivers, place two fingers into the vagina in a "V" shape on each side of the baby's nose to create an airway
- Continue throughout transport
- Notify Medical control and advise

| | | |
|---|---|---|
| R | EMR | R |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Prolapsed Cord Presentation:**

- Rapid transport is indicated
- If cord presents first in vagina, insert two fingers in the vagina to raise the presenting part off of the umbilical cord.
- Check for pulsations in the cord.
- Place mother in left lateral position with bottom of the cot elevated and knees drawn to the chest
- Do not attempt to push the cord back into the vagina
- Contact Medical Control and advise.

**Single Limb Presenation:**

- Rapid transport
- Monitor limb and support as needed
- Place mother in left lateral position with bottom of the cot elevated. Place pillows between mother's legs to help protect the presenting limb

**APGAR**

Appearance
- Body and extremities blue = 0
- Body pink extremities blue = 1
- Completely pink = 2

Pulse Rate
- Absent = 0
- <100 = 1
- >100 = 2

Grimace
- No Response = 0
- Grimace = 1
- Cough Sneeze Cry = 2

Activity
- Limp = 0
- Some flexion of extremities = 1
- Active motion = 2

Respiratory effort
- Absent = 0
- Slow or irregular = 1
- Strong Cry = 2

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

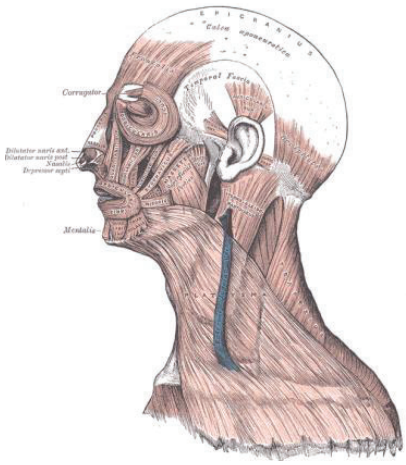
# External Jugular Cannulation

College of Emergency Physicians | Standards Procedure (Skill)

## Indications for External Jugular Cannulation:

P Paramedic P

- When a patient has a critical need for access and peripheral IV's cannot be established in a timely fashion or not at all, and to prevent EZ IO insertion in an awake critically ill patient that needs emergent medication or fluids.



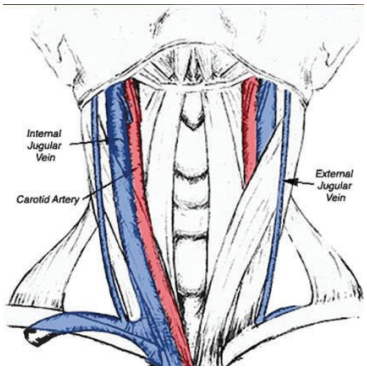
## Contraindications:

- **Patient is actively vomiting**
- **Patient is agitated**
- **Patient has a neck mass**
- **Patient has a VP shunt on side of intended insertion**
- **Cervical Spinal Trauma**
- **Circumferential Burns to Neck**
- **Evidence of Infection at the Insertion Site**

## Procedure:

The external jugular vein is formed below the ear and behind the angle of the mandible, where a branch of the posterior facial vein joins the posterior auricular vein. The external jugular vein then passes downward, and obliquely backward, across the surface of the sternomastoid muscle before piercing the deep fascia of the neck just above the middle of the clavicle, ending in the subclavian vein lateral to the anterior scalene muscle. Valves are present in this vein at the entrance to the subclavian vein and about four centimeters above the clavicle.

- Identity External Jugular Vein Site (Position patient flat or in Trendelenburg position.
- Instruct patient to turn their head away from the selected site (or move them manually)
- Cleanse site with approved skin prep (Alcohol, Betadine, Chlorhexidine)
- Lightly place finger of non-dominate hand just above the clavicle to produce a tourniquet effect
- Use thumb of same hand to gently pull traction above the puncture site
- Advance catheter into vein and look for flash in device hub. Advancement of catheter should be shallow and superficial, too deep of an angle will cause you to miss the vein.
- Attach saline lock to catheter and ensure blood pulls back
- Inject 10-20ml of Normal Saline and look for any signs of infiltration
- Secure needle with approved IV securement device




## Certification Requirements:

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Eye Irrigation (Morgan Lens)

| | | |
|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for use the of Morgan Lens for Eye Irrigation:**

- Chemical Burns to the Face
- Exposure of irritant or chemical in eye
- Foreign object in eye

**Procedure:**

Insertion

- Instill topical anesthetic (Tetracaine) **ALS ONLY**
- Attach to IV set (Plasma Lite preferred, Normal Saline acceptable)
- Begin flow
- Have Patient look down, insert lens under upper lid.
- Have patient look up, retract lower lid, drop lens into place.

Flush

- Deliver at least 1-2 liters in affected eye.
- Absorb run-off with towel rolls.
- If chemical is unknown or is an alkali (base) flush with 2 liters.

Removal

- Have patient look up, retract lower lid
- Slide lens out.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

P3 Paramedic P3

**Indications for Finger Thoracostomy:**

- Traumatic PEA arrest where insertion of bilateral needle decompression is not successful
- Traumatic PEA arrest with suspected pneumo/hemothorax
- Penetrating chest trauma with rapid deterioration and s/s of air trapping or large pneumo/ hemothorax

**Contraindications:**

- None in the emergent setting

**Caution:**

- Pulmonary blebs
- Known bleeding and/or clotting disorders
- Skin infection at procedure site

**Procedure:**

- Anesthetize site if able/time permits. Local anesthetic is achieved by use of SQ Lidocaine Injection. Sedation with Fentanyl/Versed or Ketamine can be used with constant attention to airway control.
- Make 2-3 cm incision over rib, below the fourth to fifth intercostal space along the mid-axillary line
- Bluntly dissect subcutaneous tissue overlying the intercostal muscle
- Being sure to slide just over the superior rib edge (in order to avoid the neurovascular bundle), push through the muscles and pleura with a Kelly clamp – Prevent overly deep insertion by using non-dominant hand to guide insertion or hold clamp in hand with index finger on shaft of instrument.
- Open clamp to enlarge pleural opening
- Insert gloved finger to check for pleural adhesions (fibrous band that abnormally connect two layer of pleura). Use caution when inserting finger with significant chest trauma (e.g. multiple rib fractures, etc.).
- Allow blood/air to drain and cover with occlusive dressing
- Administer Ancef per dosing guideline for open fracture trauma patients.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: Foreign-Body Obstruction

Adult, child and infant | Paramedic instrumented removal: direct laryngoscopy and Magill forceps.

## Recognize obstruction

Effective cough: encourage coughing and observe. Severe obstruction: ineffective or absent cough, inability to speak / cry, or worsening cyanosis; act immediately.

## Responsive adult or child

Alternate 5 back blows with 5 abdominal thrusts until the obstruction clears or the patient becomes unresponsive. In late pregnancy or when the abdomen cannot be encircled, use chest thrusts instead of abdominal thrusts.

## Responsive infant

Alternate 5 back blows with 5 chest thrusts. Do not use abdominal thrusts in infants. Support the head and neck throughout.

## Patient becomes unresponsive

Lower to a firm surface and begin CPR, starting with compressions. Each time the airway is opened for breaths, remove a visible object. Do not perform blind finger sweeps. Continue age-appropriate CPR and airway care.

## After relief

Reassess breathing, oxygenation and circulation; provide support and transport as indicated. Document the obstruction, maneuvers and response.

## Paramedic: instrumented removal

1. Continue oxygenation, ventilation and age-appropriate obstruction care.
2. Use direct laryngoscopy to visualize the obstructing foreign body.
3. If visible, grasp and remove it with Magill forceps under direct visualization. Do not perform blind forceps sweeps.
4. Reassess airway patency and ventilation immediately; resume CPR or airway support as needed. Document the object, method and response.

Sources: AHA 2025 Adult Basic Life Support; AHA/AAP 2025 Pediatric Basic Life Support.

# Gastric Tube Insertion

P Paramedic P

Indications:

- Evacuation of air or fluids in the stomach
- Dilution of ingested poisons
- Intubated patients
- Administration of glucose solution / gel when IV failed, IV impossible or Glucagon contraindicated
- If administering glucose solution, irrigate with 20-30ml NS to flush Salem Tube

Contraindications for NG:

- Facial Trauma
- Basilar Skill Fracture
- Epiglottitis or Croup

Contraindications for OG:

- Epiglottitis or Croup

Procedures:

Nasogastric Tube Insertion:

- Universal precautions
- Assemble equipment
- Explain the procedure to the patient
- If possible, have the patient sitting up.
- Use a pad or towel to protect the patient's clothing.
- Measure the tube from the nose, around the ear and down to the Xiphoid process.
- Mark the point at the Xiphoid process with a piece of adhesive tape.
- Lubricate the distal end of the tube 6 to 8 inches with water-soluble lubricant.
- Insert the tube in the nostril and gently advance it towards the posterior nasopharynx along the nasal floor.
- When you feel the tube at the nasopharyngeal junction, rotate it inward towards the other nostril.
- As the tube enters the oropharnyx, if patient is awake instruct the patient place their chin to their chest (if no c-spine concerns) and then to swallow.
- Pass the tube to the pre-measured point. (If resistance is met or significant coughing back the tube up, and try again. Do not force it.)
- Check placement of the tube by aspirating gastric contents, or by auscultating for air over the epigastric region while injecting 20-30 ml of air.
- Tape the tube in place and connect to low suction

Orogastric Tube Insertion:

- Universal precautions
- Assemble equipment
- Explain the procedure to the patient
- If possible, have the patient sitting up or elevate the head.
- Use a pad or towel to protect the patient's clothing.
- Measure the tube from the mouth, around the ear and down to the Xiphoid process.
- Mark the point at the Xiphoid process with a piece of adhesive tape.
- Insert the tube in the mouth and gently advance it towards the posterior oropharynx..
- As the tube enters the oropharnyx, if patient is awake instruct the patient to swallow (chin to chest if no c-spine concerns).
- Pass the tube to the pre-measured point.
- Check placement of the tube by aspirating gastric contents, or by auscultating for air over the epigastric region while injecting 20-30 ml of air.
- Tape the tube in place and connect to low suction

# Generic Airway Management

## Purpose and personnel

Provide a common entry point for adult and pediatric airway assessment, oxygenation, and ventilation. Basic measures are performed within provider scope; advanced airway procedures require the existing credential and provider level. Newborn transition/resuscitation follows the Neonatal Resuscitation guideline.

## 1. Assess and prepare

Assess responsiveness, airway patency, breathing effort/rate, chest movement, and pulse. Look for secretions, blood, vomit, foreign body, swelling, or trauma. Apply pulse oximetry and prepare oxygen, suction, appropriately sized BVM/mask, and airway adjuncts.

If pulseless or in cardiac arrest, immediately follow the age-appropriate Cardiac Arrest guideline. For severe choking, use the Foreign-Body Airway Obstruction procedure.

## 2. Open and clear the airway

Position the patient for effective ventilation. Use head tilt-chin lift when trauma is not suspected. With possible cervical injury, begin with jaw thrust and manual stabilization. If jaw thrust and adjuncts fail, use the head movement needed to open the airway; oxygenation takes priority.

Suction visible secretions, blood, or vomit with appropriate equipment. Remove a visible, reachable obstruction; do not perform blind finger sweeps. Reassess after suctioning.

## 3. Choose an adjunct and support breathing

Use an OPA only in an unresponsive patient without an intact gag reflex. Consider an NPA when appropriate; avoid with suspected basilar skull or facial fracture. Follow the individual adjunct procedure for sizing and insertion.

If spontaneous breathing is adequate, provide oxygen as indicated by the condition-specific algorithm and reassess. Consider CPAP/BiPAP only when its indications and contraindications are met; it does not replace BVM ventilation for apnea or ineffective breathing.

If breathing is absent or inadequate, begin BVM ventilation promptly. Use two rescuers when available: one maintains a two-handed mask seal and airway position while the other squeezes the bag. Give each breath over approximately 1 second, using only enough volume for visible chest rise. Avoid excessive rate, pressure, and volume.

# Generic Airway Management

## 4. Ventilate and reassess

**Inadequate breathing with a pulse:** Adult: 1 breath every 6 seconds (10/min). Infant/child, excluding newborn transition: 1 breath every 2-3 seconds (20-30/min). Reassess pulse and breathing about every 2 minutes and whenever condition changes.

**During cardiac arrest:** Follow the approved age-appropriate arrest algorithm for ventilation timing and compression coordination. Do not delay compressions or defibrillation for an airway attempt.

Monitor chest rise, breath sounds, heart rate, oxygen saturation, and clinical response. Use waveform capnography when available during assisted ventilation and continuously with an advanced airway.

## 5. If ventilation is ineffective

Correct position and mask seal; reassess for obstruction; suction; resize or replace an adjunct; use a two-person BVM technique. Check oxygen supply, connections, valve function, and equipment.

If basic measures remain ineffective, escalate promptly to an authorized advanced airway approach, such as BIAD/i-gel or intubation, using its existing procedure. Reoxygenate between attempts and avoid repeated attempts that worsen hypoxia.

If unable to oxygenate/ventilate despite these measures, request immediate additional help and Medical Control. A credentialed provider may use the surgical airway rescue procedure only when its criteria and age restrictions are met.

## 6. Confirm, secure, and document

After advanced airway placement, confirm with waveform capnography and clinical assessment, secure the device, and record its depth/size. Recheck after movement and with any deterioration. Sudden loss of the waveform or chest rise requires immediate assessment for displacement, obstruction, equipment failure, or worsening circulation.

Document initial findings, devices/sizes, attempts, confirmation method, oxygen/ventilation settings, monitoring values, complications, and patient response. Continue reassessment through transfer of care.

## Sources and review notes

**Local integration:** This draft adds no medication orders or advanced-airway permissions. Condition-specific oxygen targets and approved algorithms remain controlling. Before adoption, confirm local age definitions and provider levels.

American Heart Association, 2025 Adult Basic Life Support; AHA/AAP, 2025 Pediatric Basic Life Support.

Mercy EMS 2026 guideline book: OPA, NPA, BIAD/i-gel, intubation, CPAP/BiPAP, capnography, surgical cricothyrotomy, and arrest procedures/guidelines. Reviewed October 21, 2026.

# Glucometry Monitoring

**Indications for Sure Step Glucose Monitoring System:**

- Any patient that presents with an altered level of consciousness
- Any Diabetic Patient with signs and symptoms of hypoglycemia.
- Any stroke or seizure presentation

| | | |
|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Precautions:**

- As our glucometers are maintained and tested daily, and since a patient's glucose check is performed for definitive care, we must use our own glucometer reading and not rely on the readings of other entities, or the patient's own reading

**Procedure:**

- Universal Precautions
- Turn on the Meter
- Make sure the code numbers match on the bottle and the meter. If the code numbers do not match, press the "C" button until the code numbers match.
- Obtain drop of blood

<u>Finger stick with lancet</u>

- Wipe site with alcohol and allow to dry
- Squeeze the finger again to get a drop of blood
- Place drop of blood on the pink test square on the front of the strip.
- Check the confirmation dot on the back of the strip. If it is completely blue, you have applied an adequate amount of blood.
- Insert the test strip within 2 minutes after applying blood. Firmly push the strip until it stops.
- The result appears in approximately 30 seconds.
- Remove the test strip and discard in sharps container.
- Cover the puncture site with a dry sterile adhesive strip.
- Record the reading. Glucose readings are expressed in mg/dL.
- Normal ranges for glucose are from 70 to 110 mg/dL.

<u>From IV needle</u>

- From IV site by drawing with syringe
- Place drop of blood on the pink test square on the front of the strip.
- Check the confirmation dot on the back of the strip. If it is completely blue, you have applied an adequate amount of blood.
- Insert the test strip within 2 minutes after applying blood. Firmly push the strip until it stops.
- The result appears in approximately 30 seconds.
- Remove the test strip and discard in sharps container.
- Record the reading. Glucose readings are expressed in mg/dL.
- Normal ranges for glucose are from 70 to 110 mg/dL.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# EMS Hand Hygiene

**Applies to all**

**Introduction:**

- Hand hygiene is one of the most important things we can do in healthcare to keep ourselves and our patients safe and healthy. Nitrile exam gloves are not a substitute for proper hand hygiene

**Considerations:**

- The ambulance is a mobile hospital room, and we "Foam In / Foam Out" of all hospital rooms. It is expected, then, that we "Foam In / Foam Out" when we enter/exit the ambulance.
- When we deliver a patient to a facility, the fact that we are wearing nitrile exam gloves does not mean our hands are clean to enter the room – we still need to "Foam In / Foam Out".

**Procedure:**

1. When dispatched on a call, and prior to putting on your nitrile exam gloves, use an appropriate alcohol based hand cleaner.
2. Always ensure an appropriate level of PPE for the situation. Keep in mind, Standard Precautions change based on the situation, and your level of PPE needs to escalate to meet the situation.
3. When departing scene any provider not performing patient care should remove their gloves in a manner that will not contaminate their clean skin or anything else in their environment and carefully place them in an appropriate waste receptacle, keeping in mind that any soiled gloves need to be put in an approved biohazard container.
4. Use an appropriate alcohol based hand cleaner after removing gloves.
5. On arrival at the receiving facility:
   a. The provider performing patient care should remove gloves as described above if they are visibly soiled, use alcohol based hand cleaner, and don a new pair of gloves.
   b. The provider who drove to the facility should don a new pair of gloves.
   c. All providers should use an appropriate alcohol based hand cleaner prior to departing the ambulance (Foam Out) *over* their gloves (GEL works best, FOAM leaves a film).
   d. Once arriving at the patient room, all providers should use appropriate alcohol base hand cleaner *over* their gloves prior to entering the patient room (Foam In).
   e. After transferring patient care at the receiving facility, all providers should remove their gloves as described above and dispose of them inside the patient room, and use an appropriate alcohol based hand cleaner when leaving the room (Foam Out).
   f. The providers should then don appropriate PPE to clean/decontaminate any soiled equipment. Once complete, they should appropriately remove and dispose of PPE, and perform hand hygiene with either an appropriate alcohol based hand cleaner, or by thoroughly washing hands with soap and water.
4. Any time hands are visibly soiled, they should be washed thoroughly with soap and water as quickly as possible.








# Medication Administration: IN/Mucosal Atomization Device

| | | |
|---|---|---|
| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Clinical Indications for IN/Mucosal Atomization Device Use:**

- Narcotic, benzodiazepine, or naloxone administration without IV access
- Available drugs: midazolam, fentanyl, naloxone.

**Considerations:**

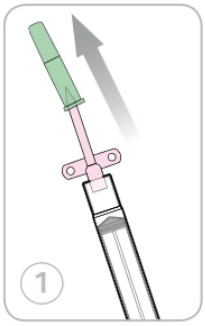
- BLS utilization is for **naloxone only**.



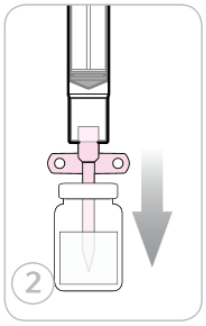
LMA® MAD Nasal™ Device with vial adapter and 1 mL (or 3 mL) syringe

**TIPS TO IMPROVE SUCCESS**

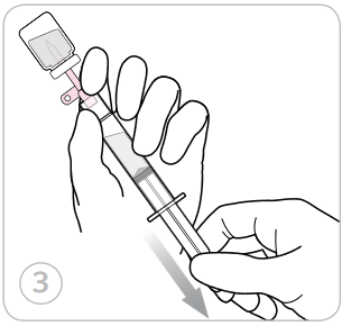
1. Minimize volume, maximize concentration.
   -1mL/nare max, appropriate drug concen.
2. Maximize absorption
   -Push **hard/fast** (atomize), use both nares
3. Beware of barriers
   -Mucous, blood, vasoconstrictors



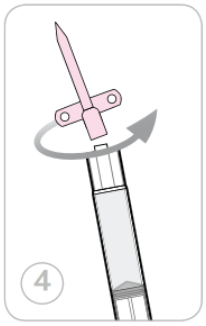
**STEP 1:** Remove and discard the green vial adapter cap.



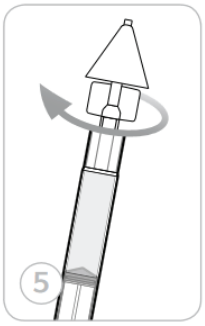
**STEP 2:** Pierce the medication vial with the syringe vial adapter.



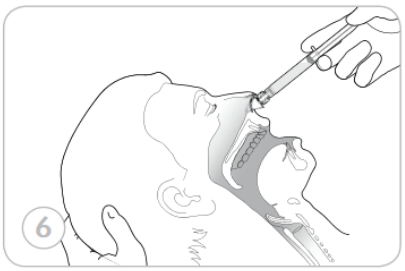
**STEP 3:** Aspirate the proper volume of medication required to treat the patient (an extra 0.1 mL of medication should be drawn up to account for the dead space in the device).



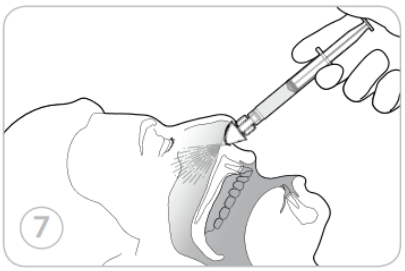
**STEP 4:** Remove (twist off) the syringe from the vial adapter.



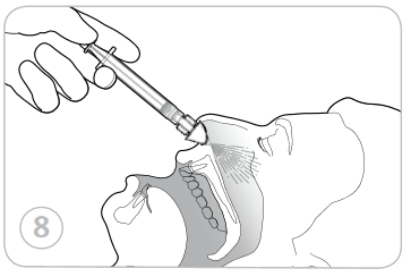
**STEP 5:** Attach the MAD Nasal™ Device to the syringe via the luer lock connector.



**STEP 6:** Using the free hand to hold the occiput of the head stable, place the tip of the MAD Nasal™ Device snugly against the nostril aiming slightly up and outward (toward the top of the ear).



**STEP 7:** Briskly compress the syringe plunger to deliver half of the medication into the nostril.



**STEP 8:** Move the device over to the opposite nostril and, repeating steps 6 and 7, administer the remaining medication into the nostril if indicated.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Intraosseous Insertion with Saline Lock

**Indications for IO with Saline Lock:**

- For access in in which vascular access is difficult to obtain in emergent and urgent settings

| | | |
|---|---|---|
| A | AEMT | A |
| P | Paramedic | P |

**Precautions:**

- Avoid when fractures are present in target bone
- Avoid when infection is noted at area of insertion
- Avoid in areas where patient may have significant orthopedic reconstruction
- May be difficult to obtain in some patients with excessive tissue and/or absence of anatomical landmarks

- **Site Selection**
  - Paramedics should choose a site that is appropriate to the therapy needed.
  - Recommended sites:
    - Humerus (6-8 L/Hr)
    - Distal Femur (5 L/Hr)
    - Proximal Tibia (1 L/Hr)

**Equipment:**

Choose the appropriate sized needle and equipment for the situation

**Complications:**

Infiltration, hematoma, bone fracture, infection

**Procedure:**

- Inform the patient of the procedure if they are conscious.
- Universal precautions.
- Select site and identify landmarks
- Clean site with hospital approved antiseptic (Chlorhexadine prep or equivalent)
- Stabilize the site and skin
- Attach needle to driver
- Press needle through skin until contact with bone
- At bone contact, activate driver and allow driver to advance needle. Do
- Ensure needle is seated in bone and remove needle from catheter
- Attach tubing to catheter and aspirate for bone marrow/blood.
- Consider injection of Lidocaine 2% for pain. (Adult 50mg, Slow Push) (P Push)
- Infuse about 10-20cc to assure patency. Watch for signs of infiltration.
- Secure IO with the manufacturer recommended device
- Begin infusion at prescribed rate. May require pressure bag to be utilize

**For Saline Lock**

Attach lock device (Clave connector etc…) Flush with **5-10 ml Normal Saline.** Watch for signs of infiltrate. Secure with appropriate device.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the EMS System. Assessment should include direct observation at least once per certification cycle.

# IV Catheter Insertion / Saline Lock

**Indications for IV Catheter / Saline Lock:**

- Per guideline Criteria

| | | |
|---|---|---|
| A | AEMT | A |
| P | Paramedic | P |

**Precautions:**

- Avoid venipuncture in arms with dialysis shunts
- Avoid venipuncture in arms with injuries proximal to the insertion site
- Avoid venipuncture in arms with previous mastectomy on the same side.
- Limit attempts to no more that three times. If access is emergently needed, consider IO procedure.

- **Site Selection**
  - Paramedics should choose a site that is appropriate to the therapy needed.
  - IV's near joints should be avoided if possible. Site selection is limited to peripheral veins.
  - Recommended sites:
    - Dorsum of the hand
    - Forearm
    - Antecubital fossa
    - External Jugular

**Equipment:**

Choose the appropriate sized catheter and equipment for the situation

**Complications:**

Infiltration, hematoma, arterial puncture, infection

**Procedure:**

- Inform the patient of the procedure.
- Universal precautions.
- Apply tourniquet.
- Select and clean site with hospital approved antiseptic (Chlorhexadine prep or equivalent)
- Stabilize the vein with distal traction the vein and skin.
- Pass the needle into the vein with bevel up, noting blood return.
- Advance the needle 2mm more into vein.
- Slide catheter over the needle and into the vein.
- Remove needle and draw blood if needed with luer adapter or syringe.
- Attach tubing to catheter and release tourniquet.
- Infuse about 10-20cc to assure patency. Watch for signs of infiltration.
- Secure IV with appropriate device per hospital policy.
- Begin infusion at prescribed rate.

**For Saline Lock**

Attach lock device (Clave connector etc…) Flush with **5-10 ml Normal Saline.** Watch for signs of infiltrate. Secure with appropriate device.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the EMS System. Assessment should include direct observation at least once per certification cycle.

# Kendrick Extrication Device (KED)

| | | |
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| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Kendrick Extrication Device (KED):**

- Patients who do not meet criteria for Rapid Extrication
- Patients who aren't able to self extricate
- Need Cervical Splinting
- May be useful for confined space extrication
- Stabilization of hip fractures / dislocation

**Contraindications:**

- Patients with easy access requiring rapid extrication

**Procedure:**

- Selective Cervical Splinting
- Maintain in-line stabilization of C-spine
- Assess distal pulses, sensation, and motor function
- Apply appropriately sized C-collar
- Position device behind the seated patient
- Pull the device up until it fits snugly in the armpits
- Apply chest straps and tighten. Avoid over tightening that restricts breathing efforts.
- Apply leg straps and tighten snugly. Avoid catching the male genitals in the straps
- Apply proper amount of padding between the head and back of the KED to keep head in a neutral position. (Note: the long green pad is usually too much, a folded towel, or multi trauma dressing work best)
- Fold the sides of the headpiece of the KED around so that they cradle the head. For most patients, properly fitted, a KED will reach or cover the patient's ears. If the sides do not reach the ears, it is possible there is too much padding. (Note: before applying head padding, be sure to place the patient upright, inline, and with the plane of the KED)
- Secure the head to the device with Kerlex, tape, or coban. (the foam straps don't work very well)
- Turn the patient and device as a unit, and then lower onto cot, and release straps.
- If cot not near or available place on scoop stretcher or Combi Carrier for transport to cot.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the EMS System. Assessment should include direct observation at least once per certification cycle.

# Medication Administration: Laryngo-tracheal Anesthesia (LTA)

P Paramedic P

**Clinical Indications for Laryngo-tracheal Anesthesia (LTA) Use:**

- Facilitate intubations in the patient with laryngospasm.
- Reduce the risk of laryngospasm in the breathing patient.

**Precautions:**

- Should be done under direct visualization.
- Cricoid pressure should be applied until the endotracheal tube is secured in place
- Dosage of Lidocaine used not to exceed 3mg/kg.

**Contraindications:**

- Known Allergy to Lidocaine
- Heart Blocks

**Procedure:**

1. Universal precautions
2. Have an assistant standing by to help.
3. Hyperventilate the patient for 2 minutes.
4. Assemble the LTA catheter to the bristoject.
5. Under direct visualization, advance the LTA catheter through the vocal cords until the black line on the catheter is at the glottis opening.
6. Administer the **Lidocaine 4% topical solution** through the catheter to spray the entire glottis and subglottic area.
7. Have an assistant apply cricoid pressure as needed while the patient is hyperventilated for 2 minutes.
8. Perform the intubation procedure.
9. Assess tube placement and secure tube.
10. Release cricoid pressure and continue ventilation.
11. Complete Intubation Procedure Report.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# EMS Use of Lights and Siren (L&S)

**Applies to all**

**Introduction:**

- As part of a national quality improvement process to improve the safety of 911 responses and transports by reducing the use of lights and sirens, Mercy EMS has adopted the following goals:
    1. >70% of all 911 scene responses will be made without the use of L&S
    2. >95% of all patient transports will be made without the use of L&S

**Considerations:**

- The use of lights & sirens (L&S) is an intervention that can potentially save up to 4 minutes on transport times but comes at the cost of increased vehicle collisions to both EMS and civilian traffic, increased injuries, increased fatalities to EMS and civilians, and ultimately much longer transport times. Because the use of L&S has potential benefits and risks, just like any intervention, it must be used selectively and only when indicated.

**Procedure:**

1. The use of L&S is a clinical procedure and should be used like any other intervention when the benefits outweigh the risks.
2. The potential benefit of L&S use outweigh the risks only when the amount of time saved will result in a potentially life-saving intervention preformed in the ED within the time saved using L&S. In general, there are very few such interventions outside the treatment of an failed and unsecured airway, need for immediate surgery such as penetrating trauma, maternal arrest with viable fetus, undelivered obstetric emergency (i.e. single limb presentation, prolapse cord, placenta previa).
3. The situations in which L&S would be beneficial are rare and should typically be reserved for patients who present with significant trauma, or cases above. Keep in mind that not all Trauma or emergent cases are the same and each case should be evaluated for the benefit of L&S.
4. Sepsis patients will rarely receive any benefit from the use of L&S for transport.
5. L&S is not justified solely because the patient is post cardiac-arrest, has an advanced airway or is receiving other advanced care in the field.
6. If L&S are a consideration, first improve scene departure to improve time and then determine if L&S are warranted.

# Defibrillation: Manual

College of Emergency Physicians | Standards Procedure (Skill)

**Clinical Indications:**

- Patients in cardiac arrest (pulseless, non-breathing).

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| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Contraindication:**

- Patients who are so small that the pads cannot be placed without touching one another.
- Patients who are conscious

**Procedure:**

- **If multiple rescuers available, one rescuer should provide uninterrupted chest compressions while the cardiac monitor is being prepared for use.**
- Apply defibrillator pads per manufacturer recommendations. Based on 2026 ACLS guidelines, place pads preferably in AP or AL position when implanted devices (pacemakers, AICDs) occupy preferred pad positions and attempt to avoid placing directly over device.
- Remove any medication patches on the chest and wipe off any residue.
- **Stop CPR and clear the patient** for rhythm analysis. Keep interruption in

- **If indicated, charge during CPR: ADULT Zoll 200 J / LIFEPAK 360 J; pediatric per guideline.**
- Once the device is charged, **Assertively state "CLEAR" and visualize that no one, including yourself, is in contact with the patient prior to defibrillation.**
- Press Shock button and release
- Begin CPR (chest compressions and ventilations) immediately after the delivery of the defibrillation.
- After 2 minutes of CPR, analyze rhythm and defibrillate if indicated. Repeat this step every 2 minutes.
- If "no shock advised" appears, perform CPR for two minutes and then reanalyze.
- Transport and continue treatment as indicated.
- **Keep interruption of CPR compressions as brief as possible. Adequate CPR is key to successful resuscitation.**
- **If pulse returns use the Post Resuscitation Guideline**

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Mechanical CPR Device - LUCAS

College of Emergency Physicians | Standards Procedure (Skill)

| | | |
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| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Mechanical CPR Device Usage:**

- Adult patients in cardiac arrest (pulseless, non-breathing).
- Non-traumatic Arrest

**Contraindication:**

- Adult patient that is too small for the device
- Adult patient that is too large for the device
- Pediatric patient's less than 16 years of age
- Traumatic arrest
- Advanced pregnancy

**Procedure:**

- Open Bag:
  - Open cover so that the entire bag unfolds.
  - Remove back plate, remove device and press power button
  - Press #1 Button to put device in "Adjust" mode
- Place back plate:
  - Pause manual CPR
  - Lay back plate under body below armpits and resume manual CPR
- Attach device to back plate:
  - Extend leg; ensure claw locks are open
  - Connect to back plate; listen for "click"
  - Pull up once to ensure attachment
- Position suction cup:
  - Lower edge of suction cup should be immediately above the end of the sternum superior to xiphoid process
  - Suction cup should be centered over the sternum
- Lower suction cup:
  - Piston inside suction cup should touch patient's chest.
  - If it doesn't touch / fit properly continue manual compressions
- Start compressions:
  - Press #2 button locking piston into position
  - Press #3 button activating device
  - Press continuous compressions or 30:2 mode
  - Check for proper position
  - Do not leave patient or device unattended during use
- Attach stabilization strap:
  - Place support cushion under patients neck
  - Fasten cushion straps to device straps and tighten the straps
  - Do not utilize stabilization strap when it might impair treatment
- Press #2 button to pause compressions for EKG analysis

Remember that chest compressions are the utmost concern. Keep interruptions to a bare minimum.

Use of the device must be discontinued once ROSC has been achieved or CPR is no longer necessary.

FOR PATIENT SAFETY, ONCE THE SUCTION CUP HAS BEEN PROPERLY PLACED, MAKE A MARK ON THE CHEST AT BOTTOM OF SUCTION CUP WITH A PEN OR SHARPIE OR TAPE TO ENSURE THE SUCITON CUP DOESN'T MIGRATE DURING PATIENT MOVEMENT OR DURING RESUCITATION.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Medication Administration Cross-Check

**Applies to all**

## Provider 1
(Giving the medication)

**"Med-Check" or "Safety-Check" or "Cross-Check"**

**"I am going to give:"**
Dose
Drug name
Route
Rate
Reason

Concurrence

If none state
**"No Contraindications"**
Otherwise verbally verify

Concurrence

- State the drug concentration
- State volume to be administered in milliliters (Do not say "amp" or "vial") or state # of tablets
- Show the vial / bottle to provider 2 (if safe to do so)

Concurrence and Positive Visual Verification

## Provider 2
(Remember "R.C.V.")

**"Ready"**

**"Contraindications?"**

**"Volume?"**
(or "Quantity?" for PO)

**"Sounds good" or "Give it" or "Go Ahead"**

- "**Contraindications**" include: 1) verification of appropriate VS, 2) known patient allergies, and 3) expiration date.
- Provider 2, if an EMT, is simply confirming and repeating back to their partners what they are seeing and hearing – there is no advanced level medication knowledge required!
- If a discrepancy, disagreement, or need for clarification is encountered at any step in the process, it must be resolved prior to continuing the cross-check.
- Essentially only Provider 2 can authorize the administration of the medication.
- The MACC must be completed prior to the administration of any medication.
- If there is an interruption or change in patient condition of any kind, the process must be re-initiated by Provider 1.
- Avoid ambiguous statements or confirmations like "okay."

## RED RULE of Medication Administration
(A Duty to Avoid Causing UNJUSTIFIABLE Harm)

NEVER give the contents of a syringe that is not labeled or without visualizing the vial or ampule from which it was immediately drawn.

# RED FLAGS of Lost Situational Awareness and Errors in Production

Situational Awareness is the ability to identify, process, and comprehend the critical elements of your team's actions with regard to achieving your team's goals.

**Red flags are signs that you or someone on your team has lost situational awareness and a verification is needed.**



- Intuition or a "bad gut feeling"
- Rushing
- Poor Communication
- Disagreement
- Task Saturation
- Trying Something New Under Pressure
- Interruptions
- Ambiguity
- Preoccupation
- Confusion






Establish a collective awareness by:




- Review the situation out loud **(SBAR)**
  - **S**ituation
  - **B**ackground
  - **A**ssessment
  - **R**ecommendation
- Defer to expertise
- Look it up (i.e. guidelines, SOP)
- Contact the Supervisor or Medical Director




**Be the voice of the patient!**

SLOW IS SMOOTH. SMOOTH IS FAST!

**Clinical Indications for Multi-Lead ECG Acquisition:**

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| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

- Patients with suspected myocardial infarction
- Patient with dizziness, weakness, nausea/vomiting
- Elderly or diabetic patients with non-specific complaints
- Syncope, bradycardia or tachycardia in ALL ages
- Serial 12-Leads are indicated in patients with continuing chest discomfort, a change in discomfort (better/worse), or a change in the heart rhythm.
- Patients refusing transport after 12-lead: consider contacting Medical Control / EMS Medical *Director.*

**If a 12-lead ECG is acquired; Aspirin 324mg PO should be given unless contraindicated.**

**Procedure:**

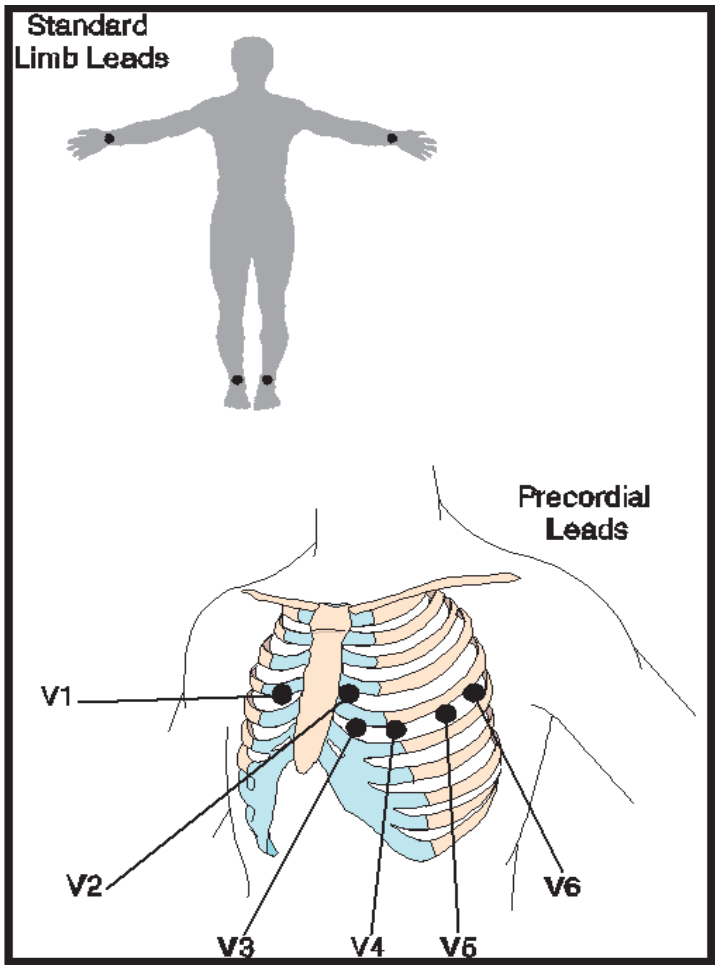
1. Limb leads are placed on the limbs (RA - Right Arm, LA - Left Arm, LL - Left Leg, RL - Right Leg)
2. Precordial lead placement should be as indicated on page 2.
3. After 12 -lead has been acquired; leave electrode pads attached to the patient in case serial ECG's are needed.
4. A 15-lead ECG's should be performed on a patient with:
   a. A non-diagnostic 12-lead
   b. Evidence of acute inferior wall injury.
5. Attach 12 & 15-leads on approved sheet and complete interpretation if unable to transmit to ePCR.

**Transmission:**

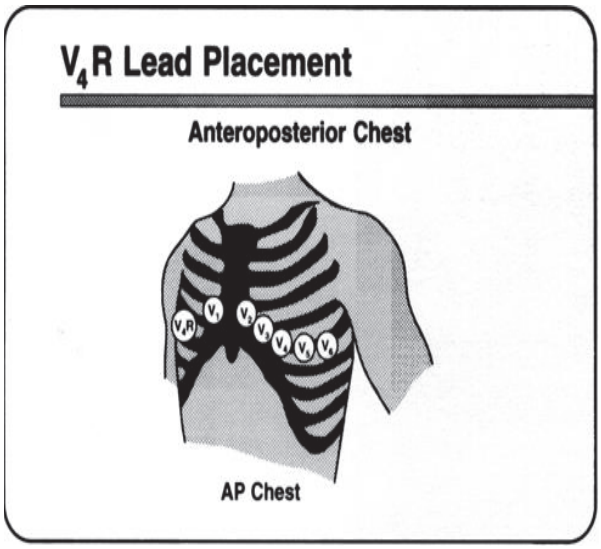
- Whenever medical control is contacted and a 12-lead ECG is performed the 12-lead should be transmitted.

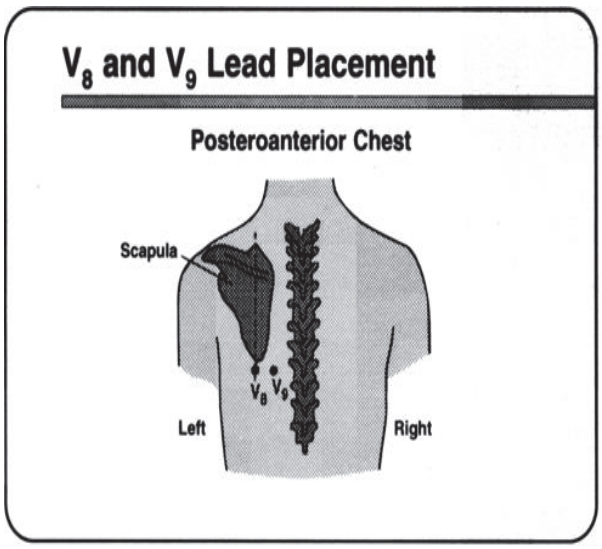
**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.




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| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |



# Airway: Nasopharyngeal

| | | |
|---|---|---|
| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Nasopharyngeal (NPA) Use:**

- Conscious or semiconscious patients unable to control their airway.
- Clinched jaws.
- Altered LOC with a gag reflex.
- WARNING: This airway will not prevent aspiration of stomach contents!

**Contraindications:**

Suspected or presence of basilar skull fracture or facial fractures

**Cautions:**

Fluid or blood from ears or nose.

**Procedure:**

1. Universal Precautions
2. Pre-oxygenate the patient if possible
3. Measure the tube from the tip of the nose to the earlobe
4. Lube the airway with water soluble jelly (KY, surgilube, or lidocaine)
5. Insert tube (right nare first) with bevel of tube towards the septum, angling towards the base floor of the nasopharnyx
6. Reassess the airway
7. If the patient needs ventilatory support, a 7.5mm ET adapter can be inserted into the airway and used with a BVM.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: Nasotracheal Intubation

**Paramedic**

## Indications for Nasotracheal Intubation:

- Need for a definitive airway.
- Awake patients or those not tolerating oral intubation attempts.
- Need to assist ventilations.
- Nasal intubation is performed on breathing patients.

## Contraindications

- Basal skull or significant facial fracture or congenital facial deformity.

## Precautions:

- Bleeding or fluids from nose or ears
- High risk of nosebleeds could cause aspiration
- Risk of sinus infection with diabetic patients

## Procedure:

1. Take universal precautions. Have suction unit ready.
2. Hyper-oxygenate patient with BVM or PPV for 2 minutes.
3. Assemble, check and prepare all equipment
4. Pre-medicate nares with 1 -2 sprays of **neo-Synephrine (.5%)** in each nare. wait 1 to 2 minutes for effect. (time permitting)
5. Lube a nasopharyngeal airway with **2% Lidocaine jelly** or water based lubricant and insert per NPA procedure. Wait about 1 - 2 minutes for effect. (time permitting)
6. Remove the NPA and insert lubed ET tube with the bevel towards the nasal septum.
7. Advance tube aiming the tip down along the nasal floor.
8. Stand to the patient's side with one hand on the tube while the thumb and the index fingers of the other hand palpate the larynx.
9. Gently advance the tube along the airway while rotating it medially slightly until the best airflow is heard through the tube. Use of the BAAM device or other method to aid hearing airflow is recommended.
10. Gently and swiftly advance the tube during early inspiration. Patient will cough as tube passes through the cords.
11. Inflate the cuff with 5 - 10 ml of air. Ventilate the patient.
12. Observe for chest rise; auscultate lung sounds and epigastric sounds. If available, utilize ETCO2 monitors. Secure the tube.
13. Auscultate for breath sounds and sounds over the epigastrium and look for the chest to rise and fall.
14. Secure the tube with tape or other device.
15. Confirm tube placement using end-tidal $CO_2$ detector.
16. Consider initial PEEP at 5cm/H2O
17. It is required that the airway be monitored continuously through waveform Capnography and Pulse Oximetry.
18. Paramedics: Consider Procedural Tolerance

## Certification Requirements:

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Medication Administration: Nausea / Vomiting

P Paramedic P

**Indications for Nausea and / or Vomiting Treatment:**
- To help prevent or lessen nausea / vomiting

**Contraindications:**
- Known Allergy to Medications

All providers consider patient smelling Isopropyl Alcohol pads to help decrease nausea

**Procedure - Adult:**
- Consider Zofran (4mg)
  - Slow IVP
  - IM
  - ODT
  - May repeat one time
- Consider Compazine (5mg) (Caution in patients >60 yrs of age)
  - Slow IV push over 2 min. Each 5mg diluted in 10ml of NS
- Consider Benadryl for EPS (25mg)
  - Slow IV

**Procedure – Pediatric**
- Consider Zofran (0.15mg/kg)
  - Over the age of 2 and less then 27kg use the 0.15mg/kg dose
  - Slow IVP
  - IO
  - IM
  - For patients weighing over 27kg or higher use the adult dose

**Certification Requirements:**
Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

**Indications for Needle Thoracostomy:** P2 Paramedic P2

- Increased ventilatory pressure resulting ineffective ventilation in the patient (with an open airway)
- Traumatic cardiac arrest with chest pathology
- Profound hypotension with suspicion of tension pneumothorax
- Absent lung sounds on affected side with signs of tension pneumothorax
- Increasing respiratory distress with respiratory failure and suspicion of tension pneumothorax
- Decreasing SPO2 with respiratory failure and suspicion of tension pneumothorax

**Contraindications:**

- None in the presence of a Tension Pneumothorax

**Complications:**

- Laceration of intercostal vessels
- Creation of a pneumothorax, hemothorax
- Laceration of lung tissue
- Risk of infection

**Procedure:**

- Universal precautions
- Identify the second or third intercostal space, midclavicular line on affected side or anterior axillary line at the 5$^{th}$ intercostal space (anatomical ideal nipple level)
- Quickly prep the area with antiseptic
- **Adult Procedure: SPEAR**
  - Insert into the skin over the 5th rib anterior axillary line.
  - An alternative site is the 3$^{rd}$ intercostal space midclavicular just over the rib.
  - Insert the catheter through the parietal pleura until air escapes.
  - Air should exit under pressure.
  - Remove the needle and leave the catheter in place.
  - Reassess frequently for redevelopment of condition
  - If tension pneumothorax returns, repeat procedure.
- **Pediatric Procedure: North American Rescue 14 Gauge**
  - Insert into the skin over the 5th rib anterior axillary line.
  - An alternative site is the 3$^{rd}$ intercostal space midclavicular just over the rib.
  - Insert the catheter through the parietal pleura until air escapes.
  - Air should exit under pressure.
  - Remove the needle and leave the catheter in place
  - Reassess frequently for redevelopment of condition
  - If tension pneumothorax returns, repeat procedure.
  -

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: Neo-Tee T-Piece Resuscitator

Neo-Tee T-piece resuscitator

## Use and preparation

For trained neonatal / infant resuscitation providers; device intended for patients under 10 kg. Have an alternative means of ventilation immediately available. Inspect the circuit, manometer, gas supply and pressure relief.

## Pre-use verification

Connect the gas source and set flow to 10 L/min. Attach a neonatal test lung, or use the protective cap for testing. Occlude the PEEP opening and set initial PIP to 25–30 cm $H_2O$; release it and set PEEP to 5 cm $H_2O$. Verify both on the manometer. Manufacturer flow range is 5–15 L/min; never exceed 15 L/min.

## Ventilation

Remove the protective cap before patient connection. Attach the mask or airway interface. Occlude the PEEP opening to deliver inspiration; uncover it promptly for expiration. Use the approved neonatal ventilation rate and oxygen targets.

## Continuous checks

Monitor chest movement, heart rate, oxygen saturation and delivered pressures. Recheck PIP and PEEP after flow changes. If ventilation is ineffective, use the backup device immediately. Do not leave the patient unattended.

Source: Mercury Medical, Neo-Tee Instructions for Use, document 83-900-0630, Rev. 8.4. Consult the complete IFU for the exact circuit and controller.

# Airway: Oropharyngeal

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| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Oropharyngeal (OPA) Use:**

- Unconscious / Unresponsive Patients.
- WARNING: This airway will not prevent aspiration of stomach contents!

**Contraindications:**

- Gag Reflex Present

**Procedure:**

1. Universal Precautions
2. Pre-oxygenate patient if possible
3. Measure airway from corner of mouth to earlobe
4. Grasp the tongue and jaw, lifting anterior
5. Insert airway adjunct into mouth being cautious of soft palate
6. A tongue Depressor may also be used
7. Ventilate patient and listen for lung sounds

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: Orotracheal Intubation

**Indications for Orotracheal Intubation:**

P Paramedic P

Need for a definitive airway
Possible Positive Pressure Ventilation
Aid for assisting ventilations

**Precautions:**

Can induce hypertension and increase ICP in head injured patients
Can induce vagal response and bradycardia
Can induce hypoxia related arrhythmias

**Procedure:**

1. Take universal precautions
2. Hyperventilate the patient with a BVM or PPV and consider basic adjunct
3. Assemble, check, and prepare all equipment
4. Place head in ear to sternal notch/ramping position (elevate head 2-4").
   Maintain C-Spine stabilization on trauma patients or concern for C-spine injury.
5. Hyperextend the neck slightly.
6. Insert laryngoscope blade, avoid pinching the bottom lip
7. Sweep tongue to the left. place blade in proper position
8. Lift the laryngoscope forward to displace the jaw
9. Advance tube past the vocal cords until the cuff disappears using tube reference markings.
10. Inflate the cuff to obtain seal. Should be at or below amount given on equipment/packaging.
11. Ventilate patient. Observe for chest rise, auscultate lung sounds and over the epigastrium.
12. Confirm ET placement with ETCO2 and record reading.
13. Secure the tube, noting the depth marking on the tube.
14. Insert an OPA as a bite block if not able to utilize tube holder with built in bite block.
15. Continue ventilation with 100% O2.
16. Consider initial PEEP at 5cm/H2O
17. Reassess tube placement often.
18. Document airway procedure appropriately in EHR.
19. It is required that the airway be monitored continuously through waveform Capnography and Pulse Oximetry.
20. Paramedics: Consider Procedural Tolerance

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Oxygen Titration

| | | |
|---|---|---|
| FR | EMT | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Oxygen Titration:**

- The overall goal of oxygen therapy is to avoid tissue hypoxia.
- Oxygen saturation of less than 88%
- A failure of the oxygen-hemoglobin transport system can result from a reduced oxygen carrying capacity in blood (e.g. anemia, carbon monoxide poisoning)
- Reduced tissue perfusion (e.g. shock, trauma).
- Continue with 100% O2 in any patient with suspected decreased carrying capacity
  - Known or expected anemia (ie. Trauma, GI bleed, etc.)
  - Presence of toxin such as Carbon monoxide, Methemaglobin or cyanide. (NOTE: Paraquate poisoning is a contraindication to oxygen unless below 88%)
- Titrate O2 to a SpO2 target range of 88-92% in patients with exacerbation of COPD, Asthma and chronic neuromuscular disease with difficulty breathing
- Titrate O2 to a SpO2 target range of 92-96% in patients with ROSC post cardiac arrest
- No supplemental O2 is recommended for cardiac and CVA patients with SpO2 ≥ 94%. If O2 is required to achieve SpO2 ≥ 94% titrate to ≤ 99%.

**Precautions:**

- COPD patients should generally receive lower (FiO2) concentrations unless they have serious signs / symptoms of decompensation

**Procedure:**

- Inform Patient of Procedure
- Connect Tubing to O2 Port and Flush
- Administer $O^2$
  - Nasal Cannula 2-6 lpm
  - NonRebreather Mask 10-15 lpm
  - BVM 15 lpm –Flush
- Monitor Patient for Effects

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the EMS System. Assessment should include direct observation at least once per certification cycle.

# Pediatric Pain Management

## Procedure - Paramedic (P)

Indication: pain due to injury or illness. Contraindication: known allergy to the selected medication.

Before each repeat dose, reassess pain, sedation, respiratory status and blood pressure. Account for medications already given.

Fentanyl: 2-3 mcg/kg IV/IO/IM/IN every 5-20 minutes as needed. The confirmed local order has no fixed per-dose cap and no cumulative maximum; give the calculated weight-based dose and reassess before every repeat.

Ketamine for pain refractory to opioids: 0.1 mg/kg IV/IO in 100 mL D5W over 5-10 minutes.

Ketamine for extreme pain in rare situations, including severe burns, traumatic amputation or prolonged / chemical extrication: 1 mg/kg IV/IO OR 4 mg/kg IM.

After either initial route, may repeat ONCE with 0.5 mg/kg IV/IO at least 15 minutes after the initial dose, if still needed after reassessment. Do not restart the repeat allowance when changing routes.

Provide dissociative-sedation monitoring and airway capability. Give IV doses slowly; consider apnea risk and whether the airway can be accessed promptly.

Histamine reaction: consider diphenhydramine 1-2 mg/kg, maximum 25 mg, slow IV push. Monitor for nausea, vomiting and hypotension.

Certification: maintain knowledge of indications, contraindications, technique and complications. Assessment may include quality assurance, classroom demonstration and skills stations, with direct observation at least once per certification cycle.

# Medication Administration: Pediatric Procedural Tolerance

P Paramedic P

**Indications for Procedural Tolerance:**

- Pain control during traumatic procedures

**Contraindications:**

- Known Allergy to Medications

Consider Benadryl 1-2mg/kg (Max 25mg) slow IVP if histamine reaction Occurs after narcotics.

- Nausea
- Vomiting
- Hypotension

**Procedure – Pediatric**

- Consider Fentanyl (2-3mcg/kg)
  - IV
  - IO
  - IM
  - IN
  - May repeat every 5-20 minutes as needed

**In addition to narcotics for pain control, consider the following to treat extreme cases for traumatic procedures, severe burns, traumatic amputations, prolonged/chemical extrications when you have full access to the airway:**

- Midazolam (Versed) 0.025 – 0.05mg/kg
  - IV / IO
  - IN
  - IM
  - May repeat as needed
- Ketamine
  - 1mg/kg IV/IO
  - May repeat as needed at 0.5mg/kg IV/IO

**Caution:**

**Use of benzodiazepines in combination with narcotics increases incidence of respiratory depression / Arrest.**

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

**All levels of provider are only allowed to practice within the confines of their respective scope of practice and under the written authorization (guideline) of the agency medical director.**

B **Emergency Medical Technician:**
Able to preform all skills granted by the state of practice and within the scope of the National Registry of Emergency Medical Technicians.

A **Emergency Medical Technician Advanced:**
Able to preform all skills granted by the state of practice and within the scope of the National Registry of Emergency Medical Technicians.

P **Paramedic I:**
Able to preform all skills granted by the state of practice and within the scope of the National Registry of Emergency Medical Technicians.

P2 **Paramedic II:**
In addition to all standard skills, the P2 level may also provide the following care:

- Push Dose Vasopressor Administration
- Push Dose Nitroglycerine Administration
- Rapid Sequence Intubation
- Surgical Airway
- Needle Jet Airway

P3 **Paramedic III:**
In addition to the all the standard skills and P2 skills, the P3 level may also provide the folliwng care:

- Umbilical Vein Catheterization
- Pericardiocentesis
- Chest Tube
- Finger Thoracostomy

The P3 level requires the following be complete and maintained to practice:

- ❖ Hold current critical care certification (FP-C, CCP-C, CCEMTP, CFRN)
- ❖ Hold Neonatal Resuscitation Program Certification
- ❖ Attend Cadaver Lab Skills Session Annually
- ❖ Record 3 successful intubations every 90 days (may be real or simulated)
- ❖ Audit ATLS Course (one time only)

# Pulse Oximetry SPO2

**Indications for Pulse Oximetry SPO2 Monitoring:**

- All ALS Patients
- Extremity Fractures
- Any patient with Respiratory complaints
- Any patient with Chest Pain
- Any patient receiving benzodiazepines, narcotics or ketamine
- Any patient needing airway assistance

| FR | EMR | FR |
|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Precautions:**

- Accuracy is dependent upon adequate perfusion at the probe site.
- The reading can be affected by bright light, Carbon Monoxide Poisoning, Cyanide Poisoning, Nail Polish and Polycythemia.

**Procedure:**

- Find suitable location for probe:
  - Finger
  - Earlobe
  - Pediatric Probe
  - Bridge of Nose
- Attach and record the readings
- May be used to monitor circulation distal to injuries
- If receiving erratic readings, move probe to a different site

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the EMS System.

# Medication Administration: Push Dose Epinephrine

P2 Paramedic 2 P2

**Indications for Push Dose Epinephrine Use:**

- Hypotension in the critically ill patient. Examples: sepsis, post-intubation, cardiogenic shock, etc.

**Considerations:**

- Push Dose Epinephrine should not be used in the hypovolemic patient requiring fluid replacement.
- Push Dose Epinephrine should be used with extreme caution in the relative hypovolemia patient (sepsis, etc.), and only in conjunction with aggressive fluid therapy.

**Procedure:**

1. Ensure the patient is being monitored appropriately to include full vital signs and continuous cardiac monitoring.
2. Ensure the patient has a patent IV/IO line, with appropriate fluid therapy.
3. Mix your Push Dose Epinephrine
   a. Gather your epinephrine 1:10,000, 10mL saline flush, 10mL syringe, transfer device, tape and marking pen.
   b. Assemble your epinephrine luerject syringe and attach it and you empty 10mL syringe to the transfer device.
   c. Transfer 1mL(0.1mg) of epinephrine into the empty 10mL syringe.
   d. Remove the epinephrine luerject syringe and attach the 10mL saline flush to the transfer device.
   e. Transfer 9mL of saline into the 10mL syringe containing the 1mL(0.1mg) of epinephrine previous transferred.
   f. You now have 1:100,000 epinephrine in your 10mL syringe. This is 0.1mg(100mcg) in 10mL, or **10mcg/mL**.
   g. Make sure your Push Dose Epinephrine is mixed well, and label the syringe so that it is not confused for a saline flush.
4. Administer 0.5-2mL of the dilution (5-20mcg) every 2-5 minutes for hypotension or impending hypotension (example: soft BP with planned intubation).

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Medication Administration: Push Dose Nitroglycerin

P2 Paramedic 2 P2

**Clinical Indications for Push Dose Nitroglycerin Use:**

- Congestive heart failure with significant respiratory distress or on CPAP
- Cardiac chest pain when utilization of sublingual is difficult (extreme dry mouth, CPAP ongoing, etc.).

**Considerations:**

- Patients should be monitored closely for developing hypotension.
- Glass bottle is single patient use only.

**Procedure:**

1. Ensure the patient is being monitored appropriately to include full vital signs and continuous cardiac monitoring.
2. Ensure the patient has a patent IV/IO line, with appropriate fluid therapy.
3. Prepare your Push Dose Nitroglycerin
   a. Gather your nitroglycerin (50mg/250cc D5W), draw needle, syringe, tape and marking pen to label syringe.
   b. Label syringe with “NITRO” or “Push Dose NITRO” so that it is not confused for a saline flush.
   c. Draw 2mL (400mcg) of nitroglycerin from glass bottle into labeled syringe.
   d. Do not fill the whole syringe with nitroglycerin, only draw 2mL of nitroglycerin from the glass bottle to mitigate the chances of inappropriate dosing.
4. CHF with hypertension: administer 1-2 mL (200-400 mcg) slow IV push over 1 minute. Repeat every 5 minutes as needed to lower systolic BP by 20%.
5. Chest pain: administer 1mL (200mcg) to 2mL (400mcg) slow IV push over 1 minute and repeat every 5 min as needed for pain.

Use caution with heart rate >90.
Caution: recent PDE-5 inhibitor use.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Rapid Extrication Technique

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| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Rapid Extrication:**

- Unstable patients with immediate life threats
- Compromised airway
- Apnea or severe respiratory distress requiring assisted ventilations
- Shock (no radial pulses)
- Uncontrolled bleeding
- Altered Level of Consciousness
- Dangerous / Uncontrolled environments
- Fire or immediate danger of fire
- Danger of explosion
- Rapidly rising water
- Increasing toxic exposure

**Contraindications:**

- Stable patients not meeting any of the above criteria

**Procedure:**

- Selective Cervical Splinting as appropriate.
- Do a rapid primary survey
- If Patient is able, they may self-extricate from the vehicle. If not:
  - Slide long backboard onto seat and if possible, under the patient's buttocks
  - Rescuer standing outside of the open door takes control of C-spine stabilization
  - A rescuer positions themselves on the opposite side of the seat ready to rotate the legs around
  - Another rescuer should be positioned by the open door beside the patient. By holding the upper torso work together with the rescuer holding the legs to carefully turn the patient as a unit.
  - The patient is turned so that their back is towards the backboard. The legs are lifted and the back is lowered to the backboard. The neck and back are not allowed to bend during this procedure.
  - Carefully slide the patient to the full length of the backboard and straighten legs.
  - Secure patient to board as necessary for patient safety and move patient away from the hazard.
  - Remove patient from extrication board as soon as possible.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: Rapid Sequence Intubation

**Indications for Rapid Sequence Intubation (RSI) or Drug Assisted Intubation (DAI):**

P2 Paramedic 2 P2

- A critical need for airway control exist, such as:
  - Persons with impending respiratory failure.
  - Combative patients with compromised airway.
  - Patients with depressed LOC. GCS ≤ 8 and not protecting their airway
  - Patient with hypoxia refractory to oxygen or treatment.
  - Any time risk of potential / actual airway compromise is suspected

**Relative Contraindications:**

- Benefit of Airway control must be weighed against risk.
- Hypersensitivity to drug

**Absolute Contraindications:**

- Patients in whom a cric would be difficult or impossible.
- Massive Neck Trauma / swelling
- Patients who would be impossible to intubate or ventilate after paralysis
- Acute Epiglottitis
- Upper Airway Obstruction
- In Arkansas, patients under 8 years of age

**Procedure:**

- Assemble necessary equipment and personnel.
- Position Patient properly.
- Assure at least 1 secure well running IV Line.
- Pulse Oximeter & Cardiac Monitor attached
- Assign specific duties. (Bagging patient, application of cricoid pressure, pushing of medications).
- Allow patient to breath 100% Oxygen for 4-5 minutes if possible, or Ventilate patient with BVM at 100% for 1-2 minutes. (4 Vital Capacity Breaths)
- Premedicate Patient as indicated:
  - **Consider push-dose pressor if concerned for bradycardia or hypotension.**
  - **Consider Atropine 0.01mg/kg IV/IO** for Pediatrics if **Succinylcholine** or **Ketamine** is being utilized (min 0.1mg, maximum 0.5 mg )*
  - **Etomidate 0.3mg/kg** or **Ketamine 1 mg/kg IV/IO** for sedation
  - Consider the use of Ketamine for Asthmatic or Septic Patients
  - **Rocuronium 1.5mg/kg** adult or **1mg/kg IV/IO** Pediatric
  - If Rocuronium is temporarily unavailable due to shortages, then **Succinylcholine, 1.5mg/kg** adult **2.0mg/kg** Pediatric* will be added on trucks.
- Perform Intubation and confirm placement while monitoring SPO2, Cardiac Rate and rhythm. Tube must be confirmed with Capnography.
- **Rocuronium 0.1-0.3mg/kg** for continued paralyzation only if absolutely nessasary, Make sure the patient is also adequately sedated (Watch the heart rate)

# Airway: Rapid Sequence Intubation

P2 Paramedic P2

**When utilizing RSI, even with adequate sedation, the patient may still be aware of the situation. Please inform the patient of any procedures you will be performing, just as you would in an awake patient.**

## REQUIRED EQUIPMENT

- Suction unit and catheter
- BVM w/correct mask
- Appropriate size ET Tubes
- Working Laryngoscope
- Appropriate Drugs (drawn in syringes)
- Pulse Oximeter
- ETCO2 Monitor (if Available)
- Cardiac Monitor
- Cricothyrotomy Equipment
- Alternate Airways

**Consider Procedural Tolerance Procedure**

## FAILED AIRWAY

- In the event that the patient cannot be intubated after paralysis is achieved
  - Place OPA, NPA, i-gel or other airway.
  - Assist ventilations with BVM
  - If unable to ventilate the patient perform cricothyrotomy.

**Certification Requirements:**
Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Resuscitation: Medical Control Report

Use when requesting termination of resuscitation. This checklist does not establish new termination criteria.

## Patient and event

History of present illness; suspected cause of arrest; relevant medical history; DNR / TPOP status.

## Time and CPR

Estimated time down; witnessed or unwitnessed; time CPR began; bystander / pre-arrival CPR; EMS resuscitation duration.

## Airway and ventilation

Airway device and placement confirmation; interventions performed; ventilation adequate or poor; oxygenation and waveform capnography.

## Rhythm and shocks

Initial rhythm; rhythm changes; any ROSC; number, timing and energy of defibrillations.

## Medications and reversible causes

All medications with dose, route, time and response; fluids; reversible causes considered and treated.

## ETCO2 and request

Current ETCO2 and trend throughout the event; response to interventions; request direction; document the physician, time, order and family communication.

**Use the age-appropriate arrest guideline and withholding-resuscitation policy. Contact Medical Control when the arrest guideline requires it. Removal of DNR contact requirements is not a general authorization to terminate every resuscitation.**

# Selective Cervical Splinting

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|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Selective Cervical Splinting:**

- To be used with patients who meet criteria for cervical splinting only.

**Precautions for Selective Cervical Splinting:**

- Properly sized C-Collar must be used
- Patients with penetrating traumatic injuries should NOT be immobilized unless a focal neurological deficit is noticed
- Patients undergoing cervical splinting should be handled with extreme care, and reminded to be as still as possible when transporting a patient in position of comfort
- Integrity of the cervical spine *must be protected*

**Procedure – C-Collar Sizing:**

- Bring patient's head to eyes forward inline position
- Maintain in line stabilization
- Measure the "key dimension" (from trapezius muscle at the base fo the neck to the bottom of the chin using your fingers as a measurement guide)
- On an assembled Stiffneck extrications collar the distance between the black sizing post on the side for the collar and the bottom of the collar (hard plastic) is used for comparison with the "key dimension" measured by your fingers
- Use the proper size that matches the correct size of C-Collar

**Procedure – C-Collar Application**

- Pre-form the collar to the estimated shape.
- On a supine patient, slide the loop fastener end under the neck just far enough that it can be reached. On a seated patient, this step is not necessary.
- Place both of your hands on the front side of the collar on either side of the tracheal opening
- Slide the collar up the chest wall and under the chin, making sure the chin is flush with the end of the chin piece.
- With the chin piece properly positioned, grasp the collar by the tracheal opening and the loop fastener end to tighten.
- Tighten by pulling the loop fastener end parallel with the ground, then up to meet the hook fastener on the collar.
- The hand at the tracheal opening will prevent any counter rotational forces and allow proper tightening.
- Inspect the chin piece to ensure that the chin is properly positioned.
- Adjust the collar if necessary.

**Procedure – Foam Rolls / Towel Rolls**

Place foam/towel rolls on each side of the patient head when supine or leaning back against the stretcher, to not tape or affix the patients head to the rolls or the stretcher.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

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|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

## Procedure – Securing to Long Spine Board (Extrication Only)

- Maintain manual In-line C-spine stabilization throughout procedure.
- Apply appropriate C-collar (Procedures A, B)
- If necessary, use rapid extrication procedure. If not:
- Place extra rescuers to control the thorax, pelvis and legs
- Place backboard beside the patient
- Leave patient's arms by their side. Try to avoid rolling on injured arm.
- The person holding the head makes the count, carefully roll the patient as one unit to their side.
- Do a quick check of the back for injuries or deformities
- Roll the patient onto the backboard.
- Secure with spider straps or other straps making sure the straps are in the following locations: Lower legs, Legs (above knees), Pelvis, Thorax (over the shoulders with spider straps) (under the arms on regular straps).
- Secure straps tight enough to hold but not restrict breathing.
- A Kendrick Extrication Device may also be used per procedure, if appropriate.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Selective Cervical Splinting

College of Emergency Physicians | Standards Procedure (Skill)

| | | |
|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Suspected Spinal Injury**

- Mechanism of Injury
- Complaint of neck or back pain
- Complaint of numbness or weakness (focal neurological)

NO

- Altered Mental Status, GCS <14
- Intoxication or Uncooperative
- Language Barrier
- Extrememes of age: <5 years old or >65 years old
- Known Bone Disease

NO

Significant injury causing distraction?

- Long Bone Fractures
- Large Laceration / Burn
- Other significant injury

NO

Physical assessment...

- Midline spine tenderness / deformity
- Upper Extremity / Lower Extremity weakness
- New Paresthesia

NO

Does active range of motion cause midline neck pain?

- Chin to chest
- Chin 45 R&L anteroflexion
- Ear to Shoulder Right and Left

NO

**Transport in Position of comfort without cervical splinting**

YES

YES

**Cervical Splinting**

- C-Collar (Cervical Splinting)
- Backboards should be utilized for extrication only
- Patient log rolled on to cot for transport
- Utilize scoop stretcher or Combi Carrier to transfer patient to cot for transport if needed.

Patients with penetrating traumatic injuries should NOT have Cervical splinting unless a focal neurological deficit is noted. If a focal neurological deficit is noted, apply cervical splinting.

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| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Clinical Indications for Splinting:**

- Isolated suspected extremity fractures
- Sprains and strains, snakebites, bleeding control

**Clinical Contraindications for Splinting:**

- Extremity splinting can be time consuming and should not take priority over life threatening conditions.
- In general, splinting long bone fractures you should immobilize the joint above and the joint below the fracture site.
- Traction splints should NOT be applied if there is a possible proximal femur fracture, pelvic fracture, or a tib/fib fracture.

**Procedure - Long Bone (Femur):**

- Universal Precautions
- Stabilize the injured limb manually
- Consider sedation or analgesia prior to moving extremity.
- Assess distal pulses, sensation, and motor function.
- If pulses are absent distal to the injury, then apply in line traction to the leg to the return of pulses
- Apply traction splint to patient comfort.
- In unconscious patients, apply traction to the return of distal pulses. A pulse oximetry can help with the pulse monitoring in these circumstances.
- Reassess distal PMS after splinting and q 5 minutes thereafter.
- It may be necessary to splint some femur fractures in the position found if angulated.
- In general, if pulses and sensation are present distal to the injury, field reduction should not be attempted. Unless it is a midshaft femur or limiting packaging/transport of patent.
- In the event that this occurs, consult with medical control to discuss options.

**Other Splinting Techniques**

The following splints are recommended for the following situations. As every situation is different, splints may have to be improvised to achieve the desired effect of immobilization.

- Clavicle — Sling and Swath
- Radius /ulna — Ladder, board, or Sam splint
- Tib / Fib: — Ladder, board, or Sam splint
- Ankle — Pillow splint
- Joints — In position found
- Pelvis — Routine splinting of pelvis should be avoided
- Hand — In position of function
- Hip — Scoop / pillow, Inverted KED

Assess distal PMS before and after splinting, then periodically during transport.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the EMS System. Assessment should include direct observation at least once per certification cycle.

# Airway: Surgical Bougie Aided Cricothyrotomy

**SURGICAL CRICOTHYROTOMY: Minimum age 8 years. No needle technique.**

## Clinical Indications for Surgical Bougie Aided Cricothyrotomy Use:

P2 Paramedic 2 P2

- Patients needing emergency airway access and control when they are unable to adequately be ventilated or intubated due to trauma or other causes.
- THIS PROCEDURE IS A LAST RESORT. It is used when all attempts at ventilating the patient have failed.

## Precautions:

- Complications include: Hemorrhage from great vessels, lacerations, damage to surrounding structures

## Procedure:

1. Take Universal Precautions (gloves, goggles, mask)
2. Have suction equipment ready
3. Place patient supine.
4. Maintain C- spine stabilization
5. Locate landmarks of thyroid/cricoid cartilage and cricothyroid membrane
6. Clean the neck with an antiseptic solution
7. Stabilize the larynx with the thumb and index finger of one hand.
8. Palpate the cricothyroid membrane.
9. Pull the skin taut.Make a **2-3 cm** vertical skin incision at the cricothyroid membrane level.
10. Locate and palpate the crocothyroid membrane with your gloved finger.
11. Puncture through the cricothyroid membrane horizontally.
12. Place bougie with coude tip into trachea with a back and forth motion to feel tracheal clicking or carina hold up
13. Place an endotracheal tube or Shiley over the bougie just enough for the cuff to be inside trachea
14. Inflate the cuff and secure the tube.
15. Ventilate the patient with a BVM and 100% O2.
16. Observe lung expansion.
17. Place capnography and record continue monitoring and capnography.
18. Auscultate lung sounds.
19. Cover the incision site with an occlusive dressing.
20. Consider initial PEEP at 5cm/H2O
21. Reassess tube placement often.
22. Document airway procedure appropriately in EHR.
23. It is required that the airway be monitored continuously through waveform Capnography and Pulse Oximetry.
24. Paramedics: Consider Procedural Tolerance

## Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

P Paramedic P

Indications for Synchronized Cardioversion:

- Unstable Tachydysrhythmias

Precautions:

- Exercise safety precautions at all times
- Cardiovert with extreme caution with patients on digitalis preparations, beta-blockers, and calcium channel blockers

Procedure:

Physio-Control LifePak 12 or 15 Procedure:

- If conscious, explain procedure to the patient.
- If time permits, consider Procedural Tolerance per procedure for stable tachydysrhythmias.
- Attach ECG electrodes and record baseline rhythm strip(s)
- Select lead that displays the tallest R wave.
- Attach multi-function pads.
- Select appropriate energy setting. 360J for adults
- 2 J/kg for pediatric initial and repeat synchronized shocks (all devices).
- Activate synchronized mode. Observe synchronize markers on screen.
- Charge defibrillator and clear the patient.
- Call CLEAR and look up and down the patient to assure patient is clear.
- Press discharge buttons and hold until discharge is observed.
- Reassess the patient and rhythm and repeat procedure if indicated.

Zoll X Series Procedure:

- If conscious, explain procedure to the patient.
- If time permits, consider Procedural Tolerance per procedure for stable tachydysrhythmias.
- Attach ECG electrodes and record baseline rhythm strip(s)
- Select lead that displays the tallest R wave.
- Attach multi-function pads.
- Select appropriate energy setting. 200J for adults
- 2 J/kg for pediatric initial and repeat synchronized shocks (all devices).
- Activate synchronized mode. Observe synchronize markers on screen.
- Charge defibrillator and clear the patient.
- Call CLEAR and look up and down the patient to assure patient is clear.
- Press discharge buttons and hold until discharge is observed.
- Reassess the patient and rhythm and repeat procedure if indicated.

Certification Requirements:

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Tarp Assisted Cooling Oscillation (T.A.C.O.)

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| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for T.A.C.O. Application:**

- Patients presenting with signs and symptoms of heat stroke
- Rectal temperature >104 F (40C) degrees believed to be environmental
- Rectal temperature >104 F (40C) degrees with any altered mental status

**Procedure:**

- Rectal temperature preferred for measuring for hyperthermia concerns
- Use any available body bag, tarp, plastic sheeting, or other similar product
- Fill with water (garden hose, fire hose, bottled water, etc.)
- Place patient in water, should cover patient as much of the body surface area as possible
- Fill with ICE if available (If no ICE is available, water alone will cool better than no action)
- Oscillate, agitate or move water/ice back and forth to continue to mix around patient
- Patient should remain in colling until symptoms of heat stroke has resolved or without heat stroke symptoms and a rectal temperature less than 102 F (38.9C) degrees.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Taser Barb Removal

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|---|---|---|
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Taser Barb Removal:**

- When asked by law enforcement to remove barbs prior to transportation to a facility other than a hospital
- Removal prior to your transport to the hospital

**Contraindications for Taser Barb Removal:**

Do NOT attempt to remove the barb if it is embedded in the

- Eye
- Eyelid
- Face
- Breast
- Groin / Genitalia
- Joints
- Any cartilaginous body part such as the ear or nose

**Procedure:**

1. Follow Appropriate Scene Safety
2. Ensure your safety prior to removal
   Proper PPE should be worn including Eye Protection
3. If using non dominant hand for skin stabilization, ensure it is a safe distance away to avoid accidental sharps exposure.
4. Grab barb with hand and pull straight back with a 90 degree motion until barb exits skin
5. Ensure entire barb was removed
6. Patient is to have a full assessment and cardiac monitor applied to rule out cardiac arrythmias
7. Do proper wound care if you are not transporting to a hospital. Clean and dress the wound as appropriate.
8. This is an ALS ePCR

**Certification Requirements:**
Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Temperature Measurement

## Purpose and personnel

Measure and trend temperature in adults and children with suspected infection, altered mental status, environmental exposure, or other clinical indications. Perform only routes for which the provider is trained and locally authorized. Equipment: Welch Allyn SureTemp Plus (690/692 series).

## Preparation

1. Explain the procedure; obtain consent when possible. Provide privacy and a chaperone for rectal measurement according to agency policy. Use gloves and appropriate infection precautions.

2. Stocked equipment: SureTemp Plus with blue probe/well. The service reports medical director approval for oral, axillary, and rectal use of this configuration. Rectal use is a local deviation from the manufacturer's instructions; see the review requirements on page 2. Use a new approved probe cover for every measurement.

3. Select the safest reliable route. Do not interrupt airway care, resuscitation, urgent cooling, or transport to obtain a temperature.

## Oral

Use for an alert, cooperative patient who can safely hold the probe under the tongue with lips closed. Avoid with impaired consciousness, active seizure, oral trauma/surgery, or inability to cooperate.

Wait 20 minutes after eating, drinking, smoking, or similar oral-temperature interference; choose another route if waiting is impractical.

Select Oral. Place the covered probe in a posterior pocket beneath the tongue; close the lips without biting. Keep it steady until the completion signal.

## Axillary

Select Pediatric Axillary for age 17 or younger; Adult Axillary for age 18 or older. Dry the axilla, position the covered tip against skin high in the armpit, and hold the arm against the torso until completion.

Avoid injured skin. Treat axillary readings as screening when an accurate core temperature is needed; a normal result does not exclude significant illness.

# Temperature Measurement

## Rectal

Consider when a more reliable internal temperature is needed and the route is appropriate. Avoid with rectal bleeding, anorectal injury/recent surgery, significant coagulopathy or thrombocytopenia, or known/suspected neutropenia. For neonates and young infants, use axillary screening and seek Medical Control direction if rectal measurement is necessary.

1. Position the patient on the side with knees gently flexed when feasible. Expose only the area needed and maintain safe positioning.

2. For the locally approved blue-probe configuration, use the written local operating instructions. Apply a new probe cover and compatible water-soluble lubricant. Mode, insertion depth, and measurement endpoint remain to be specified in this draft.

3. Never force or leave the probe unattended. Stop for pain, bleeding, resistance, or clinical deterioration. Do not substitute the manufacturer's red-probe depths or timing for unspecified blue-probe instructions.

4. Remove gently and discard the cover. Follow the approved cleaning and cross-route handling instructions; a new cover alone does not establish that a rectally used probe is suitable for subsequent oral use.

## Medical director approval

Blue thermometer probe use has been approved by the medical director for rectal use.

## Interpretation and reassessment

Record the measured value and route; do not add or subtract a fixed amount to convert between sites. Repeat an unexpected reading after checking technique and device function.

For suspected severe hypothermia, confirm the device can measure the required low range; an out-of-range display is not a numeric temperature. Use the applicable Hyperthermia, Hypothermia, Fever, Sepsis, or other clinical guideline for treatment.

## Documentation

Record date/time, value, units (°F or °C), route, repeat readings, relevant limitations, patient tolerance, and treatment/response. Communicate important abnormalities and route limitations at handoff.

## Sources and review notes

Baxter/Welch Allyn, SureTemp Plus 690/692 Instructions for Use, 80030111 Rev. B (2024). Device instructions matched to the SureTemp Plus shown by the service.

Royal Children's Hospital Melbourne, Temperature Management. Open RN, Nursing Skills, Chapter 1, General Survey (temperature assessment). Reviewed October 21, 2026.

# Tourniquet Application

| | | |
|---|---|---|
| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

## Indications for Tourniquet Application:

- Life threatening extremity hemorrhage that cannot be controlled with direct pressure

## Procedure:

**For the C.A.T. tourniquet** (Combat application tourniquet)

- Insert the wounded extremity through the loop of the self-adhering band.
- Pull the self-adhering band tight and securely fasten the band back upon itself.
- Adhere the band around the arm. Do not adhere the band past the windlass clip.
- Twist the windlass rod until BRIGHT RED BLEEDING AND **DISTAL PULSES** have stopped.
- Lock the rod with the windlass clip.
- Adhere the self-adhering band over the windlass rod. (If there is enough band)
- Secure the rod and band with the windlass clip band.




**Touriquets**
**Should always be tightened until NO PULSE can be appriciated**

**For the SWAT-T tourniquet** (Stretch, Wrap and Tuck)

- Stretch the material tight enough that the pressure indicators change shape (ovals become circles, diamonds become squares, and the row of squares on the top of the tourniquet separates to look like the example in the middle of the tourniquet).
- Wrap the tourniquet, being careful to keep it as flat as possible, and keeping the same amount of pressure with each wrap.
- Place your hand under the last wrap so that you can tuck the tail under and the device will secure itself.
- Ensure that BRIGHT RED BLEEDING AND **DISTAL PULSES** have stopped.




## Certification Requirements:

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Cardiac: Transcutaneous Pacing (TCP)

P Paramedic P

**Indications for Transcutaneous Pacing:**

- Symptomatic Brady dysrhythmias
- Symptomatic Heart Blocks

**Precautions:**

- Do not place the pacer electrodes directly over an implanted pacemaker, generator, or AICD device

**Procedure:**

**LifePak 12 or 15 AND Zoll X Series Procedure:**

- Explain procedure to the patient.
- Connect 4 basic leads in proper position. Record a rhythm strip prior to pacing.
- Adjust ECG size if necessary or select the lead with the tallest R wave.
- Apply pacing pads or ***Quick Combo*** electrodes in the anterior/posterior position as directed by the manufacturer.
- Turn pacer unit on.* Do not activate pacer until pacer pads have been applied.
- Set rate at 80 bpm.
  - In Bradycardia, gradually increase energy (milliamps) until electrical capture is observed. (generally a wide bizarre QRS complex)
- Check the pulse on the right arm for mechanical capture. If pulse is present, assess blood pressure. Record rhythm strip.
- If mechanical capture is not achieved, continue to increase energy (milliamps) to maximum in an effort to achieve capture.
- Continue to pace while CPR (if necessary) is in progress, even if capture is not obtained.
- Consider Procedural Tolerance per procedure..

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.





# Umbilical Venous Catheter

**Indications for Umbilical Venous Catherterization:** P3 Paramedic P3

- Following NRP guidelines, newborns may need emergent administration of medications or intravenous fluids during resuscitation. Intraosseous use is hampered by unsuccessful placement, infiltration, and dislodgement especially in a premature newborn.

**Contraindications:**

- Acute abdominal pathology
- Omphalitis
- Omphalocele
- Necrotizing enterocolitis
- Peritonitis

**Complications:**

- Catheter malposition in the heart or liver
- Infection
- Vessel or peritoneal perforation
- Hemorrhage
- Thromboembolism
- Cardiac arrhythmias
- Pericardial effusion or tamponade

**Procedure:**

- Universal precautions
- Gather all equipment and supplies listed in the equipment section below.
- Determine the appropriate UVC size. **3.5 FR catheters** are used in infants weighing **<1.5 kg. 5.0 FR catheters** are used in infant weighing **>1.5 kg.**
- Sterile technique for this procedure is preferred.; however, you must balance the need to rapidly secure emergent venous access versus the risk of introducing an infection.
- Apply sterile gloves.
- Prime the appropriately sized UVC with normal saline using a syringe connected to a stopcock. Close the stopcock to the catheter to prevent air entry and fluid loss.
- Clean the umbilical cord and surrounding skin with Povidone-Iodine Swabsticks.
- A 2nd crew member will need to assist in holding the umbilical cord vertical using a pair of kellys secured to the umbilical cord clamp. **They will continue to hold the cord vertical until the cord is cut in preparation for line placement.**
- **Create a sterile field around the umbilical cord using sterile towels.**
- Place the umbilical tape (cord tie) at the base of the umbilical cord and secure around the skin at the base of the cord (not the actual cord) ensuring not to compromise skin perfusion. This tie can be tightened to prevent excessive bleeding after you cut the cord.
- Cut the cord horizontally with a scalpel below the umbilical clamp and about **1 to 2 cm above the skin line**. This should be a **straight cut** rather than at an angle.

# Umbilical Venous Catheter

P3 Paramedic P3

- Identify the umbilical vein. The umbilical vein is a thin-walled structure generally close to the periphery. The umbilical arteries are smaller, thick-walled, and lie close together.
- Using the **pickups or kellys**, stabilize the umbilical cord making sure to avoid grabbing the vessel.
- Insert the catheter into the umbilical vein, and gently aspirate with a syringe attached to the stopcock. Continue inserting until there is blood return. This should occur between **2 and 4 cm.**
- Secure the UVC by first placing duoderm on the skin next to the umbilical cord. Then, using a circular technique place the umbilical line on the duoderm and cover it with a clear transparent dressing (tegaderm). **The insertion site should not be covered.**

**Certification Requirements:**
Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

# Venous Blood Draw

| | | |
|---|---|---|
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Venous Blood Draw:**
- Cardiac Patients
- Suspected Stroke Patients
- ALS Trauma Patients
- Any other patient needing Blood Drawn and IV established

**Precautions:**
- Avoid venipuncture in arms with dialysis shunts or previous mastectomy on the same side.
- Avoid venipuncture in arms with injuries proximal to the insertion site

**Site Selection**
- Choose a site that is appropriate to the therapy needed.

**Equipment:**
- Choose the appropriate sized catheter (at least 20g in adults, 18g or larger preferred if medication bolus or fluid bolus may be needed) and equipment for the situation

**Complications:**
- Hematoma, arterial puncture, infection

**Procedure:**
- Inform the patient of the procedure.
- Universal precautions.
- Apply tourniquet.
- Select and clean site with hospital approved antiseptic (Chlorhexadine prep or equivalent)
- Stabilize the vein and skin with distal traction.

IV Catheter Method
- Pass the needle into the vein with bevel up, noting blood return.
- Advance the needle 2mm more into vein.
- Slide catheter over the needle and into the vein.
- Remove needle and draw blood if needed with luer adapter or syringe.
- Insert Vacutainer into the hub (puncturing the top)
- Vacutainer will draw blood until it is full
- If vacutainer fails to draw
  - Check positioning of catheter or arm for obstruction due to bending.
  - Pulling back slightly on the catheter or needle may allow blood flow.
  - If vacutainer fails even after positioning, discard and try another tube
- Remove full blood tube and repeat with another color tube if needed
- Draw the following tubes in this order:
  - Blue top (coagulation studies; must fill completely)
  - Yellow Top (Clot tube with serum separator)
  - Green Top (Chemistry)
  - Lavender Top (CBC)

# Venous Blood Draw Continued

| A | AEMT | A |
|---|---|---|
| P | Paramedic | P |

- A syringe may be used to draw blood from the IV catheter. If syringe is used, draw blood slowly and smoothly to prevent hemolysis. Blood must be transferred from the syringe to the vacutainer tube.

Direct Venipuncture method
- Assemble vacutainer device (attach needle to hub)
- Pass the needle into the vein, bevel up.
- Insert vacutainer into hub, puncturing top
- Vacutainer will draw blood until it is full
- Remove blood tube and draw another color of tube if needed

- Fill out Blood Draw Label.
- Apply numbered EMS stickers to blood tubes.
- Place sticker over the pre-applied stickers already on the tube.
- Put large EMS sticker in the bag with all labeled tubes. Document EMS label number in EHR.

<u>Completed labeled and properly marked, filled tubes should be handed to the nurse receiving report.</u>

**Certification Requirements:**
Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

| | | |
|---|---|---|
| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

**Indications for Vital Signs Assessment:**

- Any patient contact
- Before and after medication administration
- Every 5-10 minutes in critical patients or patient receiving vasoactive drugs
- Every 15 minutes on long transports for stable patients not receiving treatment
- Minimum of 2 sets required on all transport or patient contact

**Definition:**

- Pulse Rate and Quality
- Blood Pressure (manual for any concerns for erroneous findings)
- Respiratory Rate and Depth
- Skin Color, Temperature, and Moisture

**Contraindications for Vital Sign Assessment:**

- Don’t attempt blood pressure on injured extremities, arms on the side of a previous mastectomy or arms with dialysis shunts

**Procedure:**

- Universal precautions
- Choose appropriate sized cuff for the patient
- Blood pressure is required as a baseline and before and after medication administration.
- Record vital signs and the times taken on the ePCR.

**Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the EMS System. Assessment should include direct observation at least once per certification cycle.

# Defibrillation: Zoll Monitor AED Mode

**Clinical Indications:**

| | | |
|---|---|---|
| FR | EMR | FR |
| B | EMT | B |
| A | AEMT | A |
| P | Paramedic | P |

- Patients in cardiac arrest (pulseless, non-breathing).

**Contraindication:**

- Patients who are so small that the pads cannot be placed without touching one another.

**Procedure:**

1. **If multiple rescuers available, one rescuer should provide uninterrupted chest compressions while the AED is being prepared for use.**
2. Apply defibrillator pads per manufacturer recommendations. Based on 2026 ACLS guidelines, place pads preferably in AP or AL position when implanted devices (pacemakers, AICDs) occupy preferred pad positions and attempt to avoid placing directly over device.
3. Remove any medication patches on the chest and wipe off any residue.
4. If necessary, connect defibrillator leads: white to the anterior chest pad and the red to the posterior pad.
5. Activate AED for analysis of rhythm.
6. **Stop CPR and clear the patient** for rhythm analysis (if device requires). Keep interruption in CPR as brief as possible.
7. Defibrillate if appropriate by depressing the “shock” button and holding until shock is delivered. **Assertively state “CLEAR” and visualize that no one, including yourself, is in contact with the patient prior to defibrillation.** The sequence of defibrillation charges is preprogrammed for monophasic defibrillators. Biphasic defibrillators will determine the correct joules accordingly.
8. Begin CPR (chest compressions and ventilations) immediately after the delivery of the defibrillation.
9. After 2 minutes of CPR, analyze rhythm and defibrillate if indicated. Repeat this step every 2 minutes.
10. If “no shock advised” appears, perform CPR for two minutes and then reanalyze.
11. Transport and continue treatment as indicated.
12. **Keep interruption of CPR compressions as brief as possible. Adequate CPR is a key to successful resuscitation.**
13. **If pulse returns use the Post Resuscitation Guideline**

**Certification Requirements:**
Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Mercy EMS System. Assessment should include direct observation at least once per certification cycle.

## ACETAMINOPHEN (TYLENOL / OFIRMEV)

| Simplified Drug Profile | |
|---|---|
| Action | • Acts on hypothalmus to produce antipyresis<br>• May work peripherally to block pain impulse generation; may also inhibit prostaglandin synthesis in CNS. |
| Indications | • Pain or fever-related distress. Select one appropriate antipyretic.<br>IV acetaminophen: Adult Pain Management (p. 146) or Pediatric Fever Guideline.<br>Count acetaminophen from all products and routes. |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug, severe active hepatic dysfunction<br>• Precautions: Impaired renal function; history of chronic alcohol use |
| Side Effects | • Rash, Nausea, Dizziness |

## ADENOSINE (Adenocard, Adenoscan)

| Simplified Drug Profile | |
|---|---|
| Action | • Slows conduction through the AV Node<br>• Interrupts AV reentry pathways to return sinus rhythms |
| Indications | • Paroxysmal Supraventricular Tachycardia |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug, 2nd or 3rd degree AV Block, sinus node disease (sick sinus syndrome)<br>• Precautions: Will cause arrhythmia at time of conversion, Asthma |
| Side Effects | • Facial Flushing, Dyspnea, Chest Pressure, Headache, Lightheadedness, Dizziness, Nausea |

Mercy EMS Emergency Medical Services

# ALBUTEROL (Proventil, Ventolin, ProAir)

Simplified Drug Profile

| | |
|---|---|
| Action | • Beta 2 Receptor Agonist with some Beta 1 activity<br>• Relaxes Bronchial Smooth Muscle with little effect on heart rate |
| Indications | • Reactive Airway Disease causing bronchospasm (Asthma, COPD) |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug, Severe hypersensitivity to milk proteins<br>• Precautions: history of Cardiovascular disease, methods of administration will cause aerosolized particles and administration should be avoided in the presence of high consequence pathogens. |
| Side Effects | • Tremors, Nervousness, Insomnia in Children, Fever, Nausea, Headache, Dizziness |

# AMIODARONE (Pacerone, Cordarone, Nexterone)

Simplified Drug Profile

| | |
|---|---|
| Action | • Inhibits Adrenergic Stimulation<br>• Affects Sodium, Potassium, and Calcium Channels<br>• Markedly prolongs action potential and repolarization<br>• Decreases AV conduction and Sinus Node Function |
| Indications | • Pulseless Ventricular Fibrillation / Ventricular Tachycardia<br>• Ventricular Arrhythmias<br>• Atrial Fibrillation / Flutter with RVR and Hypotension<br>• WPW |
| Contraindications / Precautions | • Black Box Warnings: Indicated for only life-threatening arrhythmias due to difficulty in managing the drug. Can cause pulmonary toxicity, liver injury and worsening of the arrhythmia.<br>• Contraindications: hypersensitivity to the drug, Cardiogenic Shock, 2nd or 3rd degree AV block, Symptomatic Bradycardia<br>• Precautions: Prolongs QT interval. Consider slower administration in patients with hepatic or renal dysfunction |
| Side Effects | • Hypotension, Dizziness, Headaches, Malaise |

Mercy EMS Emergency Medical Services

# ASPIRIN

Simplified Drug Profile

| | |
|---|---|
| Action | • Relieves pain by inhibiting production of chemicals called prostaglandins.<br>• Works on the cellular level to decrease the chemical processes the body has that leads to pain.<br>• Blocks Platelet aggregation |
| Indications | • New Chest pain suggestive of AMI.<br>• If 12-lead is performed Aspirin must be given unless documentation clearly indicates why Aspirin was not indicated. |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to Aspirin, GI Bleeding, Stroke, Active Ulcers, Trauma<br>• Precautions: Stomach Problems, Asthma |
| Side Effects | • Heartburn<br>• Nausea / Vomiting<br>• Wheezing |

# ATROPINE (Atropine Sulfate)

Simplified Drug Profile

| | |
|---|---|
| Action | • Inhibits muscarinic actions of acetylcholine which in turn inhibits parasympathetic responses<br>• Stimulates cardiac muscle leading to increased heart rate<br>• Decreases smooth muscles which leads to decrease gastrointestinal secretions |
| Indications | • Symptomatic Bradycardia<br>• Hypotension secondary to bradycardia<br>• Organophosphate poisoning |
| Contraindications / Precautions | • Contraindications: None when used in Emergency Situations<br>• Precautions: Tachycardia, Hypertension |
| Side Effects | • Palpitations / Tachycardia<br>• Headache, Dizziness, Anxiety<br>• Dry Mouth, Pupillary Dilation, Blurred Vision<br>• Urinary retention |

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# CALCIUM CHLORIDE

Simplified Drug Profile

| | |
|---|---|
| Action | • Is essential in the proper functioning of the nervous and muscular systems<br>• Aids in normal cardiac contractility<br>• Aids in coagulation of the blood<br>• Affects the secretion activity of endocrine and exocrine glands |
| Indications | • Hyperkalemia / Hypocalcemia<br>• Calcium Channel Blocker Overdose (Verapamil, Nifedipine)<br>• Abdominal Muscle cramping associated with spider bite<br>• Antidote for Magnesium Sulfate |
| Contraindications / Precautions | • Contraindications: Not to be used in treating Ventricular Fibrillation, Patients on Digitalis<br>• Precautions: Make sure the IV line is Patent, IV line should be flushed between Calcium Chloride and Sodium Bicarbonate |
| Side Effects | • Arrythmia's (Bradycardia, Asystole)<br>• Hypotension |

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Emergency Medical Services

# CEFAZOLIN (ANCEF)

Simplified Drug Profile

| | |
|---|---|
| Action | • Prevent Infections that are strongly suspected to be caused by bacteria<br>• Inhibits bacterial Cell Wall Synthesis |
| Indications | • Any patient with evidence of an open fracture.<br>• Deformity with a break in the adjacent skin |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to Cephalosporin Antibiotics<br>• Precautions: Patient's with renal insufficiency, PCN Allergy |
| Side Effects | • Localized Phlebitis, Skin Rash<br>• Nausea / Vomiting<br>• Pain at injection site<br>• Fever / Anaphylaxis |

# Dexamethasone (Decadron)

Simplified Drug Profile

| | |
|---|---|
| Action | • Corticosteroid – aids in anti-inflammatory responses |
| Indications | • Pediatric anaphylaxis / respiratory emergencies only.<br>• 0.2 mg/kg (max 8 mg) IV/IO/IM/PO. One dose by one route.<br>• |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug.<br>• Precautions: None in the emergency setting |
| Side Effects | • Nausea / Vomiting / Upset Stomach<br>• Headache / Dizziness / Anxiety<br>• Hypokalemia / Hyperglycemia / Tremors |

# CEFTRIAXONE (Rocephin)

| Simplified Drug Profile | |
|---|---|
| Action | • Third-generation cephalosporin antibiotic<br>• Kills susceptible bacteria by inhibiting cell-wall synthesis |
| Indications | • Septic shock with hypotension<br>• Serious bacterial infection with hypotension, per local EMS education |
| Contraindications / Precautions | • Contraindications: Cephalosporin hypersensitivity; penicillin allergy or prior severe beta-lactam anaphylaxis (per local education).<br>• Premature neonates through 41 weeks postmenstrual age; hyperbilirubinemic neonates; neonates 28 days or younger requiring or expected to require IV calcium.<br>• Precautions: Renal and/or hepatic dysfunction; monitor for anaphylaxis.<br>• Do not mix or administer simultaneously with calcium-containing IV fluids. In non-neonates, flush with compatible fluid between sequential infusions.<br>• Never administer lidocaine-containing ceftriaxone IV. |
| Side Effects | • Injection-site pain / phlebitis; rash; nausea / vomiting; diarrhea<br>• Serious: anaphylaxis, C. difficile colitis, hemolytic anemia, seizures / encephalopathy, biliary or urinary precipitation |

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Emergency Medical Services

Sources: Mercy EMS ceftriaxone education; DailyMed prescribing information.

# Cyanokit - Hydroxocobalamin

| Simplified Drug Profile | |
|---|---|
| Action | • Binds to cyanide to form a non-toxic substance in the body. |
| Indications | • Any patient in cardiac arrest with high suspicion of smoke inhalation<br>• Any patient in cardiac arrest with high suspicion of inhalation of burning synthetic fibers, dyes and plastics |
| Contraindications / Precautions | • None in the emergency setting |
| Side Effects | • Hypertension<br>• Acute Renal Failure<br>• Cherry Red Skin Color<br>• Interferes with Laboratory Testing |

# Dexamethasone (Decadron)

| Simplified Drug Profile | |
|---|---|
| Action | • Corticosteroid – aids in anti-inflammatory responses |
| Indications | • Pediatric anaphylaxis / respiratory emergencies only.<br>0.2 mg/kg (max 8 mg) IV/IO/IM/PO. One dose by one route. |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug.<br>• Precautions: None in the emergency setting |
| Side Effects | • Nausea / Vomiting / Upset Stomach<br>• Headache / Dizziness / Anxiety<br>• Hypokalemia / Hyperglycemia / Tremors |

# Dextrose (10%)

| Simplified Drug Profile | |
|---|---|
| Action | • Carbohydrate<br>• Elevates blood glucose levels quickly |
| Indications | • Hypoglycemia as indicated by patient signs / symptoms / glucometry |
| Contraindications / Precautions | • Contraindications: None in the Emergency Setting<br>• Precautions: A blood sample should be obtained before administering the Dextrose |
| Side Effects | • Local Venous Irritation |

# DILTIAZEM (Cardizem)

| Simplified Drug Profile | |
|---|---|
| Action | • Calcium Channel Blocker / Calcium Antagonist<br>• Slows conduction through the AV Node |
| Indications | • PSVT<br>• Atrial Fibrillation with Rapid Ventricular Response (Afib with RVR)<br>• Atrial Flutter with Rapid Ventricular Response |
| Contraindications / Precautions | • Contraindications: Heart Blocks, Conduction Distrubances, Wolfe Parkinson White (WPW)<br>• Precautions: Hypotension, Don't give to patient's with IV Beta Blockers being administered |
| Side Effects | • Nausea / Vomiting<br>• Hypotension / Bradycardia<br>• Dizziness |

Mercy EMS Emergency Medical Services

# DIPHENHYDRAMINE (Benadryl)

| Simplified Drug Profile | |
|---|---|
| Action | • Antihistamine<br>• Blocks histamine receptors H1<br>• Some sedative effects |
| Indications | • Allergic Reactions<br>• Anaphylaxis<br>• Dystonic reactions due to Phenothiazine administration |
| Contraindications / Precautions | • Contraindications: Asthma, Nursing Mothers<br>• Precautions: Hypotension |
| Side Effects | • Sedation / Headache / Blurred Vision / Confusion / Loss of coordination<br>• Dries Bronchial Secretions / Upset Stomach<br>• Palpitations |

# DOPAMINE (Intropin)

| Simplified Drug Profile | |
|---|---|
| Action | • Sympathomimetic<br>• Inotropic Properties that increase cardiac contractility<br>• Peripheral Vasoconstriction |
| Indications | • Cardiogenic Shock<br>• Hypovolemic Shock (after complete fluid resuscitation has been administered) |
| Contraindications / Precautions | • Contraindications: Hypovolemic shock without fluid resuscitation<br>• Precautions: Don't administer with tachyarrhythmias, Ventricular Fibrillation, Other Ventricular Irritability |
| Side Effects | • Ventricular Tachyarrhythmias / Angina<br>• Hypertension / Headache / Anxiety |

Mercy EMS Emergency Medical Services

# DUO-NEB (Combivent)

Simplified Drug Profile

| | |
|---|---|
| Action | • Bronchodilator<br>• Albuterol (Beta 2) and Ipatropium (Anticholinergic / Antimuscarinic) |
| Indications | • Asthma / COPD<br>• Bronchoconstriction refractory to Albuterol |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to any components of the Duo-Neb. Hypersensitivity to Atropine, Abnormal heart rhythms<br>• Precautions: Patient's with known heart disease, Closed angle Glaucoma. Monitor Blood Pressure, Pulse and ECG when administering Duo-Neb. |
| Side Effects | • Palpitations, Tachycardia<br>• Anxiety, Headaches, dizziness<br>• Sweating |

# EPINEPHRINE (Adrenaline)

Simplified Drug Profile

| | |
|---|---|
| Action | • Sympathomimetic<br>• Beta 1 (Increased Heart Rate, increase cardiac contractility)<br>• Beta 2 (Bronchodilation)<br>• Alpha (Vasoconstriction |
| Indications | • Bronchial Asthma<br>• Exacerbation of COPD<br>• Anaphylactic Shock<br>• Cardiac Arrest |
| Contraindications / Precautions | • Contraindications: Hypertension; tachyarrhythmias.<br>Precautions: Underlying cardiovascular disease and pregnancy. Protect from light; alkaline solutions can deactivate epinephrine. Continuously monitor blood pressure, pulse and ECG.<br>• |
| Side Effects | • Palpitations, Tachyarrhythmias, Anxiety<br>• Headache, Tremors<br>• Myocardial Ischemia especially in the elderly |

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# ETOMIDATE (Amidate)

| Simplified Drug Profile | |
|---|---|
| Action | • Sedative, Non-Barbiturate Hypnotic<br>• No analgesic effect<br>• Cerebro Protective Decreases for ICP / IOP<br>• Has few Cardiovascular or Respiratory effects |
| Indications | • Sedation prior to Intubation (RSI) |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug.<br>(In Arkansas contraindicated in patient's under 8 years of age)<br>• Precautions: Single dose only, monitor for marked hypotension, caution with severe asthma, caution with sepsis patients |
| Side Effects | • Myoclonic skeletal muscle movements<br>• Apnea<br>• Hypertension, hypotension, cardiac dysrhythmias<br>• Nausea / Vomiting, Hiccups, Snoring |

# FENTANYL

| Simplified Drug Profile | |
|---|---|
| Action | • Opiod / Narcotic Analgesic<br>• Analgesia, Sedation, Central Nervous System Depressant<br>• Decreased sensitivity to pain |
| Indications | • Severe Pain |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug<br>• Precautions: Respiratory depression may last longer than the analgesic effects. (Have Narcan ready) Give slowly to reduce the chance of Rigid Chest Syndrome. |
| Side Effects | • Bradycardia<br>• Respiratory Depression<br>• Euphoria |

Mercy EMS Emergency Medical Services

# Furosemide (Lasix)

Simplified Drug Profile

| | |
|---|---|
| Action | • Loop Diuretic<br>• Inhibits reabsorption of Sodium Chloride<br>• Promotes prompt diuresis<br>• Vasodilation |
| Indications | • Congestive Heart Failure<br>• Pulmonary Edema |
| Contraindications / Precautions | • Contraindications: Pregnancy, Dehydration<br>• Precautions: Protect from light. Monitor for excessive fluid and electrolyte losses. Possible postural hypotension. Use caution with patients that have history of hepatic cirrhosis and ascites |
| Side Effects | • Hypotension<br>• Tinnitus, Vertigo, Headache, Blurred Vision<br>• GI Cramping, Constipation, Nausea / Vomiting |

# Glucose (Oral, Instant)

Simplified Drug Profile

| | |
|---|---|
| Action | • Carbohydrate<br>• Elevates Blood Glucose Levels |
| Indications | • Hypoglycemia |
| Contraindications / Precautions | • Contraindications: Patients that can't protect their airway<br>• Precautions: Monitor Glucose levels |
| Side Effects | • None |

Mercy EMS Emergency Medical Services

# Haloperidol (Haldol)

| Simplified Drug Profile | |
|---|---|
| Action | • Antypsychotic<br>• Blocks Dopamine Receptors |
| Indications | • Agitated patients<br>• Aggressive behavior |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug, Patient's with Parkinson's Disease, Severe CNS Depression, Comatose States<br>• Precautions: Use caution with patient's that have severe cardiovascular disorders. Monitor for hypotension. |
| Side Effects | • Extrapyramidal Disorder<br>• Prolongation of QT Interval<br>• Tremors<br>• Somnolence |

# Heparin

| Simplified Drug Profile | |
|---|---|
| Action | • Anticoagulant<br>• Works on different sites in the coagulation system.<br>• Inhibits thrombosis by inhibiting the conversion of prothrombin to thrombin. |
| Indications | • New chest pain suggestive of an Acute Myocardial Infarction<br>• Supplement to thrombolytic therapy to prevent reclotting |
| Contraindications / Precautions | • Contraindications: Don't administer to patient's who already received low molecular weight heparin such as: Lovenox (Enoxaparin) or Dalteparin (Fragmin), Dissecting thoracic aneurysms<br>• Precautions: Don't give to patient already on oral anticoagulants |
| Side Effects | • Hemorrhage |

# Hydromorphone (Dilaudid)

| Simplified Drug Profile | |
|---|---|
| Action | • Opioid / Narcotic Analgesic<br>• Creates analgesia and sedation<br>• Central Nervous System Depressant<br>• Decreased Sensitivity to Pain |
| Indications | • Severe Pain<br>• Preferably for longer transport times |
| Contraindications / Precautions | • Contraindications: Hypersensitivity<br>• Precautions: Respiratory depression may last a while. Have narcan available. Give Slowly |
| Side Effects | • Bradycardia<br>• Respiratory Depression<br>• Euphoria |

Mercy EMS Emergency Medical Services

# KETOROLAC (Toradol)

| Simplified Drug Profile | |
|---|---|
| Action | • Nonsteroidal Anti-Inflammatory |
| Indications | • Short Term pain control<br>• Moderate to Severe nontraumatic pain |
| Contraindications / Precautions | • Contraindications: Trauma, GI bleed, Known Peptic Ulcer Disease, Renal Failure, Labor / Delivery, CVA<br>• Precautions: Hypersensitivity, Pregnancy, Elderly over 65 years of age, Caution with patient's on Warfarin, Lithium, Phenytoin, Digoxin, Methotrexate |
| Side Effects | • Lethargy / Drowsiness<br>• Nausea / Vomiting / Epigastric Pain<br>• Anaphylaxis<br>• Nephrotoxicity |

# LABETALOL (Normodyne)

| Simplified Drug Profile | |
|---|---|
| Action | • Antihypertensive<br>• Alpha and Beta Blocker |
| Indications | Severe hypertension, including pregnancy / postpartum (pp. 65, 124).<br>Local refractory VF / pulseless VT order: p. 35. No VT-with-pulse order. |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug, Bronchial Asthma, Heart Block, Cardiogenic Shock, Bradycardia, Hypotension<br>• Precautions: Blood pressure will need to be continuously monitored. Must not give in the same line as Lasix |
| Side Effects | • Dizziness, Weakness, Headaches<br>• Nausea / Vomiting<br>• Postural Hypotension |

# IBUPROFEN (Motrin, Pediaprofen)

| Simplified Drug Profile | |
|---|---|
| Action | • Nonsteroidal Anti-Inflammatory Drug<br>• Pain Reliever<br>• Fever Reducer<br>• Inhibits cyclooxygenase and lipoxygenase and reduces prostaglandin synthesis |
| Indications | • Fever-related distress: follow the age-appropriate Fever Guideline.<br>• Select one appropriate antipyretic; check prior doses and daily totals. |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug or class of drugs, GI Bleed<br>• Precautions: ASA / NSAID Induced Asthma, Hypertension, CHF, Patient's on blood thinners, Patient's that have consumed large amounts of alcohol |
| Side Effects | • Anaphylaxis, Rash<br>• Abdominal pain/bleeding, Nausea/Vomiting<br>• Dizziness, Headache |

# KETAMINE

| Simplified Drug Profile | |
|---|---|
| Action | • Nonbarbiturate / Dissociative Anesthetic<br>• Produces a cataleptic-like state<br>• Potent Anesthetic, Analgesic and Sedative |
| Indications | • Use in RSI when Etomidate is unavailable<br>• Use in RSI with Asthmatics, Septic and Burn Patients<br>• Tube Tolerance after RSI<br>• Prolonged/Chemical Extrication<br>• Severe pain refractory to Narcotics<br>• Agitated Delirium |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug, Conditions where elevation in Blood Pressure would be hazardous.<br>• Precautions: Emergence Reactions such as vivid dreams, hallucinations, frank delirium, confusion, irrational behavior for up to 24 hours. Respiratory depression may occur if rapidly administered. |
| Side Effects | • Altered Level of Consciousness<br>• Hypertension, Tachycardia, Possible Arrhythmias<br>• Laryngospasms, Nystagmus and increased intraocular pressure |

Mercy EMS Emergency Medical Services

# LIDOCAINE (Xylocaine)

| Simplified Drug Profile | |
|---|---|
| Action | • Antiarrhythmic / Local anesthetic<br>• Suppresses Ventricular Ectopic Activity<br>• Increases Ventricular Fibrillation Threshold<br>• Reduces Velocity of Electrical Impulse through the Conductive System |
| Indications | • Laryngotracheal Anesthesia<br>• Ventricular Fibrillation / Ventricular Tachycardia<br>• Premedication prior to intubation for patient's with Head injuries |
| Contraindications / Precautions | • Contraindications: High degree heart blocks (2nd degree type 2, 3rd degree, bifascicular block), PVC's in conjunction with Bradycardia<br>• Precautions: Maximum dose is 3mg/kg, Dose should not exceed 300mg/hr, Monitor for Central nervous system toxicity, Reduce dose by 50% in patient's older then 70 years old or have liver disease. |
| Side Effects | • Drowsiness, Anxiety, Dizziness, Confusion<br>• Nausea / Vomiting<br>• Convulsions<br>• Widening of QRS |

# MAGNESIUM SULFATE

| Simplified Drug Profile | |
|---|---|
| Action | • Central Nervous System Depressant<br>• Anticonvulsant<br>• Smooth Muscle Relaxer<br>• Anti-arrhythmic |
| Indications | • Eclampsia<br>• Hypomagnesium<br>• Torsades de Pointes<br>• Asthma Refractory to Albuterol<br>• Refractory Ventricular Fibrillation / Pulseless Ventricular Tachycardia |
| Contraindications / Precautions | • Contraindications: Heart Block, Recent MI, Renal Insufficiency / Renal Failure<br>• Precautions: Use caution with patient's on Digitalis, Hypotension<br>• Calcium Chloride should be available as an antidote if respiratory depression occurs |
| Side Effects | • Respiratory Depression<br>• Drowsiness<br>• Abdominal pain / diarrhea |

Mercy EMS Emergency Medical Services

# METHYLPREDNISOLONE (Solumedrol)

| Simplified Drug Profile | |
|---|---|
| Action | • Corticosteroid<br>• Anti-inflammatory<br>• Suppresses immune response in allergic reactions |
| Indications | • Severe Anaphylaxis<br>• Asthma<br>• COPD |
| Contraindications / Precautions | • Contraindications: None when used in an emergency setting<br>• Precautions: Must be reconstituted and used promptly, Onset of action may be 2-6 hours |
| Side Effects | • GI Bleeding<br>• Prolonged Wound Healing<br>• Suppression of natural Steroids |

# Midazolam (Versed)

| Simplified Drug Profile | |
|---|---|
| Action | • Benzodiazepine / CNS Depressant<br>• Sedative<br>• Amnestic |
| Indications | • Pre-medication prior to cardioversion / pacing<br>• Endotracheal Tube Tolerance<br>• Acute Anxiety States<br>• Rapid Sequence Intubation<br>• Seizures |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug, Shock (hypotension), Pregnancy<br>• Precautions: Can cause hypoventilation, respiratory depression / respiratory arrest<br>• Use caution with COPD, Acute Alcohol intoxication, patient's using narcotics/barbiturates, elderly and neonates |
| Side Effects | • Respiratory Depression / Respiratory Arrest<br>• Hypotension<br>• Laryngospasm |

Mercy EMS Emergency Medical Services

# Naloxone (Narcan)

Simplified Drug Profile

| | |
|---|---|
| Action | • Opiod Antagonist<br>• Reverses the effects of Narcotics |
| Indications | • Reverses the Narcotic effects preventing Respiratory and Cardiovascular failure / arrest<br>• May be used to reverse overdoses of: Morphine, Dilaudid, Fentanyl, Demerol, Paregoric, Methadone, Heroin, Percodan, Tylox, Tylenol #3.<br>• Synthetic Analgesic OD include: Nubain, Stadol, Talwin, Darvon |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug<br>• Precautions: May cause withdrawal symptoms. Monitor patient carefully when administering this medication<br>• May need higher dosages for certain overdoses |
| Side Effects | • Withdrawal symptoms |

# NITROGLYCERIN (NitroStat / Nitrolingual)

Simplified Drug Profile

| | |
|---|---|
| Action | • Dilates postcapillary vessels, allows peripheral pooling of blood, and reduces venous return to the heart in order to decrease preload.<br>• Relaxes Arteries which decreases peripheral vascular resistance and afterload.<br>• Dilates coronary arteries |
| Indications | • Angina Pectoris<br>• Cardiac Chest Pain |
| Contraindications / Precautions | Contraindications: Children less than 12 years of age; hypotension.<br>• Precautions: Establish IV access; monitor BP continuously. Use caution with inferior / posterior MI and HR >90. Protect from light.<br>Caution: recent PDE-5 inhibitor use. |
| Side Effects | • Headache<br>• Dizziness<br>• Hypotension<br>• Nausea / Vomiting |

Mercy
Emergency Medical Services

# NOREPINEPHRINE (Levophed)

| Simplified Drug Profile | |
|---|---|
| Action | • Vasopressor<br>• Alpha / Beta Adrenergic Agonist<br>• Causes vasoconstriction, increases heart rate, increases respiratory rate, increases glucose release and decreases metabolic function |
| Indications | • Use with shock patient·s not responsive to fluid bolus of at least 20mL/kg.<br>• Cardiogenic shock with signs of pulmonary edema should receive Dopamine instead |
| Contraindications / Precautions | • Contraindications: Allergy to Sulfites.<br>• Precautions: Must have adequate IV established to avoid extravasation, vein necrosis. Monitor for Hypertension |
| Side Effects | • Ischemic Injury<br>• Bradycardia, Arrhythmia<br>• Anxiety, Headache, Respiratory Distress |

# Olanzapine (Zyprexa Zydis)

| Simplified Drug Profile | |
|---|---|
| Action | • Antypsychotic<br>• Antagonizes Serotonin and Dopamine Receptors |
| Indications | • Agitated patients<br>• Manic Disorder<br>• Schizophrenia<br>• Psychosis |
| Contraindications / Precautions | • Known drug allergies<br>• CNS Depressant<br>• QT Prolongation<br>• Neuroleptic Malignant Syndrome |
| Side Effects | • Extrapyramidal Syndrome<br>• Urinary Retention<br>• Hypotension<br>• DKA |

Mercy EMS Emergency Medical Services

# ONDANSETRON (Zofran)

Simplified Drug Profile

| | |
|---|---|
| Action | • Anti-emetic<br>• Selective Serotonin 5-HT Receptor Antagonist |
| Indications | • Prevention of Nausea / Vomiting |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug<br>• Prolonged QT interval greater then 470 |
| Side Effects | • Dizziness<br>• Headache<br>• Fatigue |

Mercy EMS
Emergency Medical Services

# OXYGEN

| Simplified Drug Profile | |
|---|---|
| Action | • Gas needed for aerobic Cellular Metabolism |
| Indications | • Hypoxia |
| Contraindications / Precautions | • Contraindications: None<br>• Precautions: Monitor COPD patients, Consider Humidification with high-flow rates when available |
| Side Effects | • Drying of Mucus Membranes |

# OXYTOCIN (Pitocin)

| Simplified Drug Profile | |
|---|---|
| Action | • Hormone<br>• Used to contract the uterus, begin lactation, and slow postpartum vaginal bleeding |
| Indications | • Severe Postpartum Vaginal Bleeding |
| Contraindications / Precautions | • Contraindications: Any condition other then postpartum bleeding, Cesarean Section<br>• Precautions: The placenta must have been delivered and no other fetuses present prior to administration. Overdose can cause uterine Rupture. Monitor for Hypertension. |
| Side Effects | • Anaphylaxis<br>• Cardiac Arrhythmias |

Mercy EMS Emergency Medical Services

# PHENYLEPHRINE (Neo-Synephrine)

| Simplified Drug Profile | |
|---|---|
| Action | • Vasoconstriction<br>• Alpha Response<br>• Topical Vasoconstriction |
| Indications | • Control of Severe Epistaxis<br>• Premedication for Nasal Intubation / NPA in order to prevent epistaxis |
| Contraindications / Precautions | • Contraindications: Hypertension, Thyroid Disease, Hypersensitivity to the drug<br>• Precautions: Enlarged Prostrate with Dysuria |
| Side Effects | • Nasal Burning / Stinging<br>• Sneezing<br>• Increase Nasal Discharge |

# PROCHLORPERAZINE (Compazine)

| Simplified Drug Profile | |
|---|---|
| Action | • Phenothiazine<br>• Antiemetic<br>• Antipsychotic |
| Indications | • Helps control Nausea / Vomiting |
| Contraindications / Precautions | • Contraindications: Comatose patient's who have received a large amount of Depressants including alcohol, Hypersensitivity to the drug<br>• Precautions: Possible dystonic reactions may occur. If this occurs treat with Benadryl. |
| Side Effects | • May impair mental and physical ability<br>• Drowsiness<br>• Hypotension |

Mercy EMS Emergency Medical Services

# RACEMIC EPINEPHRINE (AsthmaNefrin)

| Simplified Drug Profile | |
|---|---|
| Action | • Alpha and Beta Agonists<br>• Promotes Arterial Constriction, Has positive Inotropic Effects, Has Positive Chronotropic Effects, Relaxes Bronchial Smooth Muscle, Blocks Histamine Release, Insulin Secretion Inhibition, Relaxes Smooth Muscle in the GI tract |
| Indications | • Moderate to Severe Respiratory Distress associated with Croup |
| Contraindications / Precautions | • Contraindications: Hypersensitivity<br>• Precautions: Must observe for 2-4 hours after administration |
| Side Effects | • Anxiety, Headache<br>• Palpitations, Arrhythmias, Hypertension<br>• Nausea / Vomiting<br>• Rebound Edema |

Mercy EMS Emergency Medical Services

# ROCURONIUM (Zemuron)

| Simplified Drug Profile | |
|---|---|
| Action | • Nondepolarizing Neuromuscular Blockade<br>• Binds to the post-synaptic muscle receptor sites<br>• Relaxes Skeletal Muscles |
| Indications | • RSI<br>• Post intubation management |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug, Unable to ventilate<br>• Precautions: Patient will be paralyzed for up to 30-45 minutes |
| Side Effects | • Possible Histamine Associated Hypotension<br>• Possible Nausea / Vomiting<br>• Hiccups |

# SODIUM BICARBONATE

| Simplified Drug Profile | |
|---|---|
| Action | • Alkalinizing Agent<br>• Combines with excessive acid and forms a weak volatile acid<br>• Increases pH |
| Indications | • Tricyclic Antidepressant Overdose<br>• Severe Acidosis Refractory to Hyperventilation<br>• Rarely used in Cardiac Arrest unless prolonged resuscitation |
| Contraindications / Precautions | • Contraindications: Alkalotic State<br>• Precautions: Correct dosage is essential to avoid overcompensations of pH, Can deactivate catecholamines, Can precipitate with Calcium, Delivers large sodium load, Can worsen acidosis in a patient who is not intubated and adequately ventilated |
| Side Effects | • Alkalosis |

Mercy EMS Emergency Medical Services

# SUCCINYLCHOLINE (Anectine)

| Simplified Drug Profile | |
|---|---|
| Action | • Depolarizing Neuromuscular Blocker<br>• Ultra-short acting<br>• Causes initial transient contractions and fasciculations followed by flaccid skeletal muscle paralysis<br>• May increase vagal tone especially in children |
| Indications | • Achieves Paralysis for RSI |
| Contraindications / Precautions | • Contraindications: Hypersensitivity to the drug. Family history of Malignant Hyperthermia. Severe burns / crush injuries more than 48 hours old. CVA more than 3 days old. Rhabdomyolysis, Pseudo cholinesterase deficiency, Known Hyperkalemia<br>• Precautions: Electrolyte imbalance, Renal, hepatic, pulmonary, metabolic or cardiovascular disorders, Spinal Cord Injuries, Severe anemia, dehydration, Collagen disorders, Quadriplegia, Hemiplegia, Paraplegia, MS, MD, CP, Myasthenia Gravis, Eye Injuries / Narrow angle glaucoma |
| Side Effects | • Muscle Faciculations<br>• Apnea<br>• Hypertension, Hypotension, Dysrhythmias<br>• Nausea / Vomiting, Hiccups, Snoring |

# TERBUTALINE (Brethine)

| Simplified Drug Profile | |
|---|---|
| Action | • Beta Adrenergic Agonist<br>• Bronchodilator |
| Indications | • Prevention / Reversal of Bronchospasm<br>• Asthma<br>• COPD |
| Contraindications / Precautions | • Contraindications: Not to be used to induce labor. Hypersensitivity to the drug.<br>• Precautions: Caution with those with heart problems. Could aggravate diabetes and ketoacidosis. |
| Side Effects | • Tremors, Nervousness, Anxiety<br>• Heart Palpitations, Tachycardia, Hypertension<br>• Nausea / Vomiting<br>• Headache |

Mercy EMS Emergency Medical Services

# TETRACAINE (Altacaine)

| Simplified Drug Profile | |
|---|---|
| Action | • Local Anesthetic<br>• Blocks pain signals at the nerve endings in the eye |
| Indications | • Local Anesthetic used when eye irrigation is needed |
| Contraindications / Precautions | • Contraindications: Hypersensitivity<br>• Precautions: Patient will be unaware of objects touching their eye. Protect the eye from foreign debris and don't allow the patient to rub their eye. |
| Side Effects | • Burning in eye<br>• Conjunctival Redness<br>• Photophobia<br>• Lacrimation |

# TRANEXAMIC ACID (TXA)

| Simplified Drug Profile | |
|---|---|
| Action | • Antifibrinolytic<br>• Competitively binds with plasminogen to prevent clot breakdown and prevents / stabilizes coagulopathy |
| Indications | • **All 3 Criteria Must be met**:<br>1) Mechanism (blunt / penetrating) suggesting potential for major hemorrhaging. (i.e. multiple long bone fracture, flail chest, major abdominal injury, pelvic fracture, amputation)<br>2) Objective signs of hemorrhagic shock associated with trauma (BP<90 or HR>115)<br>3) Known time of injury <3 hours |
| Contraindications / Precautions | • Contraindications: Renal Failure, Hypersensitivity, History of thromboembolism, Known Aneurismal SAH, Injury > 3 hours.<br>• Precautions: Give bolus over 10 minutes to prevent hypotension. Don't give in the same line as blood products |
| Side Effects | • Possible risk of Thrombosis |

Mercy EMS Emergency Medical Services

## EMS 24 HOUR SCHEDULE PROCEDURES

**PURPOSE:** To provide ambulance services with consistent scheduling and pay procedures for 24 hour shifts.

**PROCEDURE:**

1. Co-workers scheduled for 24 or more hours on duty shall remain in quarters or with their assigned ambulance at all times. Full time co-workers (above 1.0 FTE) are scheduled based on the schedule format of the service area which can be up to 5 days per pay period. Part-time co-workers are scheduled a minimum of 48 hours per pay period. PRN co-workers are scheduled as needed, and are not guaranteed hours. PRN co-workers shall provide at least 24 hours of availability per month. Part-time and PRN co-workers should not be scheduled more than 5 shifts per pay period unless the extra shift(s) have been posted for overtime.

   Outlying EMS staff members will work not more than two (2) consecutive 24 hour shifts in a row without the approval of their EMS Manager or Supervisor. Working more than two (2) consecutive days will rarely be approved, and only in cases where the employee has had appropriate periods of rest. At no time shall an EMS coworker work more than 72 hours in a row without at least 12 hours of off duty time.

2. ~~EMS co-workers will be compensated at the overtime rate where outlined by Mercy Payroll Policy. All unscheduled overtime must be approved by the EMS Manager or Supervisor with the exception of late calls.~~

3. Co-workers can sleep or rest during their shift, providing that all station duties and assignments are completed. Sleeping is not allowed before 12:00 (noon), unless the crew (s) performed night activity on the previous shift.

4. ~~Co-workers will only begin being paid overtime after they have completed forty (40) hours of productive time in a one week period.~~

5. Paid Time Off (PTO) shall be requested on an hour for hour basis for any time off needs. For all full time coworkers, PTO must be utilized anytime worked hours do not meet 1.0 FTE (40 hours per week). Co-Workers taking an approved PTO Shift and working an Overtime shift that same pay period shall be allowed to utilize their PTO hours.

6. Each employee must maintain their time card. In some areas that have time clocks or availability to utilize UKG Dimensions telephony, the time card will be kept via those systems. In outlying areas without access to those systems, the time card will be kept digitally in UKG Dimensions, either by use of the approved application or the website version. It is each employee's responsibility to maintain their time card at the end of each shift to allow the EMS Manager or Supervisor to review and approve any punches/requests within the UKG Dimensions system in a timely manner. All time cards should be reviewed and approved by the coworker after their last shift worked in the pay-period.

7. The pay period ends at 0600 on the Sunday morning following the second Saturday of the pay period.

8. Co-workers requesting a shift trade will use the approved process outlined by the local department to do so, to include Manager or Supervisor approval.

9. Crew members that are on a 48-hour shift are not allowed to sleep in after 0700. Co-workers are expected to be awake, properly groomed, uniformed and prepared to perform work duties, immediately after 0700. If the Co-Workers have been productive during the previous shift night hours they may sleep in past 0700 an equal amount of time they were productive for, on a one for one basis. If co-workers are productive 5 hours or more hours during the previous shift between the hours of 2300-0700, they should be considered out of service until they have received 5 continuous hours of sleep, they may sleep past the 5 hours according to the above guidelines, but will be available for service.

Final Review and approval by: Robert Patterson - Executive Director, Mercy EMS

## PRN WORK REQUIREMENT

**PURPOSE:**
In order for PRN co-workers to remain familiar with equipment, procedures, and day to day operational procedures, this policy details the requirements for PRN co-workers of Mercy EMS.

**PROCEDURE:**

A. PRN co-workers are utilized as needed, but generally work less than 80 hours per pay period. They are not guaranteed work, but are willing to work as their assigned department needs them. PRN co-workers are required to provide availability of at least 24 hours per month in outlying departments who staff using 24-hour shifts, or at least12 hours per pay period for co-workers in other departments where non-24 hour shift patterns exist. Coworkers should make every attempt to work each month/pay period to ensure they remain familiar with operations and patient care.

B. PRN co-workers are responsible for communicating to their Manager, or Supervisor, the days they are available to work by the request off deadline for the schedule period. This will facilitate the regular scheduling of PRN co-workers as needed. PRN coworkers shall ensure available hours are offered to their home department first, if no hours are available in the home department, they may pick up shifta in other departments as needed.

C. PRN co-workers who do not meet the minimum work, training or meeting requirements will be considered to have voluntarily resigned unless other arrangements have been made with their EMS Manager or EMS Director.

D. As a condition of employment, PRN co-workers are responsible to meet the same educational and certification requirements as defined by the EMS Medical Director and Mercy Health System policy.

Final Review and approval by: Robert Patterson - Executive Director, Mercy EMS

## EMS STAFF MEETING/SHIFT HUDDLE POLICY

**PURPOSE:** To describe the procedure and requirements for EMS staff meetings and department huddles.

**PROCEDURE:**

1. Staff meetings will be held as needed for each department. Coworkers will be informed of staff meetings as far in advance as possible and should make every effort to attend. Huddles should occur on a regular basis as outlined by the manager of the department.

2. The meetings should include, but not be limited to, discussion of: patient care, safety, driving, hospital and department policies, supplies and equipment, interpersonal communications and other pertinent matters.

3. Co-workers attending staff meetings or training are expected to dress in good taste. Co-workers may be recognized by patients and visitors even though they are not working. Such things as bare feet, swim wear, short shorts, jeans with frayed material or holes, tight clothes, tops without appropriate undergarments, and clothing with off-color wording or graphics are inappropriate.

4. Co-workers that cannot attend a staff meeting are still responsible for knowing the content of the meeting. They should check with their EMS Manager or Supervisor to be made aware of policies and the meeting content. Co-workers shall check their Mercy email with regularity – during each shift, if at all possible.

Final Review and approval by: Robert Patterson - Executive Director, Mercy EMS

# 1-4 EMS Facility Entertainment and Leisure Activities

## AMBULANCE STATION ENTERTAINMENT POLICY

**PURPOSE:** To maintain a work environment for our co-workers that is free of offensive literature, TV programs and behavior in general.

**PROCEDURE:** The EMS facilities are provided with a television and media devices to be used by the employees for educational purposes. However, employees may use these devices for entertainment when they have free time while on duty at the station.

1. Movies not allowed to be shown at the station are those that are rated “X," or mature rated.

2. Entertainment movies or shows that are offensive to anyone present at the station shall be discontinued immediately. Personnel are obligated to ask all other persons present if a movie being shown may be or is offensive to them. If this is the case, the movie is not to be shown or the TV must be turned off immediately. Also, if an employee asks another employee to turn off the movie or show because it is offensive, it should be done immediately.

3. If there is any conflict or confusion regarding entertainment, the EMS Manager or Supervisor shall be contacted immediately.

4. This is a privilege, and it should be treated as such.

5. The playing of songs or singing of songs with offensive lyrics about sex, violence, or demeaning to others is prohibited. Music that is offensive to anyone present at the station shall be discontinued immediately.

6. Magazines, books, posters, calendars, and pictures can also be offensive to others. Any of these that are offensive to anyone present at the ambulance station shall be removed immediately.

7. Entertainment centered on gambling should refer to the current Health System policy.

8. Co-workers should also observe the same cautions/procedures on their personal electronic devices.

9. The Internet is to be used in the same manner as the television above. It is to be used as an educational tool; however employees may use it for their personal use when they have free time while on duty at the station. Pornographic sites on the Internet are not to be viewed at the ambulance stations. Other sites that are considered offensive to others present shall not be viewed and shall be discontinued immediately.

Final Review and approval by: Robert Patterson - Executive Director, Mercy EMS

FATIGUE POLICY

PURPOSE: Mercy EMS is committed to promoting a safe and healthy environment for co-workers, patients and visitors. Such an environment is possible only when each employee is able to perform their job duties in a safe and effective manner and remains able to do so throughout the entire time they are working. Co-workers who are not fit for duty and become fatigued during their shift present a safety risk to themselves and to others, increasing the potential for medical errors or injuries.

PROCEDURE:

It is possible that co-workers working shifts that span 24 hour or longer may find themselves exhausted from continuous responses/transports and other productive work. For the purpose of this policy, productive work is described as responses and associated duties, education, daily station duties etc.

Co-workers who work 24 hours or longer are encouraged to take naps during down time in order to reduce fatigue. Numerous studies of shift workers support use of short-duration naps (e.g., 20-30 minutes) during scheduled shifts. Actual sleep may not be needed, and the act of resting with one's eyes closed in a quiet location can be beneficial. Extended naps on duty may result in sleep inertia – that groggy feeling immediately after awakening. Sleep inertia can last minutes or even hours after waking and impact cognition/performance.

Calling out for fatigue must be a preventative step to ensure the safety of all parties involved and is encouraged if necessary. Calling out for fatigue will not result in any disciplinary action if deemed appropriate.

The fatigued crew member will contact on duty supervisor and request down time. That crew is then to go to a dedicated sleep room and rest for a period of 5 hours. At the end of the 5-hour period the crew will be back in service and available for assignment.

Mercy EMS utilizes a transport decision matrix to assist in determining if a coworker can safely take a transport. This matrix may help in determining fatigue.

| | 0-3 hours | 3-6 hours | 6-9 hours | 9-12-hours | 12-14 hours | 14+ hours | UNIT SCORE |
|---|---|---|---|---|---|---|---|
| Time on Duty | 1 | 2 | 3 | 4 | 5 | 6 | |
| Productive Time Prior to Request | 1 | 2 | 3 | 4 | 5 | 6 | |
| Total Length of Transfer | 1 | 2 | 3 | 4 | 5 | 6 | |
| Length of Scheduled Shift | ≤ 12 hours | | 12 + to 24 hours | | ≥ 24 hours | | |
| | 1 | | 2 | | 3 | | |
| Time of Transfer | 0700-1500 | | 1500-2300 | | 2300-0700 | | |
| | 1 | | 2 | | 3 | | |
| Outside Temperature | T < 0 | 0-30 | 30-50 | 50-70 | 70-90 | 90 < T | |
| | 3 | 2 | 1 | 1 | 2 | 3 | |
| Wind Speed | None | 0-10 | 10-20 | 20-30 | 30-40 | 40+ | |
| | 1 | 1 | 2 | 2 | 3 | 3 | |
| Precipitation | None | | Light-Moderate | | Heavy | | |
| | 1 | | 2 | | 3 | | |
| UNIT SCORE | | | | | | | 0 |

Matrix Score < 8 - 12 > No Action Required
Matrix Score < 13 - 17 > Crew Safety Briefing
Matrix Score < 18-21 > Crew Safety Briefing, Consider adding additional crew member, Consider postponing transfer for oncoming shift
Matrix Score < 21 or Greater> Transfer will be postponed until Oncoming Shift or Auxillary Staffing arrives

Final Review and approval by: Robert Patterson - Executive Director, Mercy EMS

# 1-6 Monthly Co-Worker License-Certification Review

## MONTHLY CO-WORKER LICENSE/CERTIFICATION REVIEW

**PURPOSE:** To ensure that all Mercy EMS co-workers are properly licensed with the Department Health in the State they are assigned and that other required certifications are in good standing.

**PROCEDURE:** EMS Supervisors are responsible for ensuring that assigned co-workers have all current licenses and certifications required by their job description. This includes a State issued EMS license for the level of practice. Other certifications required for the co-workers job description will also be verified as part of this monthly process.

1. On the first business day of each month, EMS Supervisors will confirm current licenses and certifications for their assigned co-workers through a review of data in the ESO system. ESO will be used to track all State EMS license, State Drivers Licenses, ACLS, PALS, and BLS as applicable.

2. Regional Managers or Operations Supervisors are responsible for confirming that the review has been completed and will certify by email to the EMS Administrative department that all EMS co-workers are properly licensed and credentialed.

3. The EMS Office Coordinator will perform an audit of one co-worker from each region and on completion will certify by email to the Executive Director and EMS Medical Director that all co-workers are in good standing to practice.

4. Co-workers not possessing a current license for the state of practice are not allowed to perform any duties and shall be suspended pending successfully obtaining proper licensure.

4. Mercy Human Resources utilizes a tracking system for monitoring licenses and certifications. This system sends updates to the Director of EMS, Regional EMS Manager and the co-workers assigned Supervisor at regular intervals. This system does not substitute for any of the processes described above.

Final Review and approval by: Robert Patterson - Executive Director, Mercy EMS

## AMBULANCE THIRD RIDER POLICY

**PURPOSE:** To provide consistent policy and procedure for approved third riders at Mercy Emergency Medical Services.

**PROCEDURE:** Riding with Mercy EMS ambulances is for educational purposes only. Riders are to observe only (no patient care) unless specifically directed to do otherwise by Mercy EMS personnel.

Approved riders include fire personnel, 1st responders, law enforcement, military personnel, dispatchers and nursing staff working in the service area. Other rider requests will be considered on a case by case basis.

Those persons approved to ride may do so between the hours of 7 AM and 11 PM seven days a week in areas with 24 hour scheduling. Riders may ride in Springfield at all hours of the day.

Students in EMS related programs requiring ride time for clinical skills will have priority for scheduling shifts.

Riders must follow the policies and procedures set forth by Mercy Talent Development and Optimization to be approved to ride and during the educational experience. Current guidelines and process can be found on the Mercy Shadow/Observation Experience website HERE.

All riders will conform to Mercy EMS appearance and grooming standards during ride time.

Mercy EMS Staff shall consult a Supervisor any time a concern exists regarding the approval or appropriateness of a rider. If a rider is asked to leave, notification should be made to the local manager and the EMS Executive Director.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# 1-7 Ambulance Third Rider Release Form

WAIVER OF LIABILITY FOR RIDE ALONG PARTICIPANTS

The undersigned ("Participant") desires to participate in an observational ride along in a Mercy Emergency Medical Services vehicle to observe ambulance operations while responding to emergency situations. The participant recognizes that such activities are unpredictable and can present hazardous situations.

For and in consideration of the undersigned being given the opportunity of observing operations and functions of Mercy EMS by riding in a passenger vehicle, ambulance, or any other equipment operated by Mercy EMS, participant assumes any and all risks pertaining thereto. Participant releases Mercy Health System, and any caregivers acting on their behalf from any and all liability whatsoever for any injuries, death, damages, and claims the participant, their heirs, or dependents may sustain by participating in this ride along activity.

To the extent the participant may have access to private, confidential, nonpublic or protected information during the observation shift, participant agrees to comply with all applicable state and federal law, including but not limited to the federal Health Insurance Portability and Accountability Act ("HIPAA"). Participant promises to protect the confidentiality of any and all such information that they may learn through their participation in the ride along program and will at all times act accordingly.

Participant agrees to the ride along guidelines below and agrees to abide by the requirements contained therein. If Participant is less than eighteen (18) years of age, their parent or legal guardian must also sign this document. Participants under the age of seventeen (17) will not be allowed to ride on EMS units (except for GOCAPS students and EMS Explorers).

Guidelines:
1. Rider must remain with the assigned EMS crew at all times. Rider will not exit the ambulance or support vehicle unless instructed to do so by a Mercy caregiver
2. Riders will be allowed in the day room, apparatus bay, and public areas only, access to any other area must be accompanied by a Mercy caregiver.
3. Riders must adhere to the dress code: Long pants, shirts must be without any logos (unless approved in advance), closed-toed shoes only.
4. Riders must conduct themselves in a professional manner at all times.

My signature below indicates I have read, understood and agree to abide by all rules set forth above.

| _____ | _____ | _____ |
|---|---|---|
| Printed Name of Participant | Signature | Date |
| _____ | _____ | _____ |
| Printed name of Parent or Guardian | Signature | Date |

(Parent or Guardian must sign if participant is under eighteen years old)

Participant's Phone Number: _____

| _____ | _____ | _____ |
|---|---|---|
| Printed Name of EMS leader approving ride | Signature | Date |

## EMS STATION VISITOR POLICY

**PURPOSE:** To provide rest for the crews who are on duty working 24-hour shifts.

**PROCEDURE:**

1. All visitors must be off the premises by 2200 hours.

2. Visitors and co-workers shall make every attempt possible to provide other crew members with opportunities to rest (i.e. keeping noise down).

3. Anyone found to be disruptive shall, at the EMS Manager's or Supervisor's discretion, be removed from the station without warning.

4. Crew bedrooms are solely for the use of on duty crew members assigned to that specific room and are off-limits to all others. Privacy of co-workers while in their assigned bedrooms shall be respected by all.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## EMS STATION VISITOR POLICY

**PURPOSE:** To provide guidance for leaders and recently graduated paramedics who already work in an EMS role.

**PROCEDURE:**

1. Any coworker who has upgraded their EMS licensure to Paramedic shall provide their state issued Paramedic license and current ACLS and PALS certification to their leader and HR by means of the Workday portal.

2. Newly licensed Paramedics will be required to attend specific days in the EMS new hire academy as assigned by the education department.

3. Newly licensed Paramedics will complete the ALS Field Guide and return it to the education department within 90-days. They must also complete assigned online education. Once these are complete, the Paramedic will be allowed to schedule scenario testing to upgrade to Paramedic II

4. During orientation, the new Paramedic will not be allowed to work in any area outside of their primary assignment area. Any extra shifts picked up, must be with a Paramedic II.

5. At the time of upgrade, if an open paramedic position exists in the coworkers primary assignment area, they will be required to apply for the open position through Mercy careers and will move to that open position.

6. In the event that no Paramedic position is open in the providers primary assignment area, they will be allowed to upgrade and remain in their position. Should a Paramedic position become open within 30 days of upgrade, the provider will be required to move into the open position. After 30 days, they will not be required to move into other positions.

7. If the coworker opts to receive a sign on bonus, and they do not move from their current position, they will be required to move into any open Paramedic position that opens in their primary assignment area for the duration of the sign-on bonus payout. The same applies for coworkers who have received tuition assistance for their Paramedic program.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

**PURPOSE:** When wearing a quality uniform, EMS coworkers project an image of professionalism, confidence and control.

**PROCEDURE:** The approved uniform policy is as follows:

**A. Class-A (Formal Dress Uniform)**

The Class-A Formal Dress Uniform may be utilized for weddings, funerals and other special functions approved by the EMS Director.

I. Command Staff (Executive Director, Operations Manager, Regional Managers, Operations, and EMS Supervisors)

a. Coat

Double-breasted Navy Blue Fechheimer (Flying Cross) 100% Polyester dress coat, with Gold EMS buttons. The Mercy Emergency Medical Service patch, and appropriate sleeve striping will be displayed on both the Right and Left sleeves in accordance with Addendum #2. Approved Gold Badge will be displayed on the badge tab over the left chest of the coat. A black wool full length overcoat may be worn over the dress coat, for outdoor activities during the winter period.

b. Pant

Navy Blue Fechheimer (Flying Cross) 100% Polyester dress pant. Female Coworkers may wear Navy Blue 100% Polyester dress skirt in place of trousers.

c. Shirt

Long sleeve (white) Flying Cross Deluxe shirt. The shirt shall display shoulder patches, rocker panels, collar pins, and a gold name badge over the Right Pocket; all in accordance with uniform Addendum #2.

d. Belt

Black patent leather 2” belt with gold buckle.

e. Shoes

Black patent leather lace-up style shoes.

f. Socks

Black socks.

g. Tie

Navy Blue clip-on Polyester or Navy Blue Polyester tied into a Double Windsor knot.

f. Headwear

Navy Blue Cool Max Oval Cap with gold band and gold cap badge

II. Ground Staff (Paramedics, EMT’s, and EMD’s)

a. Coat

Single-breasted Navy Blue Fechheimer (Flying Cross) 100% Polyester dress coat, with Gold EMS buttons. The Mercy Emergency Medical Service patch, and appropriate sleeve striping will be displayed on both the Right and Left sleeves in accordance with Addendum #2. Approved Gold Badge will be displayed on the badge tab over the left chest of the coat. A black wool full length overcoat may be worn over the dress coat for outdoor activities during the winter.

b. Pant

Navy Blue Fechheimer (Flying Cross) 100% Polyester dress pant. Female Coworkers may wear Navy Blue 100% Polyester dress skirt in place of trousers.

c. Shirt

Long sleeve (white) Flying Cross Deluxe shirt. The shirt shall display shoulder patches, rocker panels, and collar pins in accordance with uniform policy Addendum #2, and a Gold name badge shall be worn over the Right Pocket; all in accordance with uniform Addendum #2.

d. Belt

Black patent leather 2" belt with silver buckle

e. Shoes

Black patent leather lace-up style shoes.

f. Socks

Black Socks

g. Tie

Navy Blue clip-on Polyester or Navy Blue Polyester tied into a Double Windsor knot.

**B. Class B Uniform**

The Class-B Uniform may be utilized for weddings, funerals and other special functions approved by the EMS Manager or EMS Director.

a. Shirt

1. Ground Staff (Paramedics, EMT's, & EMD's)
Coworkers staffing a ground ambulance shall wear a Gray Flying Cross Deluxe shirt. The shirt shall display shoulder patches, rocker panels, collar pins, and Hospital issued ID in accordance with uniform policy Addendum #2. The shirts shall display Black epaulets. Gray uniform shirts may be either short or long sleeve depending on the weather. A black T-shirt shall be displayed under the uniform shirt. The under T-shirt may be long sleeve only if the outer gray shirt is also long sleeved. No long sleeve T-shirts shall be displayed under short sleeve shirts.

2. (Supervisory Personnel)
Supervisory Personnel not staffing an ambulance shall wear a White Flying Cross Deluxe shirt. The shirt shall display shoulder patches, rocker panels, collar pins; Hospital issued ID, Mercy EMS Badge, and a gold name badge in accordance with uniform policy Addendum #2. White uniform shirts may be either short or long sleeve depending on the weather. A white cotton T-shirt shall be displayed under the uniform shirt. The under shirt may be long sleeve or mock turtleneck, but may only be worn in conjunction with a long sleeve uniform shirt

b. Pant

A Black either EMS or Work pant, as described in Uniform Addendum #1. ***The pants are to be worn without any ankle zippers.*** Pants shall not be tucked into boots.

c. Belt
1. Plain or basket weave design leather belt
2. Webbed duty belt
3. Black only
4. 2” or 1 1/2” width
5. Chrome buckle with no design, buckleless type belt, and black plastic buckle.

d. Socks

Socks will be worn at all times. If the employee is wearing a shoe or shorter than an 8” boot, black or navy blue socks shall be worn.

e. Footwear
1. Black only
2. Slip resistant sole
3. Low quarter shoes - **no canvas**
4. Boots
   a. Wellington type (no cowboy boots)
   b. Low top or high top
   c. Military style high top
5. Footwear with laces - black laces only

**C. Class C (Duty Uniform)**

Duty uniform will be the standard operations uniform.

a. Shirt

1. Ground Staff (Paramedics, EMT’s, & EMD’s)
   Personnel staffing a duty or a standby ambulance will wear the Propper I.C.E. Performance Polo Shirt in the color charcoal. The Mercy EMS logo will be embroidered on the left chest, and the Job Title embroidered on the right chest. A black t-shirt will be work underneath the polo at all times
2. Supervisory Personnel
   All supervisory personnel, not staffing a duty or stand by ambulance, will wear the Propper I.C.E. Performance Polo Shirt in the color White. The Mercy EMS logo will be embroidered on the left chest and the Job Title embroidered on the right chest. A white T-shirt will be worn underneath the polo at all times.

***All other uniform requirements are to remain consistent with “Class B” dress***.

**D. Specialized Uniforms**

a. Honor Guard
The Honor Guard will utilize Light House Uniforms EMS Honor Guard Uniform as outlined in the Honor Guard Policy and Procedure manual.

b. Bike Team

c. Special Operations Response Team
1. Training / Callouts
2. High Risk Warrants
3. Dignitary Protection

d. FEMA Strike Team – Decided prior to deployment as needed.

e. Outpatient Transportation Division
1. Shirt
Outpatient transport drivers shall meet the same requirement for shirts as outlined for Mercy EMS ground staff. Outpatient Transport drivers shall display a licensure patch on the right sleeve if applicable.
2. Pants
Outpatient Transport drivers shall meet the same requirement for uniform pants as outlined for Mercy EMS ground staff.
3. Footwear
Outpatient Transport drivers shall meet the same requirement for footwear as outlined in Section "B" for Mercy EMS ground staff.

f. Equipment Technician
1. Shirt
Red Mercy M Wear
2. Pant
The Equipment Technician shall meet the same requirement for pants as outlined in Section "B" for Mercy EMS Ground Staff.
3. Shorts
The Equipment Technician may utilize a Black uniform during each calendar year between May 1st and October 1st.

**E. Training, Education, & Meetings**

Mercy EMS coworkers shall maintain a professional appearance at all times while representing Mercy during all mandatory trainings, meetings, and education events. Dress for such events will consist of business casual attire, or Class B Uniform dress. All Health system and departmental policies regarding personal appearance shall apply as well.

**F. Special Circumstances and Personal Equipment**

a. Shorts (must be approved by Director, Manager, or Ops Supervisor)

As approved, pro-tuff shorts may be worn during extended outdoor standby activity where heat index is anticipated to be high. While preferable for both coworkers to wear matching uniforms, it is acceptable for one coworker to wear shorts in approved scenarios.

b. Job Shirt

A Black 5.11 job shirt may be worn during cold weather conditions. Also, the job shirt shall not be used as a replacement for the duty uniform, and may only be worn over the duty uniform shirt. Job shirt will also have embroidery as the Class-C.

c. Jacket

A Black 5.11 Tactical Response Jacket or Chameleon Soft-Shell Jacket may be worn. Jackets will also have embroidery as the Class-C for supervisor and no title on right chest for non-supervisory staff.

d. Head Gear

1. Baseball cap

A Black baseball cap with Mercy Logo embroidered may be worn at any time. The cap must be in good condition and clean at all times.

2. Cold weather

A black stocking cap or black 5.11 Tactical beanie may be worn when the temperatures fall below 40 degrees Fahrenheit. If worn they must display the Mercy EMS logo.

e. Gloves

Uniform gloves are optional, if work gloves, they will be black in color.

f. Personal Equipment

1. Eye Glasses

Eye glasses used for corrective vision are the choice and requirement of the employee to maintain. Glasses should be shatter proof.

2. Sunglasses (non corrective)

Frames shall be black, navy blue, chrome or brass, all lenses should be polarized, and **Mirror lenses are not approved.**

g. Eye Glasses Strap

1. Eye glasses straps should be either black or navy blue.

h. Applicable State Drivers license must be carried on person.

i. Applicable State EMS license must be carried on person.

***NOTE:** **Personal equipment deemed to be excessive or inappropriate by the EMS Manager, Operations or Field Supervisor shall not be worn while on duty.**

**G. Personal Appearance**

a. Hair

1. Must conform to M-wear standards.
2. If hairstyle could allow hair to fall forward into their face or toward a patient, hair shall be secured in such a manner to prevent this from occurring.

b. Mustaches and beards

1. Must conform to M-wear standards.
2. Must not interfere with HEPA Respirator fit

**H. Uniform Appearance**

1. Clean and odor free
2. No rips, tears, worn out or discolored areas
3. Buttons in place and buttoned except top shirt button
4. Shoes clean, shined and in good repair.
5. Piercings – must comply with M-wear requirements.
6. Good grooming is required at all times including regular bathing, oral hygiene, and the use of an effective antiperspirant/deodorant. Sensitivity to others in the use of colognes and perfumes is required. All co-workers should smell clean without odors on them or their clothes, as this may be offensive to patients, co-workers and others served.

**I. Uniform Allowance**

1. Each EMT and Paramedic will be eligible for an annual uniform allowance. This allowance will be awarded at the beginning of the fiscal year or at the time of hire. Co-workers terminating employment are required to return uniforms acquired with uniform allowance funds to their service manager or supervisor.
2. The uniform allowance amounts will be reviewed on an annual basis by the Executive Director or their designee to determine an appropriate amount based on current costs.

***NOTE:** EMS Coworkers may purchase all required uniforms at the Galls site from July 1st to May 1st. On July 1st each year, the coworker will receive a Uniform Allowance credit for the current fiscal year. Uniform balances may not be carried over from one year to the next. The uniform allowance credit will be applied electronically to each coworker account thru the Galls site. Coworkers may continue to purchase uniforms and equipment on the site past the allotted uniform allowance; however payment will be required at time of purchase in order to be processed. Coworkers may also purchase approved items from other vendors, however coworkers will not receive any reimbursement for these purchases, even if made while the coworker has a positive uniform account balance.

**J.** **Uniform Utilization**

Uniforms and approved equipment should only be utilized while on duty with Mercy EMS. They shall not be worn in places or at functions that are not consistent with the conservative image of the Health Center. Parts of the official uniform, with identifying insignias, shall not be worn with other attire. Jackets or windbreakers may be worn for rapid identification during emergency situations.

Uniformed personnel shall not engage in any political activity, product endorsement, or activity that suggests that the Health Center supports such action without expressed written permission from Mercy Administration.

When any coworker terminates their employment with Mercy either voluntarily or involuntarily, all uniform materials including but not limited to all apparel with the Mercy logo or EMS insignia must be returned to either EMS Headquarters or the closest EMS base within 7 days. Arrangements should be made with any EMS Supervisor, Manager, or Office Coordinator to solicit uniform return.

***NOTE:** **If you have any questions or need clarification on the uniform policy, contact your supervisor.**

UNIFORM POLICY
ADDENDUM #1

***Dress Uniform Shirt***

Flying Cross Deluxe (white) – Long Sleeve Only

***Duty Uniform Shirt***

Flying Cross Deluxe (gray) – Short or Long-sleeved
Flying Cross Deluxe (white) – Short or Long-sleeved

***Modified Duty Polo***

Propper I.C.E. Performance Polo Shirt (Charcoal) – Ground Personnel / EMD's
Propper I.C.E. Performance Polo Shirt (White) – Supervisory Personnel

***Pants***

**Dress**

Navy Blue Fechheimer (Flying Cross) 100% Polyester

**EMS type**

Black Pants – Approved pants are on our vendor website

***Coats / Outerwear***

**Dress**

Navy Blue Fechheimer (Flying Cross) 100% Polyester

**Duty**

5.11 Tactical Responder Parka (Navy) – Ops Sup, Managers, Directors
Alliance VEA 3 in 1 Coat (Mfg. Reflective Apparel)
Product Number YL-MISC- (chose one: MD, LG, XL, 2XL, 3XL)

**Work shirt / Job shirt**

5.11 Tactical Job Shirt – Black

**Windbreaker**

5.11 Tactical Response Jacket – Black
5.11 Chameleon Soft-Shell Jacket – Black

**Rain Gear**

30" Rain Jacket or 48" PVC Vinyl Raincoat

UNIFORM POLICY
ADDENDUM #1 CONTINUED

***Collar Pins For Flying Cross***

| | | |
|---|---|---|
| **Executive Director** | **–** | **Two Gold Stars (white)**<br>**Two Silver Stars (grey)** |
| **Operations Manager** | **-** | **Single Gold Star (white)**<br>**Single Silver Star (grey)** |
| **Regional Manager** | **–** | **Gold Oak Leaf**<br>**Silver Oak for Duty Uniform** |
| **Operations Supervisor /**<br>**Communications Supervisor** | **–** | **Gold Captain Bars (white)**<br>**Silver Captain Bars (gray)** |
| **EMS Supervisor** | **–** | **Silver Lieutenant Bar (gray)**<br>**Gold Lieutenant Bar (white)** |
| **Senior EMD** | **–** | **Silver Lieutenant Bar (gray)** |
| **Paramedic** | **–** | **Blue Star of Life (left) and,**<br>**EMS Paramedic or**<br>**Specialty Course Completion Pin (right)** |
| **EMT** | **–** | **Blue Star of Life (left) and,**<br>**EMS Emergency Medical Technician (right)** |

***Badge***

**Supervisors only on white Flyingcross**

**Blackington – B1490**

***Name Plate***

**Blackington -**

UNIFORM POLICY
ADDENDUM #2

## ***Patches***

### Dress Coat

Mercy Emergency Medical Services patches will be displayed on both sleeves of the Class "A" Dress Coat. Patches shall be applied 2-inches below the shoulder seam.

### Uniform Shirt

Mercy Emergency Medical Services patch will be displayed on the Left sleeve, 2-inches below the shoulder seam. Certification Patch (National Registry, Missouri License, CCEMTP, or PNCCT) will be displayed on the Right sleeve, 2-inches below the shoulder seam.

## ***Sleeve Striping***

### Dress Coat

Sleeve Striping for the Dress Coat will follow the online on page 12.

# 1-10 Uniform - Dress Code

| | | |
|---|---|---|
| | EMT | Wears Field Collar Brass on Class B Uniform |
| | Paramedic | Wears Field Collar Brass on Class B Uniform |
| | EMT (FTO) | Wears Field Collar Brass on Class B Uniform |
| | Paramedic (FTO) | Wears Field Collar Brass on Class B Uniform |
| | Field Supervisor/Lead Paramedic/Senior EMD | Wears Single Bar Collar Brass on Class B Uniform |
| | Operations Supervisor/Comm Center Supervisor | Wears Double Bar Collar Brass on Class B Uniform |
| | Regional Manager | Wears Oak Leaf on Class B Uniform |
| | Assistant Medical Director | Caduceus Collar Brass |
| | EMS Operations Manager | Wears Star on Class B Uniform |
| | Medical Director | Caduceus Collar Brass |
| | EMS Director | Wears two Stars on Class B Uniform |

***Sleeve Rocker's***

**Dress Coat**

No Sleeve Rocker's shall be displayed on the Dress Coat.

**Uniform Shirt**

Sleeve Rockers will be displayed on the left sleeve of the uniform shirt. The employee may display no more than two sleeve rockers. The first may indicate status (i.e. FTO, Manager, etc…), and the second may indicate years of service. The first sleeve rocker shall be placed 1/8-inch below the Mercy EMS Patch and the second shall be placed 1/8-in below the first rocker.

A coworker shall receive one star for each year of continuous EMS service.

***Collar Pins***

**Dress Coat**

At this time, no collar pins will be worn on the EMS dress coat.

**Uniform Shirt**

Collar pins shall be displayed at all times on all duty uniform shirts. EMT's and Paramedics shall display the "Light Blue" Star of Life on the Right Collar, and either an "Emergency Medical Technician" or "Paramedic" pins on the Left Collar. All EMS Supervisors and Managers shall display the collar pins set forth for each rank as identified in Addendum #1.

**Job Shirt / Work Shirt**

At this time, no collar pins will be displayed on the Job / Work Shirt.

**Response Jacket**

At this time, no collar pins will be displayed on the Response Jacket.

***Embroidery***

**Job Shirt / Work Shirt**

The Mercy EMS Logo shall be displayed on the left chest, and the Job Title shall be displayed on the right chest.

**Response Jacket**

The Mercy EMS logo shall be displayed on the left chest. Back Panel and Front Panel may display: EMS, EMT, or Paramedic, and must be purchased separately.

***Badges***

**Dress Coat**

The approved Mercy EMS badge should be worn on the Left Chest of the Dress Coat in the badge holder.

**Uniform Shirt**

The approved Mercy EMS badge should be worn at all times with White duty uniform shirts. The badge should be worn over the left chest in the badge holder.

***Hospital ID***

Hospital issued ID shall be displayed on the Right Side of the Duty Uniform shirt. The ID may either be displayed on the Right epaulet, collar, or pocket.

***Name Plate***

When applicable, Gold name plate shall be displayed ½" above the right pocket on the white Flying Cross Uniform shirts.

UNIFORM POLICY
ADDENDUM #3

***Personal Protective Equipment***

**Helmets**

Bullard USRX with ESS Goggles will be issued to all personnel. The helmets will display the Mercy EMS patch on the front, Job Title and Star of Life on each side, and Radio Number on the back. Helmet colors will be issued as follows:

1) EMS DIRECTOR – WHITE HELMET
2) EMS OPERATIONS MANAGER – WHITE HELMET
3) MEDICAL DIRECTOR – WHITE HELMET
6) EMS MANAGER – WHITE HELMET
7) EMS OPERATIONS SUPERVISOR – WHITE HELMET
8) EMS SUPERVISOR – RED HELMET
9) PARAMEDIC – BLUE HELMET
10) EMERGENCY MEDICAL TECHNICIAN – BLUE HELMET

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# 1-11 Uniform - Personal Protective Equipment

**PURPOSE**: Mercy Emergency Medical Services recognizes that caregiver safety is always the priority in operations, in particular the importance of PPE for the health and safety of personnel. This policy has been developed to establish expectations regarding safety in operations and the issuance, expected utilization, and required maintenance of issued and caregiver owned Personal Protective Equipment (PPE).

**PROCEDURE**: The approved uniform policy contained within this policy does not cover all situations and circumstances in which PPE could be needed. Each caregiver should be alert to their own health and the potential need for PPE. If in doubt, the caregiver should contact their leader or medical control for assistance in determining the appropriate level of PPE required for the situation. The use of PPE is recommended when in doubt.

At minimum all caregivers are expected to wear health system approved gloves for every patient encounter.

Caregivers are expected to practice meticulous hand hygiene with soap and water or hand sanitizer.

Surgical masks should be worn for any patient with the possibility of infectious respiratory symptoms. N-95, CAPR/PAPR should be work for any confirmed cases of Covid, Tuberculosis, etc.

Eye protection should be worn for every patient contact. Surgical masks with eye shields, clear ANSI approved glasses or googles that cover the eyes and extend to the side of the face are also appropriate eye protection. Personally prescribed glasses are typically not enough protection as they typically do not extend to cover the side of the eyes, if you wear prescription glasses you should consult with your eye care provider about appropriate eyewear or covers.

Gowns, hair covers and shoe covers are provided in all Mercy ambulances for use when indicated.

Caregivers are expected to adhere to all uniform requirements including the use of appropriate footwear while on duty. Uniforms are a critical part of PPE and should be in good condition at all times.

Caregivers are not expected to enter any scene for which appropriate PPE is not available (active fire, hazardous materials, etc.). In these situations EMS personal should coordinate care with the appropriate responding agency and attempt to approach or enter the scene if unsafe to do so.

PPE should be inspected at the beginning of each shift and after each use for any signs of damage. If any non-disposable PPE is damaged it should not be used. The caregiver should immediately report the damage to their leader and will be issued new PPE for use.

In some situations it is appropriate for only one caregiver to don PPE and enter the scene/make patient contact. In these situations, the other caregiver should act as an observer and be vigilant for hazards.

At all times the caregivers should limit the number of EMS providers making contact with a potentially infectious patient to the minimum required to perform tasks safely.

• Regardless of dispatch information, EMS personnel should be vigilant for travel history and signs and symptoms of communicable disease (e.g., fever, cough, gastrointestinal complaints) and use standard precautions and add appropriate transmission-based infection control precautions whenever history or exam findings warrant.

• Avoid direct contact with a patient who may have a serious communicable disease until you are wearing appropriate PPE. Maintaining a distance of at least six feet may provide protection from transmission of many diseases.

• Patients or their caregivers may find responders wearing high levels of PPE such as hood, suits, and respirators alarming. Communicating with and calming anxious patients may be more challenging due to PPE as well. Caregivers should be mindful of this and be prepared to reassure patients and to address their distress and fear.

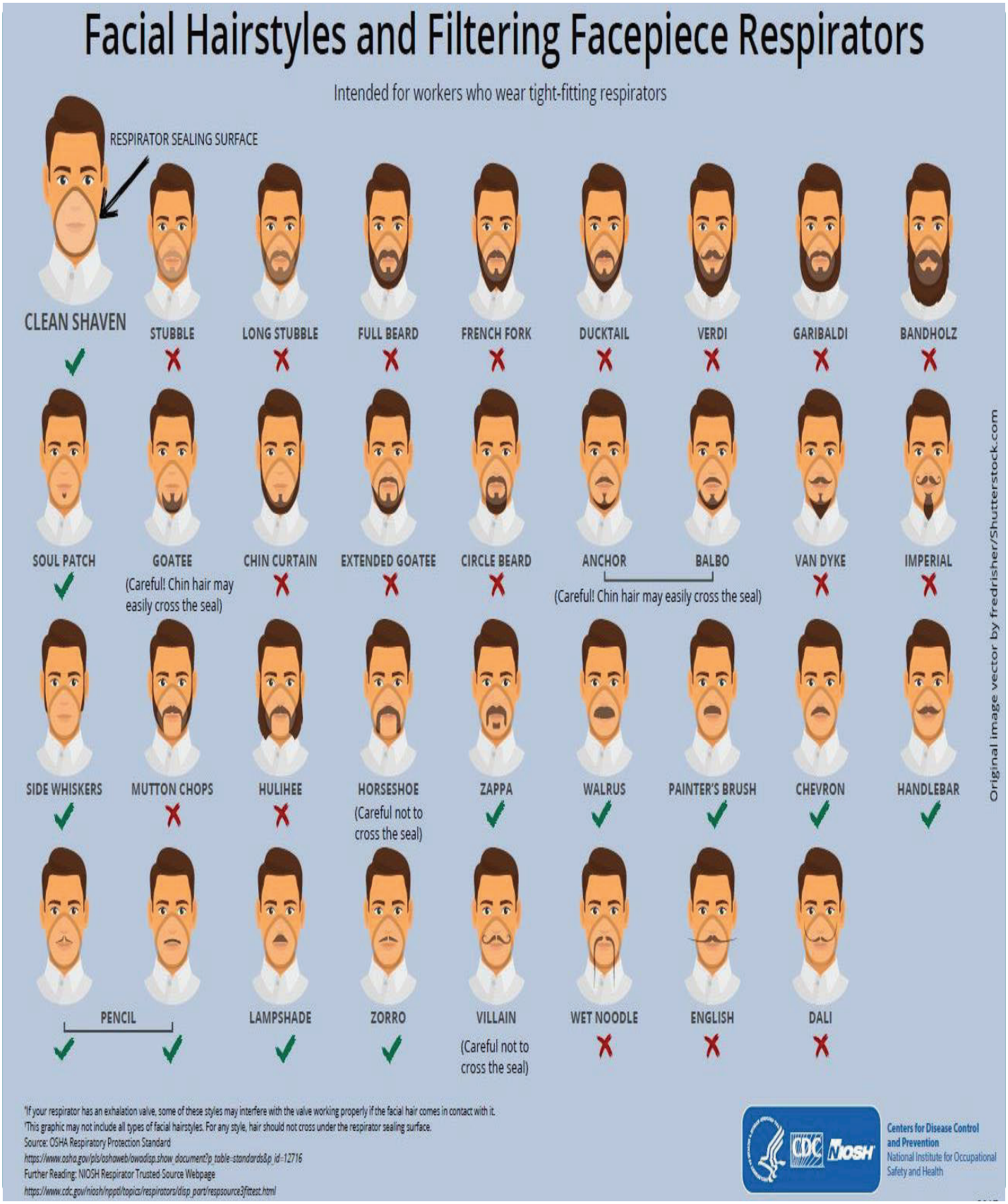
• Limit the number of EMS providers making contact with a potentially infectious patient to the minimum required to perform tasks safely.

• Placing a surgical mask on a patient with likely infectious cough significantly limits droplet generation. Patients should cover their nose and mouth when coughing or sneezing; use tissues to contain respiratory secretions and, after use, dispose them in the nearest waste receptacle; and perform hand hygiene after having contact with respiratory secretions and contaminated objects or materials.

• Influenza and other diseases can transmit via the ocular surfaces as well as other mucous membranes. Use PPE to protect the mucous membranes of the eyes, nose, and mouth during procedures and patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions. Select masks, goggles, face shields, and combinations of each according to the need anticipated by the task performed.

• Keep nonessential equipment away from the patient, so as to minimize contamination on the scene and in the ambulance

• If any exposure to an infectious disease occurs, the caregiver should notify their leader as soon as practical. The EMS supervisor will assist the caregiver with evaluation and treatment and all related documentation as outlined in Mercy Health System polies for exposure.


Facial Hairstyles and Filtering Facepiece Respirators
Intended for workers who wear tight-fitting respirators
RESPIRATOR SEALING SURFACE
CLEAN SHAVEN
STUBBLE
LONG STUBBLE
FULL BEARD
FRENCH FORK
DUCKTAIL
VERDI
GARIBALDI
BANDHOLZ
SOUL PATCH
GOATEE
(Careful! Chin hair may easily cross the seal)
CHIN CURTAIN
EXTENDED GOATEE
CIRCLE BEARD
ANCHOR
BALBO
(Careful! Chin hair may easily cross the seal)
VAN DYKE
IMPERIAL
SIDE WHISKERS
MUTTON CHOPS
HULIHEE
HORSESHOE
(Careful not to cross the seal)
ZAPPA
WALRUS
PAINTER'S BRUSH
CHEVRON
HANDLEBAR
PENCIL
LAMPSHADE
ZORRO
VILLAIN
(Careful not to cross the seal)
WET NOODLE
ENGLISH
DALI
Original image vector by fredrisher/Shutterstock.com
*If your respirator has an exhalation valve, some of these styles may interfere with the valve working properly if the facial hair comes in contact with it.
†This graphic may not include all types of facial hairstyles. For any style, hair should not cross under the respirator sealing surface.
Source: OSHA Respiratory Protection Standard
https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=12716
Further Reading: NIOSH Respirator Trusted Source Webpage
https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/respsource3fittest.html
CDC NIOSH
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

## EMS Guidelines for Personal Protective Equipment (PPE)

See the Figure below for recommended PPE to be worn by EMS personnel that will be in contact with a suspected or confirmed infectious disease.

**Remember:**

- PPE must be donned correctly before entering the patient area.
- PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas. PPE should not be adjusted (e.g., retying gown, adjusting respirator/facemask) during patient care.
- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination. A step-by-step process should be developed and used during training and patient care.

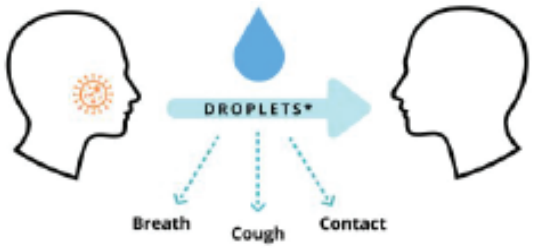
**Eye Protection: Goggles or Face Shield that fully covers front and sides of face**
Prescription eyeglasses are NOT considered adequate eye protection Used to protect eyes from infectious droplets

**Mask: N95* or surgical mask**
Used to protect you from breathing in infectious droplets



**Isolation Gown: One that fully covers from neck to knees and arms to wrist**
Used to protect clothes and skin surface from infectious droplets

**Gloves: Disposable Nitrile**
Used to protect skin surface from infectious droplets



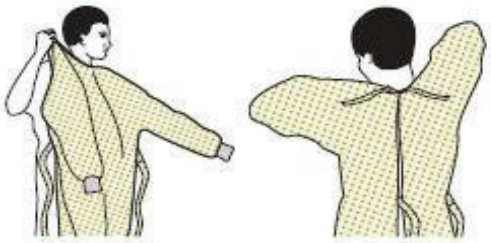

Infectious diseases are spread from someone's breath, cough, direct contact or touching an infected surface. If the virus gets into a mucous membrane, located in your eyes, nose and mouth, infection may occur. All PPE equipment shown is essential to keep you safe.

## SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

### 1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



### 2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



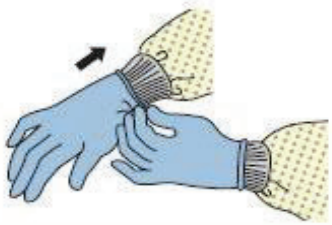
### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



### 4. GLOVES

- Extend to cover wrist of isolation gown



## USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

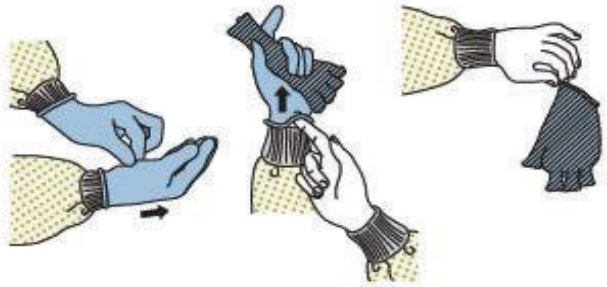
- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

# HOWTO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

## 1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container



## 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container



## 3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container

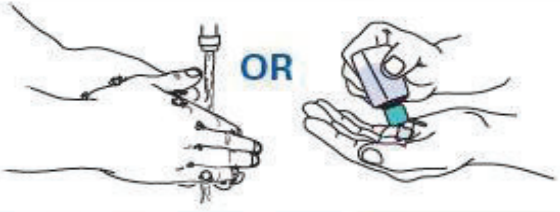


## 4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



## 5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



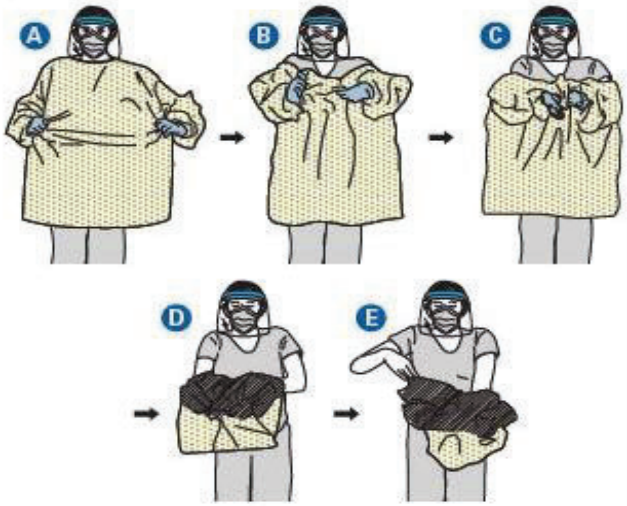

**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**

# HOWTO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

## 1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container




## 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

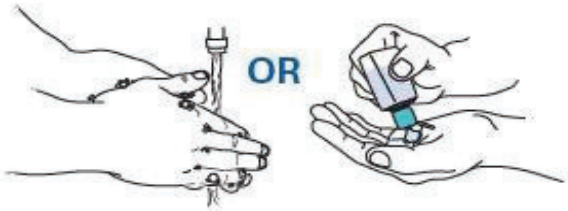


## 3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



## 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE




**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**

# 1-11 Uniform - Motor Vehicle Accidents

Mercy EMS provides PPE for working in and around motor vehicle accidents and roadway scenes. **The use of PPE at these scenes is mandatory for all caregivers**.



Safety vests are crucial on traffic scenes and roadway events to enhance the visibility of caregivers to oncoming traffic. They are essential for preventing accidents by making caregivers more noticeable, reducing the risk of being struck by vehicles. Mercy EMS requires the use of an ANSI rated reflective safety vest any time a caregiver will be working on or within 25' of a roadway.



Bullard safety helmets are provided on every ambulance and should be used anytime a caregiver will be working in or around any scene in which head injury could be a risk. This includes but is not limited to, motor vehicle accidents, industrial and construction incidents, and any scene where indicated by local guideline or OSHA rule.



Leather work gloves are provided on every ambulance and should be used anytime the caregiver will be working in, on or around sharp edges (metal, glass, etc.). Leather work gloves do not provide any protection from bodily fluids, the use of exam gloves underneath the leather gloves is encouraged.



Eye Protection helps to prevent injuries from hazards like flying debris, chemicals, fluids or harmful light. Safety glasses, goggles, and face shields are common types of eye protection available on Mercy ambulances. Proper selection and use of eye protection is essential to minimize the risk of serious eye injuries.

**Safety Glasses:** Provide basic protection against impact and dust.

**Safety Goggles:** Fit more snugly to the face, offering better protection against splashes, fumes, dust and debris.

**Face Shields:** Cover the entire face, providing protection against bodily fluid splashes, and flying debris

# 1-11 Uniform - Suspected Violent Scene

Mercy caregivers have the option to purchase their own ballistic vest from the approved uniform vendor. These vests will be measured and fitted for each caregiver.

The approved vest will be grey in color with MERCY EMS on the front and EMS on the back.

Vests may be worn over the uniform shirt or may be removed from the carrier and worn under the uniform shirt.

Ballistic vests are not edge resistant and caregivers remain susceptible to injury from edged weapons while wearing vests.

At all times EMS caregivers should remain clear of violent scenes when possible. At no time should EMS caregivers remove the EMS markings from the vest if work over the uniform shirt.

The following are approved ballistic vest available through the approved uniform vendor:

Galls Series IIIA
Point Blank GL LVL IIIA
Galls G-Force LVL IIIA
Point Blank CIIIA
Point Blank GNXIIIA

Guardian Generation 3 Grey Carrier with approved Mercy patches can be used any of the above vests.






Mercy Health System utilizes the MAXAIR CAPR (Controlled Air Purifying Respirator) system for those caregivers who are unable to be properly fitted with an N-95 mask as well as those with approved exemptions The CAPR should be used in any situation which an N-95 mask would be required. Face shields are disposable and should be thrown away in the bio-hazard container for proper disposal.

Issued CAPR devices will be serviced annually by the health system. When a device is taken for service, another device will be issued in its place to the caregiver. **Caregivers should never attempt to remove, replace or otherwise disturb the filter in the CAPR.** Filters will be replaced during annual service by qualified technicians.

## How It Works

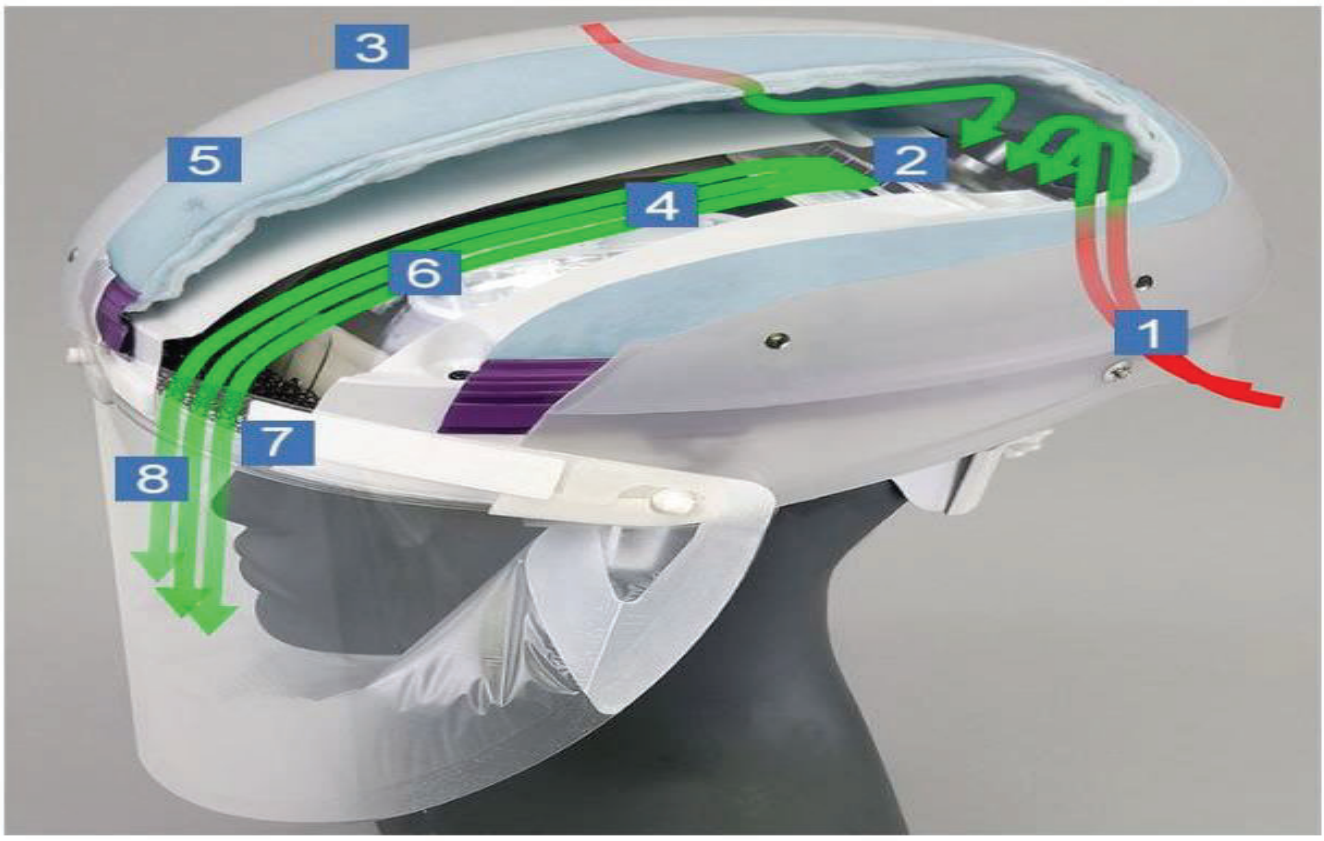
Toxic Air 1 (Red Arrows) is pulled by the Motor 2 in under the FCC 3 (or in through the Hood top, not shown)

The Toxic Air is then filtered to Clean Air 4 (Green Arrows) as the Motor pulls it through the Filter 5

After passing down through the blower the Clean Air moves through the Laminar Flow area 6 , through the front Air Diffusers 7 , and gently down between the Lens and face 8

### Simple, Comfortable, Safe

- Diffused, clean, cooling air passes down around the wearers' face
- $CO_2$ exhausted automatically
- Lens defogged by airflow automatically

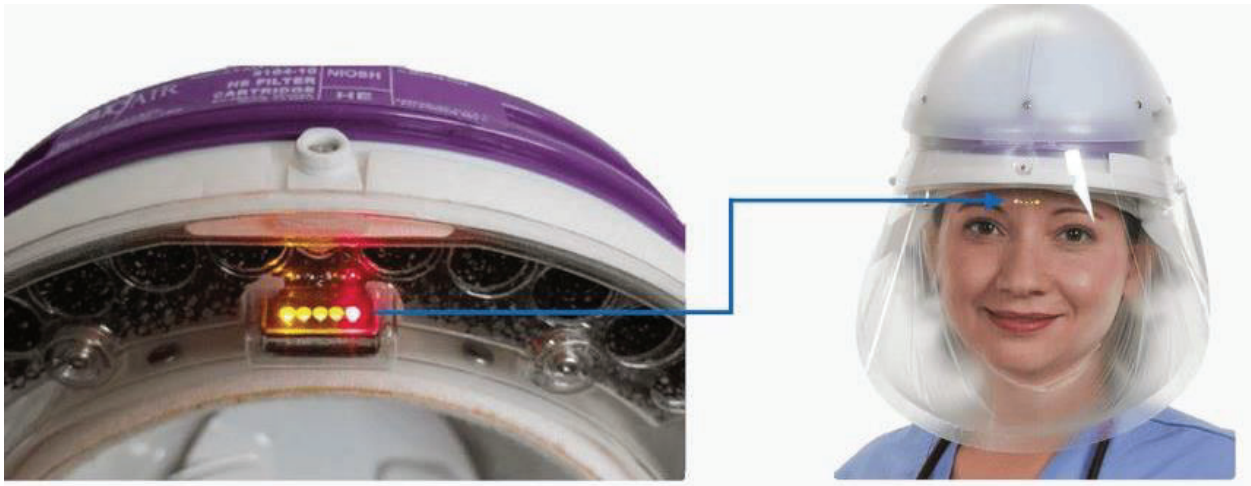


1. Air Diffusers Assist in Low Noise Operation, ≤ 62dB. Evenly dispersed air for Comfort and Anti-Lens-Fogging
2. Front Comfort Strip (Disposable)
3. Rear Comfort Pad (Cleanable)
4. Easy grasp-and-turn Ratchet to adjust head circumference and secure helmet-to-head



- The CAPR Helmet has five LED Safety Status Indicators located on its underside front that are always visible in the user's peripheral vision. They alert the user to the safe operating conditions of the system. They will provide an early warning alert to the user when the CAPR Helmet is no longer able to maintain adequate airflow and/or Battery charge to provide adequate or continuing protection for the user.
- There are five LED Safety Status Indicators, one yellow, three green, and one red. On start-up, all LED's should come on briefly (LED test) before proceeding to normal operation. During normal operation, the LEDs continuously indicate the status of the Airflow and Battery charge level.
- Airflow is proper if the Yellow LED is off. A continuously lit or flickering Yellow LED indicates low or marginal airflow. If the Yellow LED is lit, check the Filter Cartridge for excess particulate/dirt build-up and damage, and replace if necessary.
- The Battery charge level is indicated by the three Green and one Red LEDs. The approximate charge level is continuously indicated by the changing LEDs.

- When all three Green LEDs are lit, the Battery has approximately 75% to 100% of its charge.
- When two Green LEDs are lit, the Battery has approximately 50% to 75% of its charge.
- When only one Green LED is lit, the Battery has approximately 25% to 50% of its charge. When this occurs the user should prepare to exit to a safe area to obtain a fully charged Battery.
- When all three Green LEDs are off and the Red LED is lit, the Battery level is low, with approximately 0% to 25% charge left. When this occurs the user should promptly exit to a safe area to obtain a fully charged Battery.



## User Selectable Comfort Level

6. Set Air-Flow Range to meet activity, comfort level

Computer controlled constant flow througout battery run-time



## Don the System



1. Obtain a fully charged battery. (Charger LED should be green after battery is connected to charger for more than 10 seconds.)





2. Assemble the battery onto the belt. Place the top edge of the Belt under the Battery Clip. Move the Belt fully under and up to the top of the Clip.



3. Place the belt comfortably around the waist with the battery near the side-back of the right hip.





4. Remove a DLC from the DLC dispensing box and attach the DLC Lens, with the DLC cuff facing the inside to the helmet. Remove the DLC Protective film.



5. Connect the Helmet Power Cord to the Battery. Push the Power Cord Connector into the Battery Receptacle until the Secure Connection audibly clicks.



6. Loosen the ratchet adjustment knob counter-clockwise to ensure the Helmet will easily fit over the head.



7. Hold the Helmet by the rear headband in one hand, pull the front top edge of the DLC Cuff down, and place your chin into the DLC Cuff. Then, pull the Helmet over and down on to your head.



8. Slide your fingers between the Cuff and face from each temple down and under your chin to pull the DLC Flappers away from the lens, and to properly position the cuff.

**WARNING**

If conditions 1 and 2 below both are not achieved, switch to the other size DLC before proceeding.



**Condition 1:** Ensure the DLC Flappers are away from the Lens, positioned perpendicular to your temples, and within ¼ inch of the temples on each side of the head.



**Condition 2:** Ensure slight tension on the cuff is felt continuously while sliding the index or first finger between the cuff and the face all along the chin and up to the temples, from the right side of the face to the left.

**CAUTION**

If the Helmet is not secure and comfortable on the head, it may be necessary to change the Height Adjustment. The Height Adjustment raises and lowers the rear headband and the angle of the helmet with respect to the head, and properly positions the DLC Lens from the chin. This optimizes a secure and comfortable fit in conjunction with the Adjustment Knob for optimizing the circumference of the Headband. It also aids in proper positioning for easy visualization of the LED Safety Status Indicators. If necessary, unsnap the Height Adjustment tabs on each side of the Helmet Liner and reposition upward or downward, until the optimum fit for comfort and security is determined.



**CAUTION**

Optimum setting is achieved when the helmet is secure on the head for all movements required and the front headband is within 1/2 inch of the eyebrows to allow good visualization of the LED Safety Status Indicators in the upper peripheral vision. Be sure to have both Height Adjustment tabs in the same position.

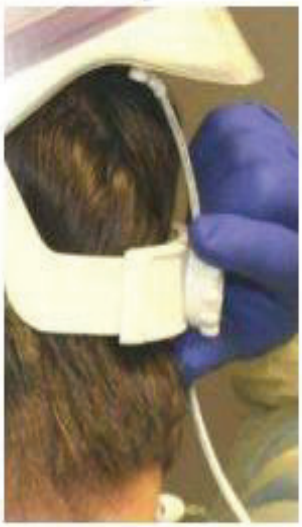




≤ 1/2 Inch (~1.25 cm)

9. Position the Helmet so that the front headband is within ½ inch of the eyebrows and the rear headband is resting under the occipital bone above the vertebrae on the neck, and then tighten the Adjustment Knob clockwise to ensure the most secure fit of the helmet on the head for all activities. Do not over tighten to cause discomfort.

## Doff the System:



1. Loosen the rear Headband Adjustment Knob (turn counterclockwise).



2. Hold the front top of the Helmet in one hand and with the other hand on the Adjustment Knob; lift the Helmet up and off the head



3. Disconnect the Helmet Power Cord from the Battery - push the Secure Connection Button down, pull Cord Connector out, release the Button.



4. Disconnect the Battery Belt from around the waist by un-snapping the buckle.



5. With the Charger connected to the mains wall power, connect the Charger Cord to the Battery. Push the Charger Cord Connector into the Battery Receptacle until it is fully seated.



6. The entire CAPR System may be decontaminated, cleaned and/or stored at this time.

7. If desired, the components of the CAPR System may be dis-assembled and each component decontaminated, cleaned and/or stored at this time.

Mercy EMS will provide U.S. Coast Guard approved personal flotation devices to be carried on all ambulances.

Caregivers shall wear the supplied PFD anytime they are working within 15-feet of the waters edge.

Mercy EMS utilizes

## VEHICLE OPERATING POLICY

**PURPOSE:** Operation of ambulances and support vehicles shall be conducted in a safe and cautious manner in order to prevent accidents resulting in personal injury and/or property damage. Both emergency and non-emergency operations will be conducted in compliance with federal, state and local laws and regulations. Drivers are responsible for the safe operation of the ambulance and shall obey all rules of the road using courtesy and professional behavior. In the event any rule or regulation contained in this policy is in conflict with federal, state or local laws or ordinances, the laws and ordinances shall take precedence. Ambulances shall not be used for personal errands or cruising at any time. Reasonable trips to grocery stores and restaurants are acceptable and should occur when possible on return from assignments in order to reduce fuel expense. Additionally, during non-emergency operations, when feasible and weather permitting, the engine shall not be left idling for more than 30 seconds in order to accomplish additional fuel conservation and pollution reduction.

Drivers must be at least 20 years of age and possess a valid State EMT or Paramedic license and the appropriate state driver's license. Driving records will be checked annually by the Human Resources Department and reviewed as needed on an individual basis. Each driver shall be oriented in the emergency ambulance operating procedures and is responsible to know the functions and capabilities of the ambulance, its accessories and equipment. All drivers must be trained in the Low Forces driving method before they're allowed drive the ambulance. Low Forces driving techniques shall be utilized whenever an ambulance is in operation. Drivers must log on to the approved driver monitoring system each time an ambulance is operated.

Situations arising that are not covered in these procedures should be addressed with the safety of the public, patients and crew being the first priority in decision making. The best drivers are always aware of their:

Responsibilities
Roadway characteristics
Environmental conditions
Vehicle Capabilities/Limitations

**Smoking, chewing tobacco or vaping is not allowed by anyone at anytime in any Health System Vehicle.**

**PROCEDURE:**

1. On-duty ambulances shall be inspected and inventoried at the beginning of each assignment in accordance with the established maintenance and inventory check lists. Irregularities in the ambulance's condition or any damage shall be reported to the EMS Manager, Operations Supervisor, or Field Supervisor with the appropriate action taken to ensure the safe mechanical operation of the ambulance before use. All equipment shall be secured on either the stretcher using cot straps or placed in the ALS Cabinet. During patient transport all equipment should be secured in cabinets or approved transport brackets. Patient belongings should be secured in such a manner as to prevent movement within the patient compartment.

2. During non-emergency operations, ambulances shall be driven in the right lane of the roadway. If extremely rough road surfaces are encountered, or merging traffic is present, the driver can utilize the left lane. In the case of the later, the driver shall return to the right lane as soon as is practical. At times while driving non-emergently, the ambulance shall be operated at or below the posted speed limit.

3. The ambulance is not to be taken off the roadway unless it is absolutely necessary and the terrain has been investigated by a crew member and determined to be safe to support the weight of the ambulance and all passengers. Drivers should not attempt to traverse any area which will likely place the passengers and/or the ambulance in jeopardy.

4. The driver will ensure that all doors on the ambulance are properly closed and that there are no obstructions or overhangs in the ambulance's path before moving it. The driver should be the last person to enter the ambulance before moving.

5. When backing the ambulance, a spotter will be assigned at the rear of the ambulance, in the driver's view to safely guide the vehicle. The spotter should stand to the side of the ambulance and NOT directly behind it. Hand and voice signals are to be used together when backing the ambulance. If the driver can not see the spotter, the driver will not continue to back the vehicle until the spotter is in view. If a driver is alone and backing the ambulance is necessary, the driver must first walk around the ambulance to inspect the area for obstacles or pedestrians. Backing must be performed very slowly and with flashing lights and back-up alarm activated.

6. Drivers will ensure that all passengers and co-workers are wearing seat belts before moving the ambulance. EMS co-workers providing patient care can remove their seat belt if the confined range of motion prohibits them from performing a critical patient care procedure. EMS co-workers shall use safety belts at all other times.

7. To ensure the safety and comfort of patients and passengers, drivers shall drive the ambulance in a manner avoiding quick starts and stops. Railroad tracks, dips, and bumps should be avoided or taken slowly. Cornering shall be even and moderate, yielding to all pedestrians. Headlights shall be turned on at all times when the ambulance is in operation.

8. When parking the ambulance, park in a manner to avoid possible difficulties in leaving the area and also in a manner not blocking the vision or roadway of other drivers. Place the gear selector in park and **set the emergency brake**. Lock all doors and compartments while away from the ambulance. When possible, do not leave the ambulance unattended while the motor is running.

9. In the case of vehicle breakdown, attempt to move the ambulance to safe location, off of the roadway. In all instances protect the people in the ambulance. Notify the communications center of the breakdown and the need for any towing and/or intercept ambulance. When safe to do so, notify the regional manager or local supervisor.

10. Should a relative or significant other person request to accompany the patient in the ambulance, they shall be seated in the front passenger seat and must wear a seat belt. A relative may accompany the patient in the patient compartment if the patient attendant deems it to be in the best interest of the patient. The passenger must wear a seat belt when in the patient compartment. Patients are to be secured to the EMS cot with all provided safety belts in accordance with the cot manufacturers recommendation. In the event that aa second patient requires transport in the same ambulance, that person should be placed on the squad bench and all safety belts fastened. If the patient requires the use of a long spine board, the patient should be secured to the board with approved straps and placed on the bench and secured with all safety belts.

    If a crew is transporting a Behavioral Health patient, only one patient will be transported per ambulance. The patient must be transported on the ambulance stretcher with all safety belts in place and above blankets/sheets. Ambulance transport of Behavioral Health patients will require at least a two-person crew, including the driver. Persons transported via Mental Health Transport vehicle shall be evaluated prior to acceptance. If approved for transport in the behavioral health transport van, the patient will be escorted to the van by EMS personal and public safety and secured in the rear seat with all safety belts. Any patient belongings will be secured out of the immediate reach of the patient. Barring an emergent situation, the behavioral health van should not stop any point between the sending and receiving facilities. If an emergency arises, immediate contact with the communications center should occur with the nature of the emergency and what resources are needed. At no time will patients under the age of 18 be transport by the behavioral health van. When possible, drivers of the same gender identity will be selected for operation of the vehicle. Generally the van will not transport patients more than 150 miles one way.

    Children who are not patients should be transported in an alternate passenger vehicle whenever possible. If an uninjured child is transported in the ambulance, they shall be secured properly using the integrated car seat or pediatric securement device.

    Family members or acquaintances who wish to follow the ambulance to its destination should be advised to keep a safe distance, obey all traffic laws and under no circumstances follow the ambulance against red intersection lights or exceed the posted speed limit. This should occur prior to the ambulance departing the scene. If the following vehicle does not adhere to the briefing, the driver shall turn off the emergency lights and siren and continue the transport. At no time is it appropriate for EMS personnel to delay transport by stopping the ambulance in order to contact the parties attempting to follow the ambulance illegally.

    Mercy EMS encourages family members and those in supportive roles to accompany the patient whenever possible. Only one family/support rider will be allowed. In the event that EMS co-workers believe the rider may present a safety hazard or could interfere with patient care (intoxicated persons, those suspected of causing injury, abuse, etc.), they may refuse a request to ride. In all cases, if the co-worker is unsure, they should contact their local leader for guidance.

11. In the event the ambulance is involved in an accident, treat all injured persons to the best of your ability, and report the accident to dispatch. The law enforcement agency responsible in the area shall be contacted and the response requested for report purposes. The EMS Manager, Director of Emergency Medical Services, and/or Vice President responsible for EMS shall be notified immediately if an ambulance or Mercy co-workers are involved in an accident. Complete all reports in timely manner. Take notes that describe in detail all circumstances of the accident.

A. If an EMS co-worker, while driving an ambulance or operations vehicle is involved in a traffic accident involving the following criteria, the co-worker **will** be tested for drugs and/or alcohol. The EMS Director or their designate will be responsible for ensuring that this testing occurs at a Mercy facility and that the driver is accompanied by an EMS Supervisor.
   1) a fatality occurred, or
   2) the co-worker is charged with a moving violation, or
   3) an involved vehicle was towed from the scene, or
   4) injuries occurred to any party involved in the accident.

B. Removal of Drivers and Follow-up Action
The following situations will cause an EMS co-worker to be immediately removed from driving responsibilities:
   1. Drugs
      A. Positive test result.
      B. Refusal to give sample for testing.
   2. Alcohol
      A. Test result of 0.02% or higher blood-alcohol content.
      B. Refusal to give sample for testing.
      C. Consuming an alcoholic beverage within eight hours prior to operating an ambulance or operations vehicle for Mercy EMS.

EMS co-workers removed from driving responsibilities must be approved by the EMS Director before driving privileges are restored.

On-duty EMS co-workers who witness or encounter a motor vehicle crash (including animal strikes) shall immediately notify the EMS Communications Center. Co-workers shall confirm that no injuries have occurred, and as current system status allows, remain on scene to protect the scene from a secondary crash.

12. In an emergency response to the scene, the driver has the responsibility of the safe operation of the ambulance. The attendant should be seated in the cab passenger seat and both must wear seat belts. In the event a third rider is on board (observer or crew member) they must use seat belts and shall sit in the attendant's seat (captains chair) of the patient compartment. Both emergency lights and siren are to be utilized in emergency response conditions.

13. Radio, cell phone communications and CAD operations are the responsibility of the EMS co-worker in the cab passenger seat. EMS Supervisors operating an Operations Vehicle shall adhere to all safety considerations including using a hands-free system and/or voice activated and mounted device if a call must be made or received and pulling over is not a reasonable option.

14. The driver is responsible to turn on and off the emergency warning lights and siren. The attendant can operate the sirens yelp, hi-lo, wail, et cetera, by voice command of the driver. However, drivers are ultimately responsible for the siren usage and emergency lighting.

15. During an emergency response, drivers may exceed the prima facie speed limit so long as they do not endanger life or property. In an emergency response, Mercy EMS response vehicles shall **not** exceed 10 miles over posted speed limits **when driving conditions are excellent**. When adverse driving conditions (i.e. traffic congestion, poor weather conditions) are present, speeds under posted speed limits **shall** be utilized for emergency response. Cruise control option shall not be used during emergency operations.

16. When entering school zones, drivers shall obey all posted speed limits, school stop signs, and crossing guards. Also, drivers shall yield the right of way to all school buses with activated warning signs or signals. The Ambulance will stop for all school bus stop signs and will only proceed after the signs have been retracted and the children are aboard the bus or off the roadway.

17. Ambulances approaching an intersection against a red light, stop sign or against the right-of-way of other vehicles or pedestrians shall come to a complete stop before entering the intersection. The driver shall look in all directions for vehicles and/or pedestrians and will proceed slowly (5 mph maximum) with caution through the intersection. If the light is green, the vehicle should be slowed to a safe speed and all other rules of clearing the intersection shall apply.

18. Drivers shall avoid passing other vehicles on the right whenever possible. Should the need arise to pass on the right side, it should only be done after coming to a stop and ensuring all other drivers are aware of your intentions. Keep in mind that passing on the right side of a vehicle is not common and most vehicle operators are taught to move the right when emergency vehicles approach. The possibility of an accident are very high when passing on the right.

19. If a driver must drive into or toward on-coming traffic or in a turn lane, the ambulance shall NOT exceed 15 mph.

20. If a driver must use the turn lane or on-coming traffic lane to enter an intersection, the driver is to bring the ambulance to a complete stop before entering the intersection. Drivers shall look in all directions for vehicles and/or pedestrians and will proceed slowly (5 mph maximum) with caution through the intersection.

21. Ambulances will not cross or "jump" any median or lane divider regardless of its height. Drivers should anticipate intersections and other areas where they may become boxed in and maneuver the ambulance into the opposing lane prior to the median or lane divider. If the driver is unable to maneuver around a median or lane divider and encounters a red light with all lanes of traffic stopped, the driver will turn off all emergency lights and siren, wait for the light change and traffic movement and then return to emergency response with lights and siren in operation.

22. When crossing through a protected (with traffic control lights) intersection with a green light or right-of-way, drivers shall slow the ambulance to a speed that enables them to stop or avoid collisions with other vehicles or pedestrians that may enter the intersection unexpectedly. The speed of the ambulance approaching the intersection shall be under the posted speed limit.

23. When crossing through a protected (with traffic control lights) intersection with a red light drivers shall stop the ambulance, check each direction and procced at not more than 5mph through the intersection, clearing each lane of travel prior to approach. The driver should be aware that pedestrians and other motorists may enter the intersection unexpectedly. The speed of the ambulance approaching the intersection shall be under the posted speed limit. Never assume traffic will stop or move for the ambulance.

24. Upon arrival at an emergency scene, the ambulance shall be placed in the safest possible position for the crew's exit and for protection of patient(s) as needed. Emergency lights shall be on anytime the ambulance is in the roadway. At a patient's residence or business it may be only necessary to leave the fourway parking light flashers activated. If the ambulance is off the roadway and safe from other traffic, the flashers may be unnecessary. Place the gear selector in park and set the emergency brake.

25. Anytime a patient is aboard the ambulance they will be secured properly using all stretcher safety belts including shoulder restraints, all passengers will wear safety belts, and all doors shall be closed properly prior to any movement of the ambulance.

26. Caution should be exercised anytime a patient of size requires movement on the EMS cot. Movement should always be at the lowest position of the cot system and extra help should be available or requested prior to any movement of the cot up or down and any lifting into or out of the ambulance. All movement should be well coordinated with all providers. In all matters, the dignity of the patient should be maintained by involving them in the process and seeking their input.

27. When backing the ambulance with a patient aboard, the non-emergency backing operations shall apply, with the exception that a crew member attending the patient should remain with the patient and if the situation permits, look out the back window for obstructions.

28. Emergent transport of patients should be considered carefully on a case by case basis. As a general rule, the transport of patients with lights and sirens will not usually result in improved care or more rapid access to services. Emergent transport greatly increases the risk to the crew, the patient and the general public and should be avoided whenever possible. Even in cases of time critical diagnosis, emergent transport will rarely make a difference in outcome of the patient. Although times may arise where emergent transport is warranted, these will generally be few and each case should be carefully considered to ensure the benefits outweigh the risks.

MAINTENANCE:

1. All vehicles in the Mercy EMS system shall be maintained at approved mileage intervals set by the vehicle manufacturer.

2. Ambulances found to have safety, emergency response equipment (lights and sirens), or patient care equipment inoperative shall not be used until repairs have been completed.

3. All patient care equipment will be maintained on schedules set forth by the equipment manufacturer.

If any driver has any questions or needs clarification of any part of this policy, they should contact their EMS Supervisor or the Director of Emergency Medical Services.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## LOW FORCES DRIVING POLICY AND PROCEDURES

**PURPOSE:** Low forces driving is a traffic and vehicle management approach for drivers that reduces fatigue, stress, risk, and costs of driving. In turn, lower forces driving enhances patient comfort and can improve patient care. The purpose of this policy therefore is to promote safe driving practices through the application of low force standards and maneuvers.

**PROCEDURE:** This policy applies to any person employed by Mercy EMS who operates a vehicle equipped with a driver monitoring system.

A. All Mercy EMS coworkers will be trained on the operation of the approved driver monitoring system.

B. New coworkers will not be allowed to drive any Mercy vehicle equipped with a driver monitoring system until completion of the approved driver safety training program, generally provided during t he Mercy EMS new Hire Academy.

C. Coworkers will be issued all required login information (badge ,key, etc.) for the approved driver monitoring system only after completion of training. This will enable the coworker to log on and off any vehicle equipped with a driver monitoring system. It is the responsibility of the coworker to have their assigned login device at all times while on duty.

D. At regular intervals, data will be downloaded from the approved system. At anytime, leaders may log into the system and view vehicle diagnostics, driver performance and video feed of the dash mounted camera system. .

F. Minimum acceptable performance is set at 16 miles between average forces counts. This figure is determined according to the formula listed on Addendum A.

G. If a driver's performance level is below the minimum accepted standard, performance coaching will be issued.

1.. First Violation:
   i. Verbal Coaching and remediation offered.

2. Second violation: (within a six month period)
   i. Written coaching and remediation offered.

3. Third violation: (within a six month period)
   i. Final Written Warning
   ii. First probation period: Driver must drive acceptable levels for a six month period or a forth violation is issued.
   iii. Mandatory refresher training.

4. Fourth violation: (within a six month period)
   i. Termination

H. Failure to log in and/or out of the driver monitoring system:
   i. First Offense – Verbal Coaching
   ii. Second Offense – Written Coaching
   iii. Third Offense - Final warning
   iv. Fourth Offense – Termination

I. Tampering with a performance driving computer or related components. Tampering includes any attempt to circumvent the system by unplugging computer connections, manipulation of the performance computer system, movement of the camera system or covering the camera system to hide activity.
   i. First Offense - Final warning
   ii. Second Offense – Termination

J. At no time is it permissible to log into the system with another coworkers credentials. If a paramedic arrives to work without their credentials, they must attend to all patients and not drive during the shift. If an EMT or EMT-A arrives to work without their credentials, they will be clocked out and sent home to retrieve them.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## CELLULAR PHONE AND CAMERA USE

**PURPOSE:** Operators of ambulances should be able to hear traffic and be aware of any driving hazards around them. This means that any distractions while driving should be eliminated, including use of cell phones, earbuds or headphones. For the safety of all caregivers, patients, their family and others sharing the road, each driver's attention must be dedicated to driving the ambulance.

**Driving Distractions:** The National Highway Traffic Safety Administration estimates that 80 percent of vehicle crashes involve some form of driver inattention within 3 seconds of the event. Your primary responsibility, while operating a vehicle, is driving the vehicle safely. For your safety, and the safety of others, it is our policy that you not engage in activities that cause you to become distracted from this responsibility.

**POLICY:** Cellular phone use and use of personal electronic equipment while on duty shall be limited to necessary work work-related calls and utilization of approved reference resources or operational applications (e.g. digital guidelines, Handtevy, etc.). Personally owned cellular phones may be used for necessary work-related calls (medical control, dispatch contact etc.) but solely at the co-workers discretion and without compensation Use of personal cameras – whether cell phone cameras, stand-alone cameras, or conventional film cameras – when performing any patient care functions for or on behalf of Mercy is strictly prohibited except within the confines of an approved Mercy issued phone for patient reporting to receiving hospitals, physicians or the medical director of the service.

**PROCEDURE:**

1. Cellular Telephone Use.
   - A. Personal cellular telephones are permitted to be carried while on duty, but must be placed on silent mode, and allow voice mail to answer the call during work related activity. Messages may be checked on "down time" when not actively involved in patient care or about to perform or in the process of performing work duties. Cellular phones may be used for personal purposes but must never be cause for delay in responding to a patient, beginning an assignment, or while completing an assignment.

   - B. While driving an ambulance, EMS co-workers shall not under any circumstances, respond to (or make) cellular telephone calls, send text messages, utilize social media or check electronic mail. Sending or receiving/viewing text messages while driving is strictly prohibited. This includes the use of electronic watches for text messaging and phone calls.

   - C. GPS navigation devices may be used while driving on company business as long as they are set up in a manner that does not obscure your view. Always select your destination on a GPS navigation device before beginning a trip and do not attempt to enter a new destination into the device while driving.

     a. Cell phones may be used as navigation devices if the phone is placed out of sight so that the driver does not need to hold or unlock the phone while driving in order to receive directions.

## CELLULAR PHONE AND CAMERA USE

D. Eating while driving a vehicle on company business is strictly forbidden. Activities such as drinking beverages, adjusting radio controls or adjusting climate controls should only be done if traffic conditions permit and when you can do them without taking your attention away from driving.

E. Any accident the driver is involved in while using a wireless communication device will be deemed avoidable. If you are involved in an accident while operating a vehicle on company business, and you are conducting a call, texting, or accessing and using internet transmissions, your employment with Mercy may be terminated.

F. Operations of CAD devices should only be conducted while stopped. During a response, the passenger should be the only one to operate the CAD, radio, siren and answering phone calls. During transport, use of the radio should only be done if traffic conditions permit and when you can do them without taking your attention away from driving.

G. It is understood that leaders working in operations vehicles and those operating OPT vehicles have need to use a cellular phone for communications with the communications center, facilities and other caregivers during their shift. This is allowed only when safe to do so and with hands free option.

G. **Any violation of this policy is subject to corrective action, up to and including termination of employment with Mercy.**

Remember, your responsibility to yourself and others is getting where you are going safely. Avoid activities that will distract you from this responsibility.

2. Camera Use

A. Under no circumstances shall any co-worker use the camera on their personal device for any photographs or video of patients or any other HIPPA protected information. Mercy EMS will provide electronic devices capable of obtaining video and photographs which are approved solely for the purpose of documenting scene information, patient evaluations and capture of required documents to be attached to the patient care report. These devices are approved by Mercy Technology Services and shall be the only devices used for such purpose

B. All on-scene photography shall be for clinical and /or documentation purposes only and conducted only at the direction of Mercy co-workers in charge at the scene or by medical control.

C. Any photographs containing individually identifiable information are covered by the HIPAA Privacy Rule and must be protected in the same manner as patient care reports and other such documentation.

D. Any on-scene images and any other images taken by a co-worker in the course and scope of their employment are solely the property of Mercy and *not* the property of the individual co-worker. This includes any image inadvertently taken with a co-worker's personally owned cellular phone camera or other digital imaging device.

E. No images taken by a co-worker in the course and scope of their employment may be used, printed, copied, scanned, e-mailed, posted, shared or distributed in any commercial manner without the express written approval of Mercy Health System Privacy Officer. Mercy understands the coworkers take pride in their work and role within the Ministry and as such may wish to post photographs and video to their personal social media, this is only allowed if the following conditions are met:

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i. No image (still or motion) may contain any patient, their family or personal identifiers.
ii . Images may not be used for personal gain, political activism or support or in any manner that would negatively affect Mercy.
iii. Any person captured within the image must provide consent for the photograph to be used.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## FIRE IN AMBULANCE POLICY

**PURPOSE:** To provide general guidelines for EMS co-workers if a fire should occur in an ambulance.

**PROCEDURE:**

1. Immediately on suspicion of fire, pull off roadway, stop and turn off ignition. Avoid parking close to a structure. Notify dispatch by cellular phone or radio of fire and your location as soon and practical.

2. Get occupants out of vehicle and to a place of safety. Occupants should be moved to a minimum of one hundred (100) feet. Continue to provide patient care.

3. Attempt to contain fire, if such can be done without personal risk, by use of on-board fire extinguishers, which are designed to combat all types of fires. At no time should a coworker place themselves in danger to save equipment.

4. Be aware that fire gives off toxic fumes and gasses, which may be harmful. Do not inhale smoke or gases. If fire cannot be controlled, do not risk personal safety. Move away from vehicle a minimum of one hundred (100) feet.

5. After any fire in a vehicle, the vehicle shall not be driven until a mechanical inspection of the vehicle has occurred and repairs made.

6. Notify the appropriate EMS Supervisor or the Director of EMS as soon as possible and fill out appropriate incident report forms.

7. If news media is on the scene, follow Health System media procedures.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## TRANSPORT OF SERVICE ANIMALS

**PURPOSE:** To avoid long term separation between patients and their service animals during the course of pre-hospital care the following procedures shall be attempted to accommodate the service animal.

**SERVICE ANIMAL DEFINITION:**
The Americans With Disabilities Act recognizes dogs and miniature horses as service animals. A service animal is one which has been trained to do work or preform tasks for the benefit of an individual with a disability. A dog ro miniature horse meeting this definition is considered a Service Animal, regardless of whether the animal is licensed or certified by a state or local government.
Service Animals are not pets. Any animal whose sole function is to provide comfort or emotional support is not recognized as a service animal.

**PROCEDURE:**
In situation where it is not obvious that the animal is a Service Animal, coworkers are allowed to ask only two questions:

1. Is the service animal required for a disability?
2. What task has the animal been trained to preform?

Coworker cannot ask about the individuals disability, require the animal demonstrate a task, request proof of license or certification, request special tags or deny services due to allergies of the coworker.

In situations where Mercy EMS is requested to provide care to a patient who has a service animal for assistance. EMS co-workers must allow the service animal to accompany the patient in the ambulance during transport if it can be accomplished safely for all involved. Service animals are generally well trained and docile, however caution should be used with the animal in the event that the patient is unable to reassure them during procedures and transport.

If transport of the service animal is not possible due to the complexity of patient care procedures, EMS co-workers shall make arrangements for transport of the service animal to the hospital such as; EMS Supervisor, family members, first responders and Law Enforcement personnel. Impounding of the service animal should only be done as a last resort.

Further information regarding Service Animals, their handling and where they are allowed to be, can be found within the **MW COMP Providing Services to Person with Service Animals Policy.**

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## FREEWAY OPERATIONS AND ROADWAY SAFETY

**PURPOSE:** Mercy EMS co-workers arriving at the scene of a vehicle crash and other incidents are challenged in working around many different types of road and traffic conditions. The procedures listed below while working on the scene of motor vehicle collisions and roadway incidents will help to keep our co-workers safe.

**PROCEDURE:**

1. All Mercy EMS co-workers, students and third riders will wear a reflectorized vest or jacket with ANSI Level II or greater coverage while working on a freeway or roadway incident.
2. Remember that you are a pedestrian.
3. Never take a step on the road without looking at traffic.
4. Never trust the other driver
5. Watch all traffic because 40-50% of all drivers are distracted by a variety of factors.
6. Park the ambulance or response vehicle in the safest location to minimize your exposure.
7. Park at an angle and offset when possible with front wheels pointing away from the working area.
8. Approach on the right shoulder area when possible not in traffic lane(s).
9. Work on the shoulder if possible and face oncoming traffic.
10. Have all non-injured persons stay seat belted or remove them to a safe shoulder bank.
11. Always face oncoming traffic when performing a patient interview and exam.
12. Watch all cars and drivers coming by your scene when possible.
13. Communicate with other Emergency Services personnel on the scene and keep each other updated to potential hazards.
14. Close roadways for the shortest time possible.
15. Utilize only secondary warning lights when facing oncoming traffic.
16. Consider additional lane blocking for safety.
17. Always check the roadway every few seconds.
18. Get off the freeway or roadway as soon as possible.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## SECURING WEAPONS

**PURPOSE:**
To establish a standard operational procedure in the handling of weapons found during the assessment and treatment of patients. Several possible scenarios are outlined in this policy. The quick assessment and questioning of all patients should include awareness for the possibility of weapons and should be a part of all patient contacts.

**PROCEDURE:**
When you make contact with a patient and it is appropriate to do so, ask if they are carrying any weapons, needles or other objects that could hurt you. Preform a through patient assessment that should include questions about the possibility of weapons as well as a visual inspection of clothing to look for anything that may resemble a weapon. At no time will EMS personal "frisk" a patient for weapons, assistance from Law Enforcement may be requested if concerns arise..

1. If you are at a patient's residence and they request transport for a condition, advise the patient that weapons are not allowed in the ambulance and suggest they secure it at their residence.
2. When necessary, the weapon should be turned over to a law enforcement officer on scene. You must document the name and badge number of the officer that the weapon was released to. You should document what was turned over and include, if possible, the make, manufacturer and serial number of the weapon. Note this information in the patient's valuable section on EPCR. If the officer will not take charge of the weapon, refer to paragraph 3 and 4 below.
3. If the weapon cannot be released to a responsible person, or there is not an appropriate place to secure the weapon, then it will be transported in the ambulance. It should be secured in a locking cabinet within the ambulance. In the case of a firearm, when possible have a law enforcement officer unload and make the weapon safe before securing it. We do not recommend EMS co-workers attempt to unload or make a weapon "safe". One can never know how a weapon may have been modified.
4. Once you arrive at the hospital, after the patient care has been transferred, the weapon should be released to a Public Safety officer. Ask Public Safety to accompany you to the ambulance to secure the weapon, do not carry it inside without prior notice to Public Safety. Advise the patient to contact Public Safety for return of the weapon upon their release from the hospital. Document the name of the Officer the weapon was released to. You should also document the manufacture and model of the weapon or a description, if possible. Note this information in the patient's valuable section on the EPCR.
5. If the patient is unconscious, the weapon should be removed by an EMS co-worker or a law enforcement officer on scene and secured as noted above.

**Basic firearm safety**
1. All firearms should be treated as if they are loaded, at all times.
2. Always keep firearms pointed in a safe direction and down. Never point a firearm at someone. .
3. Hold the firearm from the top, making sure to never cross anything in front of the barrel. Avoid placing fingers or equipment inside the trigger guard as accidental discharge may occur.
4. If the firearm is loaded or it is unknown, stay completely away form the trigger and trigger guard at all times.

**LAW ENFORCEMENT OFFICERS:**

If you are transporting a conscious and alert certified law enforcement officer, they will be allowed to retain their weapon on their person so long as it does not interfere with patient care. Some law enforcement officers are required to maintain possession of the weapon at all times and may not be comfortable with releasing it. When possible have a fellow law enforcement officer take charge of the officer's duty belt prior to transport, if necessary.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## POLICY ON TRANSPORTING INDIVIDUALS USING WHEELCHAIRS AND/OR OTHER MOBILITY AIDES

**PURPOSE:** This policy provides guidelines for use by Mercy drivers regarding delivery of transportation services to riders who use a wheelchair or other mobility aide.

The ramp of the rear and side load transportation vans are 30” inches wide.

To allow Mercy to safely transport our riders, wheelchair users may be requested (but not required) to provide a Personal Care Attendant (PCA) if the combined weight of a manual chair and rider is more than 350 lbs. These conditions can be a direct threat of injury to the rider, the driver and the vehicle.

## TRANSPORT OF PASSENGERS WHO USE MOBILITY DEVICES WITH THREE OR MORE WHEELS

Mercy drivers will encounter a variety of difficult situations when handling mobility devices with three or more wheels. When a ride is scheduled, the Communications Specialist will try to get as much information from that rider so that drivers have advanced notice of rider dimensions, steep driveways, or unclear pathways. Advanced notice is not necessary but is helpful anytime a driver may have a situation that could cause injury to either themselves or the riders. It is essential to protect both the rider and the driver from injury. Drivers should contact the communications center if assistance is needed.

*Communicate:*

It is necessary as part of the process of loading a wheelchair for the driver to get in and out of the vehicle. Be sure to communicate with the rider what you are doing, and especially what you want the rider to do.

*Accessible Access:*

Riders that use mobility devices such as wheelchairs, scooters, walkers, etc. must have an accessible path to the entrance of the transport vehicle. Ramps must be clear of snow and other debris, in addition ramps must be in good condition and stable. Driveways must be plowed and/or salted to prevent ice. Drivers will not push wheelchairs through snow or yards. When using a ramp, the driver should always stay on the downhill side of the wheelchair. Push a rider up the ramp, back a rider down the ramp.

*Terrain:*

When assisting individuals in wheelchairs (or walkers) over irregular ground surfaces, drivers should take every precaution to ensure the safety of the passenger and driver. If you encounter dangerous terrain, consult with your supervisor for possible long-term solutions. Under no circumstances will a driver push or lift an electric-powered wheelchair or scooter.

*Steps:*

The driver will assist an individual in a wheelchair up and down one step only. This means if you arrive for a scheduled pickup and find it is necessary to move the wheelchair down multiple steps and it is unsafe for the single provider to move the patient contact the Mercy Communications Center or the duty Operations Supervisor to see if there is a solution possible to get the patient taken care of. If a solution cannot be found, service is to be denied on a one-time basis with the knowledge and help of the Supervisor. When maneuvering the rider in a wheelchair up/down a single step/curb, always follow the "downhill side" rule. The driver should be on the downhill side of curbs or steps. To go up a single step or curb, first tilt the wheelchair back until it is in the neutral balance position and the front wheels will clear the curb. Move the chair forward until the rear wheels are snug against the curb, then lift with your legs and push forward. To go down a single step or curb, position the rear wheels at the edge of the curb. Pull the chair toward you and gently lower it to the ground. Tilt the chair back to balance position, and then continue to pull the chair backwards until the footrests are clear of the step or curb. Never attempt to maneuver an electric wheelchair up and down any curbs or steps.

*Tie downs:*

The passenger mobility device must be secured inside the vehicle with the four-point tie-down retractors assigned to the vehicle. Apply the wheelchair brakes and turn off power on motorized chairs. The wheelchair must face forward during transport. The wheelchair tie-downs need approximately a 45-degree angle from the floor track or plates to where they attach to the chair. Install the rear retractors 12 to 18 inches apart between the rear wheels of the wheelchair. Never cross the rear straps. Install the front retractors 3 to 8 inches outside of the front wheels. The tie-down retractors are to be fastened to the floor tracks of the vehicle. After hooking up all four retractors, turn the knob on each retractor to tighten each strap. Securing with all four-point tie-downs may be difficult with some mobility aids, especially with scooters, but MUST always be secured to the best of the driver's ability and training. A driver cannot transport a wheelchair or scooter that is not securely fastened to the vehicle. This is to ensure the safety of everyone on the vehicle. Tie-downs are to be secured only to the welded junctions of the wheelchair frame or to other structural areas where the frame is fastened together with hardened steel bolts indicated by six raised lines or bumps on the bolt head. Electric powered wheelchairs come in a wide variety of styles and can be a real challenge to secure properly. Even though they are a challenge, electric powered wheelchairs must be secured using the four-point tie-down system. Quick Straps can be attached to the structural frame of the wheelchair and provides a quick and easy installation point for the wheelchair tie-down. Under no circumstances may tie-downs be attached to adjustable, moving, or removable parts of the wheelchair and/or scooter such as armrest, footrest, or wheels.

*Seat Belts:*

A wheelchair seat belt shall be used for all wheel chair clients at all times for their safety. This safety belt is to be placed around the patient to secure them to the wheelchair when we first make contact. The safety belt should be placed on the patient with the latch in front and direction given to the patient on how to release if needed. The safety belt should remain on throughout the transport process until client arrives at destination. Passengers riding in the front passenger seat of the wheelchair vehicle must wear seat belts.

*Transfer from Scooters to Regular Seats:*

It is the position of Mercy that three-wheeled scooters present a major safety risk when being transported because of their propensity to tip. This is due to the size and center of gravity of a scooter with a client seated on it. The safest way for riders who use three wheeled scooters to board a Mercy Transportation Vehicle is to board the vehicle on foot with assistance from the driver. It is our policy to request that riders using scooters transfer to a regular seat to ensure they are safely secured using a seatbelt. The scooter can then be secured without the fear of passenger injury from tip over. Mercy strongly recommends no rider be transported while seated on their scooter, yet we cannot require this transfer and cannot deny service based on refusal to transfer to a regular seat. Most passengers will comply with this request, if not; assure the scooter is secured properly with four-point tie-downs prior to placing the vehicle in motion.

## GUIDELINES FOR TRANPORTING PATIENTS WITH PORTABLE OXYGEN

From time to time, the driver will encounter patients on continuous portable oxygen. In transit to or from the vehicle, the tank should be on a "caddy" provided on the wheelchair or in a carry case designed for oxygen tanks. Some patients will have tanks in a carrier with wheels. For short, in town transports, secure the carrier with the tank to the back of the wheelchair. For longer transports, place the tank into the black carrier and place the black carrier on the back of the wheelchair. Secure the empty carrier with wheels in the van. Never should an oxygen tank be laid in the patients lap or in the chair. During transport the tank should be secured in the tank brackets provided in the vehicle. Never should a tank be left loose (unsecured) in a moving vehicle.

## TRANPORT OF PATIENTS

When transporting patients to or from a Mercy facility, the driver should always have assistance from facility nursing staff when transferring patients to or from wheelchair. The driver should always stay with the patient until care has been transferred to the receiving care provider.

## SERVICE DENIAL

A driver may decline service when any of the above conditions are not satisfied. The on-duty supervisor must be contacted for consultation. The service denial must be followed up with written documentation providing all detail surrounding the denial. All service denials will be fully investigated by the supervisor.

Specific situations or circumstances may dictate alternative action to those stated above. Drivers should first discuss specific circumstances with a supervisor if questions arise regarding mobility limited service.

- Average weights of wheelchairs
- Ramp sizes same on all vehicles
- Ramp weight limits

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

**Transfer of Care between Agencies**
**PURPOSE:** To define the Mercy EMS flow for Medical Control and transfer of care between agencies.

**PROCEDURE:**
1. Medical Control

A. Medical Control shall be provided by the receiving hospital whenever possible. If contact cannot be made or an on-scene destination is not clear – Mercy Hospital Emergency Department – Springfield, MO will be the default Medical Control, unless local disaster procedures dictate other procedures.
B. On scene control will be the responsibility of the Mercy EMS Paramedic assigned to the responding ambulance. In the case of a multiple unit response, authority will fall to the Paramedic who assumes the responsibility for Medical Operations.
C. On long-distance transfers and inter-facility transports if the patient's condition deteriorates, divert to the closest appropriate hospital, and establish medical control with that facility. The original destination shall be updated on the diversion and current situation as soon as possible.

2. Transfer of Care Between Agencies

A. Air Ambulance – Mercy EMS co-workers will assume and be responsible for patient care until a face-to-face verbal report is provided to the flight crew to include patient history, current status, and treatment provided. Ground EMS and Flight co-workers should work together in providing patient care during the transition. Available documentation will also be transferred with the patient i.e. EKG's, blood drawn for lab, patient information etc.
B. Transfer to another ground unit – In the case of mechanical difficulty a face-to-face report will be provided and all information related. When possible the Paramedic who initiated patient care should ride in with the unit assuming care.
C. Multiple patient incident – Mercy EMS will continue patient care until that care can be transferred to an appropriate in-coming ambulance. A full face-to-face report to include all related information shall occur before patient care is transferred.
D. Interfacility transfers - If the transferring physician has made prior arrangements for transfer to a specific destination, that physician or the receiving physician should be contacted before diversion to another facility.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# 2-10 Diversion Criteria

**Diversion Criteria**

**PURPOSE:** To reduce confusion, promote consistency, and speed patients to definitive care.

**PROCEDURE:** The following guidelines shall apply to Mercy EMS ground units when transporting patients.

1. Critical Care Diversion: In the event that a hospital declares that they are on diversion for “critical care” the following patients would be taken to the next closest and appropriate facility.
   A. Penetrating injury to the head, neck, chest, abdomen, or pelvis
   B. Amputation of an extremity proximal to the wrist or ankle
   C. Glascow Coma Scale < 13
   D. Systolic blood pressure < 90 (adult), < 60 (pediatric)
   E. Focal neurologic deficit within the past 3 hours including traumatic deficits
   F. ST segment elevation myocardial infarction
   G.Patients whose level of consciousness or degree of respiratory distress require intubation
   F.Patients who were in cardiac arrest and ROSC has been achieved.

2. Diversion for trauma: In the event that a hospital declares that they are on diversion for trauma the following patients would be taken to the next closest and appropriate facility.
   A. Penetrating injury to the head, neck, chest, abdomen, or pelvis
   B. Amputation of an extremity proximal to the wrist or ankle
   C. Glascow Coma Scale < 13
   D. Systolic blood pressure < 90 (adult), < 60 (pediatric)
   E. Traumatic focal neurologic deficits
   F. Patients whose level of consciousness or degree of respiratory distress require intubation

3. Closed to EMS or ED diversion: In the event that an emergency department declares that they are on ED diversion or are closed to EMS, all patients being transported to that facility are diverted to the next closest and appropriate facility.

4. Once a pre-hospital staff member has contacted the receiving facility, given report, and been accepted by that facility that unit and patient will continue to that facility regardless of any subsequent changes in status by the facility.

5. Burn Divert (Mercy)
   A. Ground EMS units should continue transport to Mercy – Springfield. Burn Surgeon to evaluate, stabilize and facilitate transfer as indicated.
   B. If aircraft are available, outlying services should consider direct transport other designated Burn Facilities i.e. Little Rock from South, St. Louis from East, Columbia from Central.

6. Diversion is a request, and in most cases should be honored. If however, the patient refuses transport to another destination, after having been informed of the reason for diversion and the capabilities available or not available at the receiving hospital, transport should continue and report made to the hospital. If concerns arise, seek consultation of medical control, EMS leadership or the EMS Medical Director.

## DRAWING BLOOD FOR BLOOD ALCOHOL ANALYSIS

**PURPOSE:** To guide paramedics in the applications of policy and procedures when asked to draw blood by law enforcement officials for reasons other than primary patient care.

Paramedics may draw blood in the field as requested by law enforcement officials. If the patient is alert and oriented, **their consent is necessary** before the procedure is performed. In the event the patient is unresponsive, dead, or otherwise unable to give consent, then the consent will be implied and the procedure can be performed as requested by law enforcement.

Blood will be drawn by the Mercy Paramedic at the scene of an incident only, on a dispatched call for medical assistance. We will not respond to the sheriff's office or police headquarters for the sole purpose of drawing blood nor will we draw blood if an officer comes to the station with a patient for such purpose alone. Officers should be directed to the nearest emergency department for assistance in obtaining the blood sample.

**PROCEDURE:** After the paramedic is requested to draw the blood, consent must be received (informed or implied (1)). Universal precautions must be observed. Sterile, intact containers, needle, et cetera, must be used in the blood draw procedure. **Law enforcement official will supply a blood collection kit and only that kit should be used which includes site cleansing wipes, blood collection needles and tube and label**. Sample should be obtained following the instruction contained within the collection kit. Drawing from the IV site is allowable if the site was not prepped using alcohol wipes (2). After the procedure is complete, it is necessary that the paramedic carefully document the procedure in the narrative including the arresting officers' name and badge number. If consent is informed, the patient's signature should also be obtained.

Patient care is the primary concern of the paramedic and the patient's rights and well being are top priorities.

(1) Informed consent is necessary to initiate invasive therapy.

(2) While alcohol wipes are not the same as the ethanol being tested for, this is still used as an argument in court.

## PHYSICAL RESTRAINT POLICY

**Purpose:** Mercy Health System strives to provide a high level of patient safety while respecting the patient's right to privacy, dignity, comfort, and well-being. At MHS all patients have the right to be free from restraint or seclusion, of any form, imposed as a means of coercion, discipline, convenience or retaliation by staff. MHS is also committed to providing an environment that is as least restrictive and restraint free as possible for the patients entrusted to our care. This policy addresses the use of restraint and seclusion within Mercy Emergency Medical Services (EMS); describes the requirements for their use and specifies the conditions for application, duration, and limitations.

**Definitions:**

A. **Non-Violent, Non-Self-Destructive Restraints:**
Use of restraints for these conditions is for the primary purpose of supporting medical healing (i.e. preventing the interference with tubes or medical equipment due to patients' inability to follow instructions, or due to severe cognitive impairment).

B. **Violent or Self-Destructive Restraints:**
Use of restraints for these conditions is for the primary purpose of preventing harm to patients or others when there is an unanticipated outburst of severely aggressive or destructive behavior and presents a risk of imminent harm to self or others.

C. **Episode of Restraint:**
Restraint should continue for only as long as necessary to maintain patient safety.
For nonviolent, non-self-destructive conditions episode is defined as the period of time as determined by the paramedic to be necessary to complete the interventions, up to the total amount of time EMS has charge of the patient's care. For Violent or self-destructive conditions an episode is defined as the entire time EMS has charge of the patient's care as a result of limited resources to ensure patient safety in a moving ambulance. Upon arrival at the receiving facility, continued restraint will be evaluated by receiving physician.

D. **Emergency Measure:**
Occasions where severely aggressive or destructive behavior places the patient or others in imminent danger and least restrictive interventions have been ineffective.

E. **Manual Hold:**
Use of brief physical holding used in an emergency when there is imminent risk of individual harming self or others.

F. **Mechanical Restraints:**
Any manual method, physical or mechanical devices, material or equipment that immobilizes or reduces the ability of a patient to move his or her arms, legs, body or head freely. An object may be a restraint by functional definition; when an object restricts the patient's movement or access to his or her body, it is a restraint. The only approved restraint to be applied by Mercy EMS is 4-point soft restraints applied to both the patient's wrists and ankles.

G. **Seclusion**:
The involuntary confinement of a patient alone in a room or an area where the patient isphysically prevented from leaving. Mercy EMS will not utilize seclusion at any time.

H. **Chemical Restraints:**
A medication used to control behavior or to restrict a patient's movement and is not a standard treatment or dosage for the patient's condition. Standard treatment includes all of the following:

- Medication is within pharmacy parameters set by FDA and manufacturer for use
- Use follows national practice standards
- Used to treat a specific condition based on patient's symptoms
- Enables patient to be effective or appropriate functioning

I. **Infant/Toddler Restraint** (toddlers are defined as 18 months - 3 years of age):

Soft wrist restraints, an arm restraint, wrapping or bundling, or some similar type of intervention to prevent an infant or toddler from removing invasive lines or reopening a surgical site is considered a restraint. Interventions that include the use of a helmet to protect a patient's head, and when the patient is unable to easily remove the helmet, would meet the definition of physical restraint and the requirements would apply. Placing hand mitts on infants would not be considered restraint but pinning or otherwise attaching those same mitts to bed or bedding would meet the definition of a restraint.

J. **Non-Restraint:**

The following are NOT considered restraint interventions and DO NOT require a physician's order.

Medical immobilization: Devices customarily employed during medical, dental, diagnostic or surgical procedures that are considered a regular part of such procedures or tests. Examples: body restraint during surgery and arm boards during IV administration when medical immobilization is necessary.

Adaptive Support: Mechanisms intended to help a patient achieve maximum normative bodily function, including braces, orthopedic appliances, wheelchairs or postural supports, which assist the patient to assume a correct sitting position.

Developmental support for newborns/infants: swaddling newborns/infants to promote developmental care (positioning/comfort/warmth) is not considered a restraint.

Protective Devices: Mechanisms intended to compensate for a specific physical deficit. Such mechanisms usually include tabletop chairs used for support of hemiplegic patients, protective helmets for head injury patients, IV boards, and splints.

Forensic Devices: Handcuffs, leg cuffs or other devices used by the forensic staff for criminal custodial purposes.

Forensic devices applied by law enforcement (handcuffs, plastic ties or hobble restraints) must provide sufficient slack in the restraint device to allow the patient to straighten the abdomen and chest and to take full tidal volume breaths.

Forensic devices applied by law enforcement require the officer’s continued presence to ensure patient and co-worker safety. The officer should, if possible, accompany the patient in the ambulance, or follow by driving in tandem with the ambulance on a predetermined route. A method to alert the officer of any problems that may develop during transport should be discussed prior to leaving the scene. If the officer will not/cannot accompany the patient or crew then handcuffs should be removed by law enforcement and patient placed in soft 4 point restraints and secured to cot with safety belts. If it is perceived to be too great a risk to remove handcuffs, than patients should be transported on side and not on back to prevent injury to arms and wrists. In general, transport with handcuffs is discouraged. 4 point soft restraints are preferred.

Time Out: A procedure used as part of patient’s treatment plan to assist the patient to regain emotional control. Situations where patients are removed from the immediate environment for an agreed upon time frame to a quiet area or unlocked quiet room are not considered as episodes of seclusion.

K. **Safety Risks:**

Continued pulling of lines, pulling of drains, removal of equipment, removal of dressings, or places patient or others at risk of harm.

# 2-12 Physical Restraints

**Chemical Treatment of Behavioral Disorders:**

The use of medications as restraint is not a standard part of the philosophy of patient care of Mercy EMS. Medications are used to treat specific conditions based upon patient symptoms. Guidelines address behavioral health issues, utilizing anxiolytic and/or antipsychotic medications. The patient will be evaluated for medical or traumatic etiology of behavioral disorders. The only time that chemical restraint should be utilized by Mercy EMS is in the case of severe delirium, when there is no other way to safely gain control of the patient for appropriate treatment of and transport for their condition. When this is the case, chemical restraint should be employed in conjunction with manual hold and mechanical restraints utilizing as many providers as necessary to accomplish the task safely. Safety for the patient and others is always the priority.

**Alternative Methods:**

Methods or strategies utilized by the EMS co-workers in order to avoid the use of restraints include:

- Verbal de-escalation
- Presence of family members
- Law enforcement presence
- Pain management

**Procedure:**

A. Scene safety will be of highest priority and addressed prior to any intervention.
B. Any patient requiring restraint should be attended by the Paramedic.
C. Patient restraint requires on-line Medical Control prior to or notification of receiving facility as soon as safely possible following implementation. The circumstances under which the restraint is used will be documented on the Patient Care Form (ePCR).
D. Refer to Behavioral Health Disorders Guideline for a standard plan of care for these patients. Other medical or trauma guidelines may be followed simultaneously as appropriate. (Mental Status Change, Poisoning/ Overdose, Head Injury)
E. When physical restraint is required, the following parameters will be considered:
    a. The least restrictive device will be utilized.
    b. Restraints will never be applied for the convenience of the staff
    c. The patient will be assessed every 15 minutes for physical response; extremity circulation, motor function and sensation; respiratory compromise; and aspiration risk.
    d. Proper body alignment and patient comfort will be addressed.
    e. Restraint application and removal will follow the manufacturer's recommendations.
    f. Cot manufacturer restraint systems will be placed above any sheets or blankets.
F. ePCR documentation will include:
    a. Which provider, facility, or law enforcement agencies applied the restraints.
    b. The patient's behavior that led to the decision to apply restraint.
    c. Interventions used including less restrictive alternatives attempted.
    d. The assessment of the patient every 15 minutes for physical response; extremity circulation, motor function and sensation; respiratory status.
    e. Details of patient transfer of care to include at a minimum: how patient was moved into the facility and transferred to facility bed; extremity circulation, motor function and sensation; respiratory status.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## TRIAGE AND TRANSPORT

**PURPOSE:** To assure that ill or injured patients are delivered to the closest appropriate medical facility for definitive treatment.

**PROCEDURE: Mercy co-workers shall proceed to all patients with the thought of care being delivered at the patient, to that end, all EMS co-workers shall arrive to the patients side with a minimum of cardiac monitor, airway bag and first in (ALS) bag to be prepared to treat without delay all types of conditions.** Mercy co-workers who establish patient care will continue care until the patient arrives at the hospital and care is transferred, or until relieved by another EMS provider of equal or higher licensure.

Mercy EMS co-workers on the scene shall determine the patient's destination as outlined in established guidelines. They will also determine mode of transportation, and expedite transport by contacting the appropriate air ambulance service, if necessary. Mercy EMS co-workers will have the option of contacting medical control for direction in transport decisions.

For **general medical patients**, the established guidelines will be followed. Patients will be transported to the nearest appropriate facility. In cases of acute myocardial infarction, a medical facility with acute intervention will be considered. In cases of suspected CVA, onset less than six hours prior, a medical facility with CT scan available will be considered. In each of these cases, air transport should be considered.

For **trauma patients,** the established guidelines will be followed. Patients will be transported to the nearest appropriate facility. Criterion for diversion to the nearest trauma center will include physiologic criteria, mechanism of injury, and anatomic criteria, as outlined in policy and guideline. Air transport should be considered. Pediatric trauma patients will be transported to the nearest trauma facility with pediatric capabilities. Trauma patients in cardiac arrest will be treated as per guidelines. Termination of Resuscitation in the Field guidelines will be followed when appropriate.

The desired destination of patient and/or family will be considered; however selection of appropriate hospital destination will take precedence. The patient's insurance provider will also be considered; however selection of appropriate hospital destination will take precedence. The patient's ability to pay will not be a consideration when determining appropriate hospital destination.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# 2-13 MULTI-CASUALTY EVENT

**PURPOSE:** Multi-Casualty Incidents are defined as any incident where the number of ill/injured people exceeds the day-to-day operating capabilities of the service; requiring additional resources and/or the distribution of patients to multiple hospitals. This will be different for each incident based on the time of day, location, resources available, etc.

**PROCEDURE:** Upon arrival the scene and after determination of a multi-casualty event, the communications should be notified and create an MCI alert. If possible, provide the communications center with estimated number of patient and any needs (ambulances, helicopters, other resources).

**MCI Level 1 – 5-14 patients (approximately)**
A suddenly occurring event that overwhelms the routine first response assignment. The number of patients is greater than can be handled by the usual initial response. Depending on the severity of the injuries/illnesses, the system may have adequate resources to response and transport the patients. The duration of the event is expected to be less than one hour.
Examples: Motor Vehicle Accident, Active Shooter

**MCI Level 2 – 15-50 patients (approximately)**
A suddenly occurring event that overwhelms the first response assignment and, potentially, additional resources requested within the operational area and neighboring counties/agencies. Regional mutual aid system is activated. An adequate number of additional ambulances are not likely to be immediately available, creating a delay in transporting patients. The duration of the incident is expected to be greater than one hour.
Examples: Bus crashes, train derailments, active shooter in a crowd, improvised explosive device

**MCI Level 3 – 50+ patient (approximately)**
A suddenly occurring event that overwhelms the first response assignment, additional resources requested within the operational area, surrounding counties/services. It is not possible to respond with an adequate number of ambulances to the incident and promptly respond to other requests for service. Regional and State Mutual Aid system is activated. Air and Ground services found outside the local region are requested. Not only will ambulance service be inadequate but receiving hospitals will be overwhelmed. In an incident of this size a regional and/or state EOC will be activated.
Examples: Commercial airline crash, building collapse, large area active shooter.

1. The first arriving unit will immediately begin triage of patients using the SALT algorithm.

   S – Sort
   A – Assess
   L – Lifesaving Interventions
   T – Treatment / Transport

   Acuity based triage colors for both tape and tags are universally accepted as:

   Black – Deceased
   Grey – Expectant
   Red – Immediate/Life Threatening
   Yellow – Delayed/Serious non life threatening
   Green – Minor/Walking Wounded

   The use of colored tape upon initial contact with victims at the crisis site is preferred over the use of tags to identify initial acuity. Triage Tags should be used the external casualty collection point outside the crisis site or applied to patients during transport for tracking purposes.

Final Review and approval by: Robert Patterson - Executive Director, Mercy EMS

2. Whenever possible, patient should be transported to the most appropriate facility without overloading one particular facility. Every effort will be made to transport trauma patients to a trauma center, however should a facility be overwhelmed or unable to accept more patients, the next closest facility will be selected.

3. Incoming ambulances to the scene will be expected to hyper-load patients for transport. A transport officer should be assigned as soon as practical to assist with the hyper-loading process and load balancing of hospital systems. Hyper-loading should fill every available seat and the EMS cot with patients. The transport officer will assist to balance the load for each ambulance so as to not overload one unit with critical patients when possible.

4. The medical command on the scene will work in conjunction with the transport officer and incident commander to track patients, patient numbers, acuity and transport destinations. Receiving hospitals will track incoming patient names to later associate with triage numbers obtained from the medical command at the scene. This will facilitate patient accountability and reunification.

5. The incident commander at the scene has the overall responsibility for developing objectives and requesting any required additional resources. At no time should Mercy EMS units self-dispatch to an event. Off duty crews who may elect to come in to provide assistance, will report to their assigned stations and seek guidance from their local leader. At no time is it acceptable to call the communications center during an event to offer services.

6. Should it be required, the EMS Disaster Trailers located in the regions and at Mercy EMS Headquarters in Springfield, Missouri can be requested through the communications center.

Final Review and approval by: Robert Patterson - Executive Director, Mercy EMS

## TRANSPORTATION OF PATIENTS

**Mercy Emergency Medical Services will provide exceptional care to all patients, and in doing so we believe that patients should be transported to the closest, most appropriate, medical facility for screening, care and medical stabilization.**

**It is understood by EMS caregivers that in most cases, the closest hospital is generally the most appropriate, however there are certain conditions in which a father away facility is the most appropriate, especially in cases of trauma, stroke, STEMI or other specialized care.**

**Ambulance diversion is a hospital based decision and is not binding upon the EMS service. Diversion may not be appropriate if the hospital "on diversion" is the nearest appropriate hospital and the patients well-being may be compromised by a longer transport time.**

The following shall be followed regarding appropriate level of care provided for patients being transported by Mercy EMS.

1. In general, a patient should be cared for by the highest -trained person available in the ambulance If a Paramedic and an EMT-B staff a given ambulance, the medic should be handling the vast majority of those calls, and certainly all calls in which any ALS is required. When the medic downgrades a call to an A-EMT or EMT-B level ,they must be extremely confident that the patient will not deteriorate or require any advanced interventions en-route. The provider they have put in charge of the patient's care may not be in a position to intervene if the patient decompensates. If the patient suffers harm as a result of the downgrade and subsequent unavailability of ALS interventions during transport, in that case such calls will be subject to investigation and review by the EMS medical director or their designee.

2. There may be cases in which the paramedic may feel it is appropriate to downgrade a call to an A-EMT or EMT-B level of care, this should be performed with caution, and only if the following criteria have been met:

a. The paramedic has performed a complete assessment and has a high degree of confidence that the Patient would not benefit from advanced life-support measures on the scene or during the transport.
b. No ALS intervention or medication has been initiated(even if the patient improves or if the EKG normal)
c. The paramedic and EMT-B or EMT-A caregiver both agree on a plan for subsequent patient care if the patient's condition deteriorates during transport
d. The patient is alert, oriented, and acting appropriately for their age.
e. There are no signs of significant impairment due to drugs, alcohol, organic causes, or mental illness
f. If any doubt of appropriateness of downgrade the higher level of care provider should attend the patient.
g. Any patient who refuses care and who would have been transported with ALS level care will require the ALS level provider to complete the patient refusal of care documentation.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## TRANSPORT OF PATIENTS OF SIZE

**PURPOSE:** Mercy EMS is committed to the safe and efficient transport of patients of size. This policy outlines EMS capabilities, operations and safe practices for the lifting, moving and transport of patients of size.

**PROCEDURE:** In situations where Mercy EMS is requested to provide care and/or transport to a patient of size the following shall be used to assist providers in making safe decisions regarding the care of patients of size. For the purpose of this policy, a patient of size is any patient weighing 350lbs (159kg) or greater.

1. Anytime a patient of size requires movement and/or transport, a minimum of four personal will be assigned to the event. This may be by means of EMS personal, 1st responders, or other agencies that are able and trained to assist. For every 50lbs over 350lbs an additional crew member or responder will be requested/assigned to the event.

2. EMS Stretcher weight limits are designated by the equipment manufacturer. Mercy EMS utilizes the following equipment:
    i. **Stryker Power-Pro XT (with and without folding wing braces).**
    Cots are rated for a maximum weight capacity of 700lbs at full load height and a maximum of 1400lbs at floor height. A maximum unassisted lift capacity of 500lbs.
    ii. **Ferno Model 28**
    Maximum rated weight capacity of 650lbs at full height. Maximum weight capacity of 1300lbs at floor height. Manual lifting of patients above 650lbs is not recommended by the cot manufacturer.
    iii. **Ferno Model 35 ProFlexx**
    Maximum rated weight capacity of 700lbs at full height. Maximum weight capacity of 1100lbs at floor height. Manual lifting of patients above 500lbs is not recommended by the cot manufacturer.
    iv. **Ferno Model 56 Powerflexx**
    Maximum rated weight capacity of 700lbs at full height. Maximum weight capacity of 1100 at floor height. A maximum unassisted lift capacity of 450lbs.
    v. **Ferno Large Body System (LBS) cot attachment.**
    Maximum patient weight of 1000lbs (it does not increase the weight rating of the cot). A maximum patient width of 41 inches. Winch system rated for a maximum live load of 2500lbs. Long step ramps rated at 1400lbs. Ramp/Winch Transition plate does not carry a weight rating.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

3. If a patient of size requires transport from a facility, needs will be identified during the intake process at the communications center and noted in the CAD information. Contact will be made with a supervisor prior to pick up of the patient to ensure a safe plan is made for the movement of the patient.

   If an EMS crew, once on the scene of an emergency call, makes the determination that the patient is of size, they will request assistance either by contacting their local leader or the communications center.

   At no time should EMS coworkers preform any lift, movement or transport of a patient of size without additional assistance and a well thought out safety plan. Treatment should never be delayed while waiting for assistance.

4, Patients of size have the same right to competent and courteous care as any other patient treated by Mercy. All care and lifting/movement safety plans should be discussed and coordinated with the patient. Mercy EMS carries equipment for the assessment and treatment of patients of size to ensure their comfort and dignity during all phases of care.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## FERNO LBS SYSTEM

A minimum area of 40 feet by 14 feet is required behind the ambulance for deployment of the ramp system. Every attempt should be made to ensure a level service (side to side leveling is equally important). If parked on a hill, always face downhill. NEVER move the ambulance with the ramp system attached.

Ensure the LBS system is securely attached to the Ferno Cot with the provided pins. Ensure all safety belts are attached and long enough to accommodate the patient comfortably. The cot mattress should be removed and will remain off the cot during LBS operations. Ensure adequate padding is placed on the cot for the comfort of the patient.

Secure the yellow webbing straps to the cot. Ensure the webbing is not attached to the moving bracket or the head section of the cot.

Install the Winch system by placing the winch box directly in front of the captains seat in the patient compart. Secure the box to the mounting plates with the included fasteners. Once secured, plug the winch cord into the power cord located between the captains seat the action area wall. Plug the operator controller into the winch system and verify the winch moves in both directions.

Install the sill plate just inside the rear doors of the ambulance by placing the plate over the safety catch hook with the roller facing up. Ensure the hanger rods lay down into the sill near the Nader bolt for the rear doors. Once aligned, secure the plate to the floor with the included fasteners. Ensure the ramp rod spacers are on the outside of the plate.

Unfold the ramps and place the hooked section onto the ramp sill plate rod and push down to secure. At each fold point of the ramp a yellow safety cover is attached, tun these up to guard pinch points. Ensure both ramps are equal height and space apart.

With the assistance of another person, activate the winch system to extend the cable to a point about 12 inches past the end of the ramps. Ensure the cable feeds out between the antler bracket and over the roller on the sill plate.

Once the patient/cot is ready, line the cot up with the ramp system and attach the hook from the winch cable to both yellow webbing straps. Prior to movement, brief the patient on what to expect. Activate the winch to pull slack from the line and line the cot up with the ramps.

For movement on the ramp, a person should be stationed on each side of the cot to assist with guiding on the ramps and to monitor for any safety concerns. At no time should anyone ever be at the foot of the cot or in the patient compartment between the cot and the winch system during loading or unloading. The winch operator should stand outside the side entry door in view of one of the cot attendants at all times.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## FERNO LBS SYSTEM

As the cot moves along the ramp system, the attendants should ensure the cot travels in a straight line. The cot has a tendency to shift to the left side of the ambulance as it travels along the ramp system. The attendant on the left must watch and adjust accordingly. As the cot moves across the sill plate, ensure the loading wheels do not end up between the wall and cot fastener.

Once the head of the cot reaches within six inches of the antler bracket, it should be manually seated in the bracket and locked in the fastener. The winch system may remain attached during transport. When loaded in most ambulances, only a few inches of room are available on either side of the cot. Ensure all monitoring equipment and patient comfort items are prepared prior to transport.

Remove the ramps for transport and transport in a separate vehicle. The ramps should never be transported in the same unit with the patient. The sill plate arms will fold up and allow the rear doors to close without the need to remove the plate.

Once arrived at the destination and assuring adequate space and level area, the rear doors should be opened and the ramp arms folded down. Verify all fasteners are still in place and secure prior to any movement of the patient or attaching the ramps. Ramps should be attached in the same manner they were for loading.

Attendants should be present on both sides of the cot for unloading. At no time should anyone be at the foot end of the cot or in the patient care area between the cot and the winch system. The winch operator should stand outside of the side patient compartment door in view of one of the attendants.

The cot should be released from the fastener only when both crew members are holding the cot. Move the cot to the right 1-2 inches to ensure clearance from the fastener. Pull on the cot until the winch line slack is removed. Once slack is removed, the winch operator can begin releasing the cable.

The attendants should guide the cot down the ramps ensuring to watch for proper alignment on the ramps and clearance of the sill plate as it leaves the ambulance. Once the cot reaches the end of the ramps, caution should be taken to ensure a smooth transition from the ramps to the ground. It may be beneficial to have extra attendants assist with the transition from the ramps to the ground.

Once the entire cot has cleared the ramp system and attendants are certain no movement of the cot will occur, the winch cable can be safely removed from the webbing straps

At no time should any person be allowed to operate the LBS system without proper training on the use and capabilities of the system. If you have been previously trained and have not used system in some time, ask for just in time education prior to use with a patient.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## STRYKER POWER LOAD

Some ambulances within Mercy EMS operations have Stryker Power Load systems installed on the units. Stryker cots are capable of moving and lifting patients of size. Mercy EMS will only utilize Stryker cots for patients of size if an ambulance is available with a power load system installed, otherwise the Ferno LBS will used.

When moving patients of size on Stryker power cots, the cot should remain as low as safely possible anytime it is in motion.

Once the cot has arrived the rear of the ambulance, ensure both wheel brakes are locked and, if equipped, the steering wheels are locked in place. Open the rear doors and extend the power-load system until it locks in place and the lights are flashing orange.

Ensure someone is located at the foot and head ends of the cot as well as the sides of the cot. If the patient has a weight of 500lbs or less, the cot will lift without assistance and the attendants will only need to ensure the cot does not move during the lift. If the patient weight is above 500lbs, the attendants will need to provide light upward pressure on the rails to ensure the cot lifts to load height. The cot should be positioned in such a manner that little movement is required once the lift is complete to secure it to the loading system. It is not recommended by the manufacturer to move the cot at load height with a patient of size as an increased risk of tip-over exists.

Once the cot is at load height, gently guide it onto the power-load bracket until it locks into place in the receiver and the lights turn green. Once in place, ensure nothing is in the path of travel of the lower frame and press the button to lower the cot (collapsing the x-frame). There is no need to assist the cot in collapsing as the power-load system is rated to hold the cot and patient. The operator at the foot end of the cot should maintain a hold on the cot as it may travel into the ambulance once fully collapsed.

Once the cot is fully collapsed, light force is all that is required to push the cot into the ambulance. The power-load system will automatically lower and lock the cot once it is fully inside the unit.

Once arrived at the destination, ensure the ambulance is parked as level as possible. Open the rear doors and ensure the cots path of travel is clear. Press the red release button and the cot will lift slightly and disengage from the locking system. Light force is all that is required to pull the cot out of the ambulance until it locks in place.

Once the cot is fully extended from the ambulance and locked in place, press the lift button (expand the x-frame). Once the frame is completely expanded and the wheels are touching the ground, press the small red release button on the cot and the cot will disengage from the power-load system.

Ensure attendants are positioned at the head and foot end of the cot as well as both sides. Gently pull the cot clear of the power-load arms and lower to floor height prior to movement away from the ambulance.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## PHILOSOPHY REGARDING THE WITHHOLDING OF RESUSCITATION

**PURPOSE:** Mercy is an institution sponsored by the Religious Sisters of Mercy. While we strive to combat illness, injury and disease through our Emergency Medical Services, we also recognize that death ultimately comes to all persons. It is our hope that these guidelines will assist pre-hospital providers when an emergency decision must be made to withhold resuscitation

**PROCEDURE:**

1. It is a policy of Mercy EMS that cardio-pulmonary resuscitation be instituted immediately in the event of acute cardiac or respiratory arrest. CPR will be initiated if two conditions are fulfilled by the patient:
    i. If there is a possibility that the brain is viable, and
    ii. If there are no legal or medical reasons to withhold resuscitation.

2. A decision not to resuscitate a patient must be based on acceptable medical standards. The reason to withhold resuscitation should be sufficiently solid so that, should the decision be subject to question, it can be medically supported. There are a few reliable criteria by which death can be defined immediately. Decapitation, rigor mortis, tissue decomposition, and extreme dependent lividity are reliable criteria. When these are present, resuscitation should not be started. In the absence of these reliable criteria of death, resuscitation efforts generally should be initiated immediately unless there is another acceptable medical or legal reason to withhold it, such as:.
    a. NEU Criteria.
        N – Non shockable rhythm throughout resuscitation
        E – Eighty years of age or older
        U - Unwitnessed arrest

    b. Out of Hospital Do Not Resuscitate Orders (OHDNR) orders may be presented by the family. Such orders have been clearly supported in court cases. OHDNR orders must be written by the physician and must contain the medical justification for the order and an acknowledgment that the patient or family has authorized the order. The OHDNR order must be signed by the physician and dated. It must be a permanent order.

    c. Advanced Directives may be presented, an advance directive allows a competent person to make a decision concerning treatment that might prolong the dying process or to appoint an agent to convey their treatment wishes if they are incapacitated. An advance directive is a legal document in effect when the patient lacks decisional capacity. An advance directive can further stipulate that a terminal disease must also be present before the directive has force or the agent has authority. An advance directive may be revoked verbally by the patient at any time.

A DNR, OHDNR, advance directive, living will, or similar document may be honored at any time without medical control when validity and applicability are clear. Honor the treatment limits expressed. If uncertain, initiate resuscitation and consider contacting medical control.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

3. There may be situations where a patient has neither a DNR or the advance directive, but the patient's wishes conveyed by the family may be honored due to the patient's terminal condition.

4. A patient with a terminal disease, who might be transported routinely, should be informed about the existence of advance directives and where to get more information.

5. When any doubt exists concerning a patient's viability or medical condition, or about the validity or applicability of DNR orders or advance directives, resuscitation should be initiated immediately.

   If family members request resuscitative efforts despite the presence of an advance directive, resuscitation should be initiated immediately.

6. If validity or applicability of a directive is uncertain, consider contacting Medical Control. Occasionally a physician unknown to the EMT/Paramedic will appear at the scene of a medical crisis and offer to take over management of the resuscitation. Verify this person's identity and ensure they understand they are taking full responsibility for the patient and wish to do so. If yes, follow the physician's orders.

COMMENTS:

- These guidelines apply only to patients who are not admitted to the hospital.

- By law, the patient is the only person who can consent to, or refuse, their own care. This may be done by means of advance directive or by a responsible surrogate conveying the patient's wishes.

- If the patient is incapacitated and no obvious reason is present to withhold CPR, it must be performed.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# 2-16 Philosophy Regarding the Withholding of Resuscitation

## DO NOT RESUSCITATE ORDERS

**PURPOSE:** To define the circumstances when Mercy EMS co-workers may honor do not resuscitate orders in the pre-hospital setting. It is the policy of Mercy Health Center and Mercy EMS that the documented wishes of patients be honored by Mercy EMS co-workers.

**PROCEDURE:** The Paramedic/EMT in charge of patient care will honor the Outside the Hospital Do Not Resuscitate (OHDNR) documentation when it is appropriately completed and presented. The following guidelines should be used when considering the validity of a OHDNR form:

1. An OHDNR order shall not be effective during such time as the patient is pregnant.

2. DNR documentation must have been completed and signed by the patient or patient's guardian and the patient's physician.

3. If any doubt exists regarding the validity of the documentation in the mind of the paramedic, immediate resuscitative procedures should be implemented.

4. If BLS (Basic Life Support) has been initiated when documentation is presented, the EMS provider may discontinue efforts without contacting medical control.

5. If cardio-pulmonary arrest occurs during transport and a clear, valid, applicable directive is available, honor it without requiring Medical Control authorization. If validity or applicability is uncertain, initiate resuscitation and consider contacting Medical Control.

A DNR, OHDNR, advance directive, living will, or similar document may be honored whenever presented if its validity and applicability are clear. Follow the treatment limits actually expressed; a living will is not automatically a DNR.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## Helicopter Utilization Guidelines

**PURPOSE:** To provide guidelines for the decision to request a medical helicopter in order to provide expedient care and transport.

**Rationale**

Air transport is most frequently utilized by ground ambulance crews to facilitate rapid transport of critically ill or injured patients. It is important to ensure proper utilization.

1. **PROCEDURE:** Mercy EMS co-workers shall be familiar with anticipated travel times from their service areas to various hospitals as well as common road conditions, traffic and terrain along routinely traveled routes. Using this knowledge, Mercy EMS co-workers will consider the following factors in their decision to request air transport by medical helicopter.
   a. One or more of the medical or trauma guideline elements are met as assessed by the Paramedic.
   b. Ground resources are exhausted or exceeded.
   c. Prolonged vehicle extrication time is anticipated
   d. Specific environmental conditions exist - extreme heat or cold that may effect patient outcome.
   e. Road or bridge condition, which prevent ground transport.
   f. Weather conditions exist that will allow safe operation of the helicopter. The final to decision to accept a mission is the responsibility of the pilot.
   g. A safe landing zone can be prepared. It is recommended that each ambulance service maintain a list of acceptable landing zones in their area. As available, coordinates and physical descriptions of landing zones should be provided in advance to the St. John's EMS dispatch center. Local law enforcement and fire should be included in the designation of landing zones when possible.
   h. Most helicopters will require an average of six minutes during daytime and ten minutes during night hours to progress from initial dispatch to lift-off. From lift-off, travel time may vary and may be difficult to estimate, but a general rule is two miles per minute of flight time. The estimated round trip travel time for the helicopter should be considered with the necessary scene time required to transfer the patient to the flight crew. Once airborne the flight crew can provide a more accurate ETA.
   j. Estimated ground travel time with consideration of terrain, traffic and weather conditions should be considered. If ground transport will be more expeditious and rapid transport is the only rationale for requesting the helicopter, proceed with ground transport.
   k. The request for a helicopter should be made as early as possible. This request can be made while the ground ambulance is responding based on initial triage information or information provided by 1st responders on the scene. Size and scale of the incident should also be considered. If the ground ambulance arrives and determines that the helicopter is not needed, cancel the response as soon as possible.
   l. In the event weather conditions prohibit the closest helicopter from responding, dispatch may consider requesting a helicopter from another location where weather conditions may be acceptable. For example, a helicopter in Columbia or Kansas City may have good conditions to fly in the northern region when a Springfield helicopter does not.
2. Requests for an Aircraft shall be made through the dispatch center.
3. Once a helicopter is enroute, only responding Mercy EMS co-workers can make the final determination to cancel the request. The flight crew will advise the need to cancel response due to weather or mechanical issues.
4. Helicopter requests will be evaluated by the EMS Manager or Field Supervisor in conjunction with the department quality assurance program to ensure proper utilization.
5. If a patient or family member identifies themselves as a member of another flight program and if patient condition warrants helicopter transport, Saint John's EMS Dispatch should be contacted. Response time and ETA of the closest aircraft will be determined. If the response time is not appropriate and it will jeopardize the patient's condition by waiting, the patient and family should be carefully informed and provided our recommendation i.e. go by ground or call a closer aircraft.

6. If a patient or family member requests an aircraft to a location other than the closest most appropriate facility, discussion with the flight crew, and an assignment of benefits authorization must be signed, prior to transport.

7. If our co-workers identify the need for a parent to ride in the aircraft during transport of a child, notify dispatch as soon as possible in order to confirm the capability to do so. The aircraft will need to shut-down and a safety briefing provided to the parent. Delay in transport will be minimized.

**Medical/Trauma Condition Criteria**

1. Medical
    a. Systolic BP < 90 or > 200
    b. Respiratory rate <10 or >30
    c. Heart rate < 60 or 120
    d. * Uncontrollable cardiac dysrhythmias
    e. * Airway control intervention
    f. External pacing in progress
    g. * Decreased level of consciousness
    h. Hypo or Hyperthermia
    i. * Acute MI or chest pain suggestive of MI
    j. Shortness of breath
    k. Nausea
    l. Diaphoresis
    m. Medication administration requiring an infusion pump
    n. * Signs or symptoms of high risk OB patient
    o. Overdose
    p. Pulsating abdominal mass
    q. * Active GI bleed
    r. Seizure activity
    s. < 8 years old, or > 55 years old
    t. CVA or GI bleed
2. Trauma
    a. * RTS less than 12
    b. During pregnancy
    c. < 8 years old, or > 55 years old
    d. Systolic BP < 90
    e. Respiratory rate < 10 or > 30
    f. Heart rate < 60 or > 120
    g. * > 20 % body surface burn
    h. * Spinal injury with neuro deficits
    i. * Fall greater than 20 feet
    j. * Extrication greater than 20 minutes
    k. Recently discharged from a medical facility following trauma
    l. Injury or changes to head, neck, chest, abdomen or extremities
    m. Positive loss of consciousness
    n. Gross bleeding
    o. Penetrating injury

* Need only 1 criteria to qualify, otherwise at least 2 or more need to apply for appropriate helicopter utilization.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

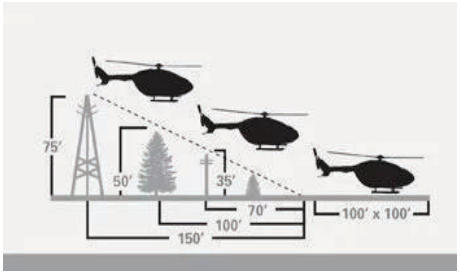
## Helicopter Scene Safety Guidelines

**PURPOSE:** To provide guidelines for safe operations around helicopters during scene operations.

**Rationale**
Air transport is most frequently utilized by ground ambulance crews to facilitate rapid transport of critically ill or injured patients. It is important to ensure a safe scene for all crew members, patients, and other responders.

**PROCEDURE:** Mercy EMS co-workers shall be familiar with ground safety rules for all scenes in which aircraft may be operating.

The following guidelines must be utilized to select, prepare and secure a safe landing site for aircraft:




Size: At least 100 feet x 100 feet
Shape: Square, circular, or rectangular
Slope: Relatively flat (less than 10º slope)
Surface: The LZ should be free of debris and equipment (loose items may be blown around the scene by downwash from the rotor blades).
Surroundings: Identify power lines, antennas, trees, signs, poles or hazards within 500 yards and keep personnel, spectators and vehicles at least 200 feet from the landing area.
Daytime LZ: Ideally the four corners of the site should be marked with highly visible objects (most Fire and Law agencies have cones available).
Nighttime LZ: Use strobe kits or vehicle headlights to mark the LZ. Flashlights placed inside orange cones are highly visible markers. **Avoid shining light directly at the aircraft as this may interfere with the pilot's night vision**
Wear appropriate eye and hearing protection

Prior to landing, ensure that a radio is tuned to the correct frequency for communications with the aircraft. Should you become aware of any safety issues prior to landing, that information should be immediately relayed to the inbound aircraft.

**Do not approach the helicopter without flight crew supervision/authorization.**

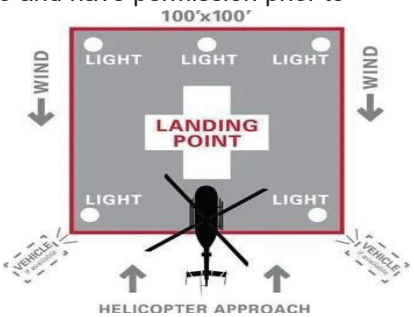
Patients should remain inside the ambulance with all EMS monitoring equipment connected until the flight crew is ready to transfer to their cot.

If requested to assist with patient loading into the aircraft, you must follow the flight crew instructions at all times. Ensure all loose articles are secured prior to approaching the aircraft. No loose articles within 100 feet of helicopter blades in motion. Do not raise anything higher than head level. **Extreme caution should be exercised at all times while assisting with loading of running aircraft.**

Approach and exit from the front of the aircraft only with approval from the flight crew or pilot. Just because you can see the crew/pilot does not mean they see you, ensure you have made contact by radio and have permission prior to approaching the aircraft.

Remain at a distance of at least 100 feet during all take off and landings
No vehicle traffic within 100 feet of the helicopter



# 2-18 Operations at Crime Scenes

**PURPOSE:** To provide guidelines for recognizing a potential crime scene, and actions to be taken to minimize potential disruption of the scene

**Rationale:** The primary responsibility of EMS personnel at the scene of a crime is to provide emergency medical care to persons who require such care. A crime scene is defined as any physical location that may contain or provide potential evidence to criminal and/or forensic investigators

1. All providers are expected to utilize good judgment in the recognition of, and subsequent operation at known or suspected crime scenes. If not already on scene, law enforcement should be requested to respond to any known or suspected crime scene. Any location in which a deceased person is found is to be considered a crime scene until otherwise designated by law enforcement.

2. After evaluating the scene for personal hazards, the rendering of immediate patient care and transportation is the primary responsibility of EMS personnel. Patient care should not be compromised in order to protect a crime scene or evidence. However, patient care should be rendered with as little disruption to potential evidence as possible. Do not touch, move, or relocate any item at the scene unless it is absolutely necessary to provide treatment to the patient. If moved, mark the location of the item(s) and notify the law enforcement officers on scene..

3. Observe and note anything unusual, especially if the evidence may not be present when the police arrive; including smoke or any odors detected.

4. Upon arrival of law enforcement, give them any information you have and let them know where you can be reached in the event they need to speak with you at a later date.

5. After establishing a presumptive diagnosis of death, personnel should refrain from otherwise moving or disturbing the body. At no time should EMS personnel unnecessarily examine or move crash debris, shell casings, suicide notes, or any other physical evidence. In addition, no obviously dead victim of a hanging should be cut down, nor any bound body be untied, following the determination of death. Refrain from covering a dead body at a potential crime scene, except in cases of public view.

6. All members operating at a potential crime scene should consider the entire location (apartment, park, etc) as being involved in the crime scene. EMS personnel should refrain from smoking, eating, or drinking at a crime scene and shall not use a sink, toilet, or other conveniences. All disposable patient care items should be left in place.

7. In the absence of a law enforcement agency, personnel should attempt to limit the number of personnel entering the scene to those necessary to treating and/or removing the patient(s). Attempt to limit the access of bystanders, family members and witnesses. EMS personnel should not restrain, eject, or otherwise physically restrict the movements of anyone at the scene, but should be aware that allowing unnecessary persons into the scene may impede the investigation of the crime.

8. In the event law enforcement advised you that they believe the patient is already deceased prior to your entry, the most experienced and/or highest trained provider should enter at the direction of law enforcement to assess the patient.

9. Upon arrival of the police, give them any information you have and let them know where you can be reached in the event, they need to speak with you at a later date.

# 2-19 In-Vehicle Camera Systems

**PURPOSE** The primary purposes of vehicle cameras are to assist in the protection and safety of persons and property, prevention of detection of criminal offenses, defense of legal claims, and most importantly driver training and safety.

**POLICY:** Cameras will be installed in all logo identified Mercy EMS vehicles and may be installed in other vehicles at the discretion of the EMS Executive Director. The system will record both video and audio. The camera system will include the following

1. Forward facing camera
2. Interior facing camera with view of the driver and passenger seat. No patient compartment view.

No images and information will be stored except where a relevant incident has occurred. The camera system records continuously on a loop and only saves data when a pre-defined event occurs. This data is encrypted and can only be accessed by authorized personal.

The camera system is always on, and as such is always recording. The system is able be viewed remotely in near real time only by users authorized by the Executive Director of EMS.

Obstructing or tampering with the camera system will not be permitted; and may result in disciplinary action up to and including termination. Examples include, covering the camera, moving the camera angle, unplugging the camera or any other action that interferes with the proper function of the camera.

Mercy takes every opportunity and measure to ensure the privacy of coworkers, the drivers/passengers seat of the ambulance is considered a work area and therefore not private.

When relevant to do so, camera footage may be retained and used for future safety training, including new hire and remedial driver training.

Access to the camera system and associated video and images is approved on an incident basis. Once access is approved, recorded footage can be reviewed (not deleted or amended) by the following:

1. EMS Managers
2, HR & Risk Management
3. Accident Review Committee Members
4. Mercy Legal Department
5. Statutory bodies such as police, etc. (when legally allowed and review access granted by Mercy Legal).

Any other person with interest must obtain permission from the EMS Executive Director to view any recorded footage, providing reasons and justification for such request.

Any person whose images are recorded, due to a recordable event, have the right to view those images for training/coaching purposes.

**Coworkers:**

As stated, the primary uses of the camera system is to assist in the protection and safety of persons and property, prevention or detection in criminal offenses, defense of legal claims, and driver training. In accordance with the above principles, the camera evidence may be used as part of an employee investigation where, in the reasonable belief of leadership, that there may have been misconduct, or a breach of health and safety.

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Where footage is used in disciplinary and/or legal proceedings, it will be retained for a further use as applicable by federal, state, and local laws. The coworker will be permitted to see and respond to the images.

Under appropriate circumstances, the footage may be provided to police or other competent authority. In addition, footage may be provided for defense of legal claims, or in pursuance of civil recovery, and to our legal representatives with the intention of providing evidence before the courts.

**Non-coworkers:**

Where an incident involves a third party, the relevant insurers will be informed of the details. Although a third party may be aware that there is recorded evidence in the form of camera footage, a copy of the recorded material can only be obtained through legal processes as applicable by federal, state, and local laws.

Third parties should also be aware that under appropriate circumstances, the footage may be provided to police or other competent authority with the intention to prosecute for criminal offenses. In defense of legal claims, in pursuance of civil recovery, or to our legal representatives with the intention of providing evidence before the courts.

# 2-20 Take Home Vehicles

**PURPOSE** To establish uniform guidelines, restrictions and eligibility criteria for the use of assigned vehciles for Mercy EMS' take home vehicle program.

**POLICY:** Mercy EMS has recognized the benefits of individually assigned cars for certain positions within the department. The long-term asset value of the equipment is extended significantly because the cars are assigned to one operator, the mileage is extended, and the vehicle maintenance and care is improved. Vehicle assignments and replacements shall be in accordance with the fleet management policies of the department.

Take home vehicles will only be assigned to those coworkers who would be expected to be available for call out at any time of day. The issuance of a take home vehicle is at the discretion of the EMS Executive Director or his/her designee.

The driver of a take home vehicle is expected to be clocked in and on-duty at all times while operating the vehicle. This allows the vehicle to be available for dispatch to any incident they may be in close proximity of.

Assignment of a take home vehicle is a privilege and may be rescinded by the EMS Executive Director at time for cause.

Take home vehicles are not intended for nor should they be used for personal use of any kind. Take home vehicles are provided for authorized use only.

The coworker assigned to the vehicle is responsible to ensure the vehicle is maintained at proper service intervals. The vehicle should be kept a clean condition at all times and any malfunction or other service issues should be immediately reported.

The use of cellular telephones should be restricted to hands free type devices. The driver of the vehicle is expected to adhere to all department rules regarding operation of vehicles.

The coworker assigned to the vehicle shall conduct an inspection of the vehicle no less than once per week.

All marked take home vehicles will have the departments current low forces driving system installed.

Only Mercy coworkers who are authorized to drive EMS vehicles should operate the take home vehicle.

Take home vehicles shall be returned to an EMS station or EMS headquarters anytime the assigned coworker will be absent from work duties (PTO/FTO/FMLA/Ect.) for longer than 5 consecutive days.

If a take home vehicle will be out of service for an extended period of time, every effort will be made to provide a loner vehicle when one is available for use.

## MENTAL HEALTH TRANSPORT (MHT)

**PURPOSE:** The purpose of this protocol is to describe the circumstances where a Mental Health Transport (MHT) unit may be used for the secondary (interfacility) transport of clients; as well as define when a client becomes a patient and define specific requirements and procedures.

**DESCRIPTION:**

1. A Client may be transported by Mental Health Transport Vehicle (MHTV) if all the following conditions are met:
   a) Client has a Mental Illness as diagnosed by a Physician or Certified Behavioral Health Nurse or Nurse Practitioner, and;
   b) Client is voluntarily requesting transport, and;
   c) Transport is from a Hospital to a Mental Health Receiving Facility, or is from one Mental Health Receiving Facility to another Mental Health Receiving Facility, and;
   d) Client has been evaluated by an appropriate provider, medically cleared for transport, and the physician has signed the required transfer form (a verbal order documented and signed by a Registered Nurse is sufficient). It is understood that the Client may have underlying Medical condition(s) or be medicated through the use of prescribed medications prior to transport. If the client has received medication, they must be able to remain alert, oriented (normal for them) and able to sit upright for the duration of the transport, and;
   f) Provider has determined that the Client is not expected to require physical restraints during transport, and;
   g) The MHTV Operator has conducted an initial assessment and determined that the Client meets all of the criteria to be considered a Client and does not meet any of the criteria that would classify the Client as a Patient.

   At no time will it be acceptable, or permissible, to transport more than one (1) client at a time.

2. The EMS Medical Director has determined that in certain circumstances Clients may be classified as a Patient and will require transportation by Ambulance when any one or more of the following criteria are met:
   a) Client is physically restrained;
   b) Client has a decrease in their level of consciousness witnessed by the MHTV Operator;
   c) The client currently exhibits signs of violent behavior or has exhibited such behavior during the current evaluation period.
   d) The client at high-risk for elopement by statements made or behavior exhibited.
   e) Client needs or is likely to need medical attention during transport.
   f) Client requires oxygen.
   g) Client is non-ambulatory
   h) MHTV operator has determined, through their initial assessment, that the Client should be physically restrained during transport to ensure the continued safety of the Client.

**3. Safety Precautions Prior To Transport**

a) Ensure the client is not in possession of weapons or contraband (Example: lighters or matches).
b) Secure all personal belongings in the cab of the MHT Unit in range of video recorder.
c) Obtain the assistance of additional personnel (Public Safety Officer, RN, etc.) from the sending facility to ensure the safety of the client and staff during the transfer from the facility to the MHT Unit.
d) In the event that in the process of transferring the client to the MHT unit the operator deems that the client has become high-risk for elopement and/or violent behavior, the operator shall assist other hospital staff in moving the client back into the sending facility. The operator shall then contact the on-duty supervisor for guidance on requesting ALS transport.
e) Obtain the assistance of personnel from the receiving facility to ensure the safety of the client and staff during the transfer from the MHT Unit to the facility. Coordinate this assistance through the Communications Center or by direct contact with the receiving facility. At no time should the client be left alone while the operator seeks assistance.

**4. Emergencies encountered during transport:**

An emergency encountered during transport is identified as any of the following:

a) Client attempts to escape/elope;
b) Client threatens to or causes harm to themselves or others;
c) Client experiences an injury or a medical emergency.

In the event a Client experiences a mental health emergency, a medical emergency or an injury during transport the Emergency Actions described in Section 5 should be taken by the MHT Operator:

**5. Requesting Assistance**

MHT Operator will request an EMS Response via the ES Communication Center. The MHT Operator will advise the following information via radio, phone or CAD:

a) If there is imminent danger, Depress the "Emergency" Button on Radio.
   Note: Appropriate assistance cannot be dispatched until the MHT Operator advises the exact Location and the Nature of the emergency.
b) Advise your Unit ID
c) Advise Emergency Traffic
d) Provide your exact Location
e) Advise the Nature/Problem
   - Client Fleeing
   - Violent Psychiatric
   - Medical Emergency
f) Request a 9-1-1 Response and/or Emergency Law Enforcement Response

# EMS Policies: Operations

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## INCOMING AMBULANCE PATIENT REPORT GUIDE

**PURPOSE:** To enhance patient care and communications between field EMS personnel and Emergency Department personnel.

**PROCEDURE:** Incoming ambulances should contact the receiving hospital by use of Pulsara. If Pulsara is unavailable, the unit should contact the hospital via V-Med 28 (HEAR) frequency when giving a medical report on any trauma or medical patient whether requesting orders, physician consult, or giving a report only.

If radio communication is required, the ambulance crew member should transmit on the V-Med 28 (HEAR) frequency and calling the receiving hospital's name and identifying the ambulance i.e. Mercy Medic 3111, for orders, consult, or report only". (Medic 3111 is used as an example. The appropriate unit number should be used.)

Once acknowledged by the receiving hospital patient report shall be given and should include but not be limited to:

1) The applicable triage color for medical or trauma patient

2) The age, sex, and LOC of the patient

3) Chief complaint(s)

4) Critical patient information*,

5) Vital signs including BP, pulse, respirations,

6) Skin temperature, color and moisture, pupil size shape equality and reaction to light, pulse oximetry, and ECG results should be included if pertinent,

7) State any treatment that has already been given,

8) The unit's ETA

In addition, the crew member may add any other pertinent information that he/she feels the physicians might need to appropriately treat the patient including:

1) the patient's past medical history,

2) any medications the patient may be taking,

3) any food or medical allergies the patient might have,

*Critical information includes such items as hypotension, severe respiratory distress, absent lung sounds, altered LOC, massive bleeding et cetera.

The receiving hospital should acknowledge receipt of the patient report and the crew should signal that their current transmission is finished by stating “Medic 3111 clear”.

In the event the receiving hospital does not answer the radio after two attempts, contact via the ambulance cell phone should be attempted.

Incoming ambulances making direct admits to facilities other than Mercy Springfield should state, “we are en route with a possible direct admit patient”. Give the name of the patient’s physician, the facility where the patient is coming from, and the patient’s first and last initials.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## PHYSICIAN CERTIFICATION STATEMENT

**PURPOSE:** To define the requirements for EMS personnel to obtain a completed Physician Certification Statement prior to transport of all non-emergency ambulance requests.

**PROCEDURE:**

**1.** A PCS must be obtained for all non-emergency ambulance transports Its purpose is to certify the medical necessity of non-emergency transportation or to identify situations where the patient does not meet medical necessity. EMS co-workers will examine the PCS on arrival to transport. If a PCS has not been completed or is not completed properly, The in-charge RN on duty will be requested to sign and complete the PCS. Where possible, EMS Communications Center will review the requirement for the PCS with all requestors for non-emergency transport at the time of call. Should the requesting facility refuse to complete the PCS, EMS co-workers shall contact the appropriate EMS Supervisor for assistance.

Medicare does not require a PCS for emergency ambulance transportation**.** As many requesting hospitals have varying interpretations of what constitutes an emergency transport, co-workers shall obtain a PCS for all inter facility transports where a hospital is the point of pick-up. If a patient requires immediate transportation due to a time critical diagnoses a PCS is not required. In isolated cases where the patient is unstable, and staff have not prepared the PCS because of more urgent tasks, we should not delay transport by requesting the form.

**2.** The PCS should have the name of the patient's attending provider printed legibly including credentials (MD, DO, PA etc). The attending providers name should be clearly printed.
The from may be signed by a Registered Nurse Practitioner (RNP), Registered Nurse (RN), Clinical Nurse Specialist (CNS), or Discharge Planner who is employed by the hospital or facility where the patient is being treated, with knowledge of the patient's condition at the time the transport was ordered or services were furnished. The printed name of the person signing the form should be present as well.

In the State of Arkansas the PCS must be signed by the Attending Physician per Arkansas Medicaid rules.

TRUCK NUMBER 77XX INCIDENT NUMBER I160600XXX

~~Agency ID~~ ~~Call #~~ ~~Booklet ID / Matching Number~~ ~~Image Type~~

(For EMS use only)

Place Patient Sticker Here

**Mercy Emergency Medical Services**
**Physician's Certification Statement (PCS)** **Ambulance Transport**

Dispatch: 417-820-3003 Office: 417-820-5454 Fax: 417-820-8627

Patient Name: LAST NAME, FIRST NAME Date of Birth: DOB Date of Transport: TODAYS DATE

Transport From: SENDING FACILITY Transport To: RECEIVING FACILITY

Reason for transfer to appropriate or more distant facility: SERVICE THAT IS NEEDED AT RECEIVING FACILITY

**Please complete only ONE of the following sections:**

***Complete this section only if the patient meets medical necessity for ambulance transport:***

In my professional medical opinion, this patient requires transport by ambulance and should not be transported by other means. The patient's condition is such that transportation and observation by medically trained personnel is required, as other modes of transport may cause injury or jeopardize the patients health.

SEE DEFINITION BELOW

**Check all appropriate boxes for the above named patient:**

- ☐ Unable to get up from bed without assistance, unable to ambulate and unable to sit in a chair, including a wheelchair, or due to other conditions indicated in the narrative below.
- ☐ Dementia, Late stage Alzheimer's, Severe Altered Mental Status, decreased level of consciousness.
- ☐ Frail, debilitated, extreme muscle atrophy, risk of pathological fracture, risk of falling out of wheelchair while in motion (not related to obesity), or inability to remain upright during transport.
- ☐ Third party assistance/attendant required to apply, administer or recalculate oxygen enroute.
- ☐ Requires airway monitoring or suctioning during transport.
- ☐ Requires cardiac/hemodynamic monitoring during transport.
- ☐ IV medications/fluids required.
- ☐ Comatose and requires trained personnel to monitor condition during transport.
- ☐ Medicated and needs trained personnel to monitor condition during transport.
- ☐ Suffers from paralysis or contractures.
- ☐ Danger to self and others.
- ☐ Has decubitus ulcers and requires wound precautions. _____ Buttocks _____ Sacral _____ Back _____ Hip
- ☐ Requires isolation precautions (VRE, MRSA, etc.) or other special handling during transport.
- ☐ Restraints (physical or chemical) anticipated or used during transport.

OXYGEN ALONE DOES NOT QUALIFY

Describe the **physical or mental condition** of this patient **at the time of ambulance transportation** that requires the patient to be transported on a stretcher in an ambulance and why transport by other means is contraindicated by the patient's condition:

Information to support what is checked at the top. Why are they non-ambulatory, why are they weak, what medications are needed etc.....

IF NOTHING APPLIES ABOVE LEAVE IT BLANK OR SELECT SOMETHING BELOW

***COMPLETE THIS SECTION ONLY IF THE PATIENT DOES NOT MEET MEDICAL NECESSITY AND NONE OF THE CHECKBOXES ABOVE APPLY:***

**This patient does not meet medical necessity and DOES NOT REQUIRE TRANSPORT BY AMBULANCE and can safely be transported by other means because the patient can safely support him/herself while seated in wheelchair or car. This patient does not require monitoring by trained personnel.**

- ☐ **This transport is requested as no other means of transport are available.**
- ☐ **This transport is at the request of the patient or representative and is not medically necessary that he/she be transported by ambulance.**

Other Information: _____

I certify that the above information is true and correct based on my evaluation of this patient, to the best of my knowledge and professional training. I understand this information may be used by CMS and others to support the determination of medical necessity for ambulance services.

FIRST AND LAST NAME OF PROVIDER AND CREDENTIALS DATE THE FORM WAS FILLED OUT

Printed Name of Physician Ordering Ambulance Transport Date

FIRST AND LAST NAME OF PERSON FILLING OUT THE FORM AND CREDENTIALS

Signature of M.D., D.O., P.A., R.N., R.N.P., C.N.S., or Discharge Planner (see PCS Instructions)

MUST BE LEGIBLE IF NOT PRINT BESIDE THE SIGNATURE

SPR_5951 (2/22/12) 77359 Page 1 EPIC: ORDER

## Instructions - Physician's Certification Statement (PCS)

**When is the PCS required?**
The PCS is required for all inter-facility ambulance transports, transports from hospital to home or nursing facility, and any non-emergency transport. It's purpose is to certify the medical necessity of ambulance transportation.

**Completing the information fields at the top of the PCS**
Fields completed by EMS: Date of Transport.
Fields completed by Physician or person requesting transfer: Patient Name, Social Security Number, Insurance Information (Medicare, Medicaid, Private, or other), Transporting From (Origin), Transporting to (Destination), reason for transfer to appropriate or more distant facility.

**Check boxes are provided for documenting the need for ambulance transportation.**
The check boxes sections of the form are provided to assist the Physician or authorizing person in describing the situation requiring the use of an ambulance. Complete only **ONE** section either the ***Meets Medical Necessity*** OR ***Does Not Meet Medical Necessity.***

When completing the meets medical necessity section of the PCS, check all conditions that apply. Some of the check boxes refer to additional explanation that is included in the narrative area below the check boxes. If requested by the condition of the check box, the narrative information is necessary for the form to be complete.

Please read carefully the certification statement above the area for the physician's signature. In addition to certifying that the physician completing and signing the PCS has first hand knowledge of the patient's medical condition and need for an ambulance, the physician acknowledges that the information on the PCS may be used by HCFA to determine medical necessity for an ambulance transport.

**Authorized Signature Required**
All PCS forms require a physican's signature. The only acceptable alternatives to a physician's signature are signatures of a Physician's Assistant (PA), a Registered Nurse Practitioner (RNP), Registered Nurse (RN), Certified Nursing Specialist (CNS), or a Discharge Planner.

EMS medical personnel will examine the PCS upon arrival to transport the patient. If a physician's signature, or one of the acceptable alternatives listed above, is not on the PCS, EMS personnel will request the RN on duty to sign the PCS. On completion, the original PCS form will be provided to EMS personnel at the time of transport. EMS personnel are instructed not to accept a patient for non-emergency transport until the form is completed.

IF THE BOX IS CHECK ABOVE THE PATIENT HAS TO MEET EVERYTHING IN THIS BOX.

Definition of Bed Confined: "Medicare covers ambulance services only if they are furnished to a beneficiary whose medical conditions is such that other means of transportation would be contraindicated. For non-emergency ambulance transport, the following criteria must be met to ensure that ambulance transportation is medically necessary: (1) The beneficiary is unable to get up from bed without assistance, (2) The beneficiary is unable to ambulate, and (3) The beneficiary is unable to sit in a chair or wheelchair." (Medicare Provider Manual)

**RESPONSE FEE**

**PURPOSE:** To establish guidelines for an EMS response fee charge when services are provided but no ambulance transportation occurs.

**PROCEDURE:** If Mercy EMS is requested by a patient or responsible family member to provide medical assistance with assessment and treatment provided, the appropriate response fee based on level of service applies.

Medical facilities requesting lifting assistance or other services such as initiating IV access with no intention of transport should also be billed for our services when requested.

BLS Response Fee – Response and arrival on the scene as requested by the patient or family member. Assessment and BLS level of care is provided. Examples include:

- BLS assessment with lift or transfer assistance.
- BLS assessment and blood glucose reading obtained.
- BLS assessment with bandaging and splinting.

ALS Response Fee – Response and arrival on the scene as requested by a patient or responsible family member. ALS assessment and ALS level of care provided. Examples include:

- ALS assessment with EKG performed
- ALS assessment with medication administered with or without an IV being established.

EMS Supervisors or the QA/QI Coordinator must review and *approve for billing* each ePCR for the response fee to be applied.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## SUBPOENA SERVICE FOR DEPOSITION OR COURT APPEARANCE

**PURPOSE:** To define process for the acceptance of and communication to EMS co-workers when subpoenas are delivered to EMS locations.

This process applies to all Law Enforcement agencies who provide subpoenas to Mercy EMS co-workers in consideration of the difficulty in making direct contact.

**PROCEDURE:**

1. Subpoenas received at the local station level will be immediately forwarded to the EMS office.
2. The EMS office will send all subpoenas either received directly or from outlying stations to EMS Legal for review and approval to proceed.
3. Upon approval, An EMS Supervisor will review the event and related documentation with the co-worker in preparation their appearance.
   ***Note – copies of medical records, CAD summaries or other related documentation will not be taken to court or a deposition and rather should be requested appropriately through an official Medical Records request.
4. We will only accept subpoenas for appearance for official business related to an EMS response while on-duty with Mercy.
5. No subpoenas concerning personal matters shall be accepted.
6. Subpoenas will only be accepted during regular business hours Monday through Friday from 0900 to 1700. To ensure efficient service, please call ahead to arrange a drop-off time by calling (417) 820-5454 option 4.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## PREHOSPITAL CARE REPORT HANDLING - ELECTRONIC (eHR)

**PURPOSE:** To establish standards for documentation of prehospital care by Mercy EMS providers and appropriate use of laptop computers.

**POLICY:** An eHR must be completed for all calls where the ambulance arrives on scene. Cancelled Enroute calls do not require an eHR.

**GENERAL:**

1. Safeguarding protected health information (PHI) is an important responsibility of all EMS providers.
2. The responsibilities are further clarified in Mercy Health System HIPAA and Privacy policy. These policies are reviewed during the initial co-worker orientation and thereafter during annual HIPAA refresher training.
3. Initial HIPAA education delivered to providers during general orientation must be completed before access is granted to the patient care reporting system.
4. This policy applies to all providers of Mercy EMS who produce patient care reports or who are afforded access to the Mercy EMS Electronic Patient Care Reporting (eHR) System, paper patient care records, or any other repository of protected health information.

**PROCEDURES:** ***The management of computers used by EMS providers for processing patient records requires an extraordinarily high degree of attention to protect the integrity of the equipment and the information contained on them.***

**Preventive Measures:**

1. PCR laptops shall be stored in the designated cabinet in the patient care compartment or the center storage console of the ambulance cab when not in use. This keeps the computer in close proximity to a wall outlet for charging, secured from being a projectile in case of collision and removes the PCR laptop from plain view should someone look in the doors or windows.
2. When carrying the laptop on the stretcher, it shall be secured in the Sto-Net. Care should be taken to avoid damage by the stretcher when in the flat position. EMS Laptops should not be left unattended when not secure in the designated cabinet or center console. Whether in the EMS report writing area at the hospital or in public spaces at EMS stations, these devices should remain within your custody and control when not properly secured in the vehicle.
3. The Windows operating system should be closed and the computer shut down completely at the end of every shift. Laptops found to be on at the beginning of the shift should be shut down and restarted.
4. On the desktop computers at the EMS station, the Electronic Patient Reporting Software application should remain closed when it is not actively being used for the purpose of entering information or otherwise processing patient records.
5. Respiratory droplets can contaminate many surfaces in the ambulance. Laptops and paper PHI can become contaminated, so you may need to delay charting, especially if the patient is actively coughing, sneezing, or vomiting. Temporary notes can be taken on a patient information sheet or adhesive tape, but be aware these items may also be contaminated and should be destroyed accordingly.

6. Cleaning of device should be accomplished using PDI Sani-Cloth PLUS which is a germicidal disposable cloth and approved by the Health System for this purpose. No other cleaning products shall be used for this purpose.

**General Procedures:**

1. Electronic Patient care reports (eHR's) will be prepared by EMS providers in the prescribed areas of receiving hospitals, within EMS vehicles, or within EMS stations as often as is practicable. At no time should the Laptop computer be used in the cab of any EMS vehicle in motion. If an eHR is prepared in another location, care will be taken to safeguard PHI from inadvertent disclosure.
2. All EMS providers must complete training on the Electronic Patient Reporting Software, program, generally provided during the EMS Academy process.
3. All requests for modification/changes/editing of the Electronic Patient Reporting Software system must be submitted to the EMS Director, or their designee, for action and communication to the Software Vendor for possible implementation.
4. The Electronic Patient Reporting Software connects to the computer aided dispatch (CAD) system at the EMS Communication Center and call response data is to be imported from that system when available.
5. An electronic patient care report (eHR) is to be completed for all EMS calls where the ambulance arrives on scene, regardless of patient contact or care. The following guidelines should be taken into consideration on how to correctly document the encounter with a potential patient:
   a. If a person, whether or not they are the reporting party, has a complaint and desires evaluation, treatment and/or transport, the appropriate disposition should be documented, and a thorough and accurate eHR completed.
   b. If a person, whether or not they are the reporting party, has a complaint and wishes to make an informed decision to refuse evaluation, treatment, transport, or all AND has the capacity to understand their options and the possible consequences of their decisions, the appropriate disposition should be selected and the procedure for **Refusal of Care and/or Transportation** outlined below should be followed.
   c. If a crew arrives on scene and finds a person, usually reported by a passerby, who has no complaints and has no desire to be evaluated, treated, or transported by EMS, an eHR should be completed, the disposition of "Cancelled on Scene/No Patient Found" should be selected, and a narrative describing the event written.
   d. If a crew arrives on scene and finds a person who is obviously deceased, the highest level provider on scene shall write the epcr.
   e. In the event of a Multi-Casualty Incident as described below, patients with complaints, whether treated and/or transported or not, should be documented as outlined in items "a." and "b." of this section as able and as described in the section below unless documentation is suspended by EMS Leadership as outlined in the MCI Section below. In the case that there are multiple persons on the scene who were involved in the incident but have no desire for evaluation, treatment, or transport by EMS the last crew to leave the scene should document the presence of those persons in the narrative of the incident. It is not necessary in this case to obtain a demographics or signatures from these persons. An example of how this could be written in the narrative could be: "5 additional adults, 2 female 3 male, ambulating on scene all report no complaints and state no desire to be evaluated by EMS." It is beneficial for the crew to obtain those persons' names to include for more thorough documentation if it is expedient to do so. Patient transport, however, should never be delayed for this purpose.
   f. All out of range vitals, or unexpected assessment findings should be documented. Provider should document any treatments for these findings, or reasons why treatment was not provided.
6. Required fields must be completed before the system will allow the eHR to be locked.

7. In many cases, data fields are limited to drop down menu and other format control to standardize data. Where the Electronic Patient Reporting Software allows for user input with or without a menu, providers are to utilize either plain text language or Health System approved abbreviations and symbols.

**Users and User Accounts:**

1. Each provider that will input data into Electronic Patient Reporting Software will be assigned a user account and must establish a password following Health System guidelines.
2. User accounts will be specific to the individual provider and contain required system permissions.

**Timeline Requirements for Completing the eHR:**

For all patients transported to any facility, the eHR will be completed and submitted via the upload to Electronic Patient Reporting Software at the time of patient transfer to the receiving facility. However if the ambulance system status is low, EMS Communications may require that an EMS unit respond to another call or return for area coverage even though the eHR has not been completed. In this circumstance, the eHR will be completed and uploaded as soon as possible, but not in the EMS unit cab while the unit is in motion. In no case will this occur after the end of the Co-Worker's shift.

**Trailing (attached) Documents:**

The following documents are to be maintained in a secured location at the EMS station; Patient Refusal of Care (PRC) if applicable, Physician Certification Statement (PCS), Hospital Face Sheet and Advanced Beneficiary Notice (ABN). These trailing documents shall be marked in the manner prescribed by the Electronic Patient Reporting Software and faxed daily to the EMS office or submitted locally for attachment to the electronic document.

**Electronically Submitting the eHR:**

1. The complete eHR is submitted to the Electronic Patient Reporting Software system server using Wi-Fi connectivity.
2. The complete eHR must be submitted prior to the end of the providers shift.

**Receiving Hospital Procedures:**

1. When the patient is delivered to the receiving facility (or location). An eHR will be completed as soon as possible and in compliance with this policy.
2. The Electronic Patient Reporting Software system is designed to submit a completed eHR to the receiving facility.

**Signatures:**

1. Patient: The transporting EMS provider will obtain the patient's signature on the eHR. This signature is important for a variety of reasons including consent, HIPAA, and billing. If the patient is unable to sign and the patient's representative is present, the EMS provider will obtain the representative's signature and the crew will document this, indicating the reason why the patient was unable to sign. At no time should either EMS provider sign as the patient's authorized representative. If the patient is unable to sign and no representative is present the EMS provider will document the reason the patient is unable to sign and obtain secondary documentation as indicated. The patient and witnesses signatures are required in the Refusal of Care process as outlined below.

**Signatures:**

1. Patient: The transporting EMS provider will obtain the patient's signature on the eHR. This signature is important for a variety of reasons including consent, HIPAA, and billing. If the patient is unable to sign and the patient's representative is present, the EMS provider will obtain the representative's signature and the crew will document this, indicating the reason why the patient was unable to sign. At no time should either EMS provider sign as the patient's authorized representative. If the patient is unable to sign and no representative is present the EMS provider will document the reason the patient is unable to sign and obtain a signature from the healthcare provider accepting the patient at the receiving facility along with their name (preferably first and last) and credentials. This signature is in addition to the signature outlined in the "Facility Signatures" section below. The patient and witnesses' signatures are required in the Refusal of Care process as outlined below.

2. Providers: It is expected that both co-workers sign the eHR as providers, understanding that the team-based approach to care is encouraged and expected.

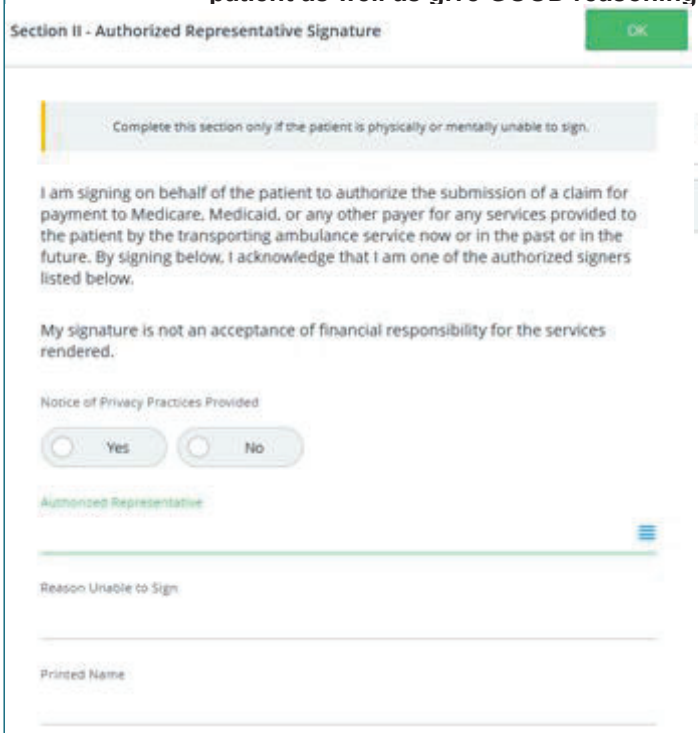
3. Students: If a student is completing field time on an ambulance and providing patient care, they should also sign the eHR. In this case, the co-worker precepting the student should still be documented as the "Lead Provider," as they are still ultimately responsible for the care of the patient. The student should be added to the eHR as "Non-Crew" in the Personnel section and the student's name typed in. Choose "Student" as the Affiliation type. At the end of the narrative, type the student's information as follows: Name, Certification level, School.

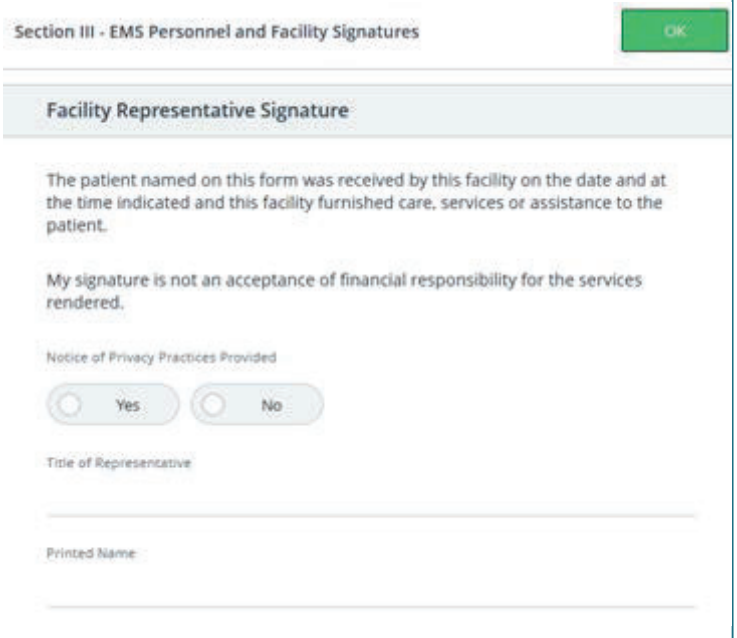
4. Facility Signatures: Upon arrival at the receiving facility the provider should obtain a signature from the accepting healthcare provider signifying they have received report and are accepting care of the patient. There are two other places for signatures in this section: one for receipt of paperwork, and one for airway confirmation. Those two sections should be filled out in situations where appropriate. In all cases, the co-worker should document the name (preferably first and last) and credentials of the individual signing at the facility.

# Mercy EMS Education
# Reminder for Signatures

A quick reminder, or two about getting signatures on EHR's:

1. **We should attempt to get the patient's signature under every circumstance. If, for whatever reason, they cannot sign we must complete Section II or Section III of the Signatures section authorizing treatment. This must include the printed name, credentials, and relation to the patient as well as give GOOD reasoning as to why the patient could not sign.**

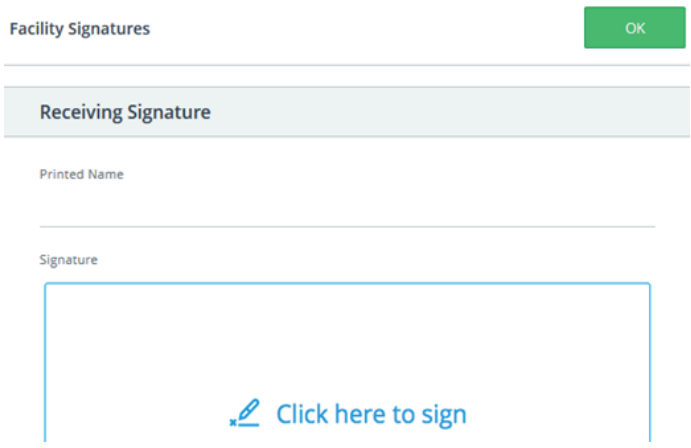



2. **We also need to ensure that we are getting a good name (preferably first and last) and credentials of the person accepting the patient at the receiving facility.**

3. **If these signatures cannot be obtained, the provider should place a single line through the box, initial the single line with their initials, and document in the narrative the reason they were unable to obtain them.**



**Addendums:**

1. Once an eHR has been electronically submitted to the Electronic Patient Reporting Software server, it is unable to be modified. The provider may however, add an addendum to the eHR.
2. The purpose of the addendum is to permit the provider to add information that was inadvertently missed at the time the provider submitted the eHR. The addendum is not intended as a mechanism to simply create a PCR. The provider will notify the receiving hospital anytime an addendum is completed to supplement a previously submitted eHR.

**Refusal of Care and/or Transportation:**

1. On calls where patient contact is made and the patient is not transported a Patient Refusal of Care (PRC) should be completed.
2. If the EMS provider is utilizing a laptop computer, the patient or responsible party will read the Patient Refusal Form on the computer screen and sign it (unless precluded by standard precautions).
3. If the EMS provider is not using a laptop computer, the EMS provider will have the patient or responsible party sign a hard copy of the Patient Refusal Form and attach using the trailing documents process as outlined in this policy. Each hard copy Patient Refusal Form must have its own eHR.
4. If the patient refuses to sign the Patient Refusal Form (electronic or paper) the EMS provider shall document such and obtain the signature of a witness. Non-EMS personnel are preferred as witnesses if available.

**Multi-Casualty Incidents (MCI):**

A multi-casualty incident is any incident that overwhelms the resources available, usually defined as a response with 5 or more potential patients involved.

1. During an MCI situation where multiple patients are being transported at one time, use of the laptop may be suspended and a patient information sheet or triage tag will be completed with as much information as is available. Where possible, copies of this trailing documentation should be retained.
2. Mercy EMS Leadership at the MCI will determine the completion of eHR's where appropriate.

**Documentation Review:**

100% of documentation will be reviewed by Supervisors, Managers or Quality Management staff for accuracy, guideline compliance, appropriate care and operational decision making, and completeness as outlined in the Quality Management Policy.

**Technical Problems:**

1. Electronic Patient Reporting Software system down (server not functional).
   a. Providers will continue to enter the eHR's on the computers, which will retain the records until the system is functioning normally again: at which time providers with submit eHR's.
   b. Leave a copy of the patient information sheet with the receiving facility
2. PC Problems:
   Contact the Duty Supervisor and depending on the status of the problem, a replacement may be deployed.
3. CAD Outage:
   If the connection to CAD becomes non-functional, providers shall create the eHR using a temporary case number created in coordination with the EMS Communications Center.

**Physical Access Controls:**

1. EMS facility report writing areas are not open to individuals not employed by Mercy EMS.
   a. Where non co-workers are present in EMS facilities, they shall be escorted by EMS co-workers, who are responsible for preventing unauthorized access to PHI.
   b. Where EMS facilities are shared with another agency (i.e., a fire department) PHI will be handled only in private EMS areas. PHI shall always be secured prior to leaving any EMS station unattended.
   c. Printing of personal or additional copies of PCR's or taking of PCR's for any non-official purpose is strictly prohibited. The making or taking of unauthorized copies of PCR's and related documentation for any reason is a serious violation that may result in discipline including termination of employment.
2. Any office space in any EMS station where PCR's and related documentation is stored shall be locked at any time when not occupied by authorized personnel.
3. PCR's shall be printed from the electronic PCR system, or retrieved from the files by EMS Supervisors, only upon the request of the Medical Director or EMS Director. The electronic PCR system maintains a log of all access to records. A log shall be maintained of all physical requests for PCR's. This log will be maintained by the Health System Health Information Management Department.

**Computer Access:**

1. The security features of the Electronic Patient Reporting Software will be utilized to minimize access to PHI by unauthorized personnel.
2. All EMS providers are personally accountable for the security of the laptop computers assigned for eHR preparation.
3. The ability to print PCR's from the Electronic Patient Reporting Software shall be limited to the following Mercy EMS providers: EMS Administration Office Staff, EMS Quality Management Staff, and EMS Leadership.
4. Where data is extracted from the Electronic Patient Reporting Software for operational or clinical analysis, patient-identified PHI shall not be included in any resulting database. Extracted data containing geo-specific data generated from the Mercy EMS Communications Center Computer Aided Dispatch System is not considered PHI but shall be handled so as to prevent access by unauthorized personnel.

**Lost or Stolen Equipment:**

1. Duty EMS Co-Workers
   a. Notify the duty EMS Supervisor immediately, by telephone, regardless of the hour. Should a duty EMS Supervisor not be immediately available, contact the EMS Manager for that Service Area or the EMS Director by phone.
   b. Place the EMS unit out of service with the Mercy EMS Communications Center and local Dispatch agency if used.
   c. Search ambulance and quarters.
   d. Return to last known point of use (hospital, etc.)
      1) Search EMS areas.
      2) Contact staff in area, ascertain if computer has been seen or secured for safekeeping.
   e. Return to station (or location directed by EMS Leadership): complete an incident report.
   f. Assist EMS Supervisor with items "a."-"e." above, or other recovery activities as directed.
2. EMS Supervisor
   a. Notify the Service Area EMS Manager or the EMS Director by telephone regardless of the hour.
   b. Determine last know point of use.
   c. Travel to the last known point of use.
      1) Contact security; determine if computer seen or secured for safekeeping.
      2) Request immediate review of video surveillance.
   d. If not located by the crew or at last known point of use, determine unit locations and statuses for last twelve hours.
   e. Contact other EMS Supervisors for the department involved and arrange for contact/search of all ambulances and stations.
   f. Repeat steps for all places where the EMS unit has stopped in the last twelve hours.
   g. If at any time there is any evidence that a crime has been committed (computer stolen), direct that a report be made with the appropriate law enforcement jurisdiction immediately.
3. EMS Manager
   a. Notify the EMS Executive Director/Deputy Director by telephone regardless of hour.
   b. Assist with/perform the duties of the EMS Supervisor as needed.
   c. Facilitate contact with hospital security other emergency service personnel that were present at the last know point of use.
   d. After 0630 and before 2330, contact Directors or Chief Officers of other EMS agencies and request search for computer.
   e. If at any time there is evidence that a crime has been committed (computer stolen), direct that a report be made with the appropriate law enforcement jurisdiction immediately.

4. EMS Executive Director/Deputy Director
   a. Assist with/perform the duties of the EMS Supervisor as needed.
   b. Notify the Electronic Patient Reporting Software vendor to disable the missing computers access to the system.
   c. Facilitate contact with hospital security other emergency service personnel that were present at the last known point of use.
   d. After 0630 and before 2330, contact Directors or Chief Officers of other EMS agencies and request search for computer.
   e. If at any time there is evidence that a crime has been committed (computer stolen), direct that a report be made with the appropriate law enforcement jurisdiction immediately.
   f. Notify Emergency Service Vice-President, Mercy HIPAA Compliance Officer and Public Information Officer.
   g. Convene EMS Senior Leadership. Review the situation, determine additional measures.
   h. Within 48 hours, excluding weekends, convene an inter-departmental response team consisting of representatives of EMS Senior Leadership, Health System Legal Counsel, HIPAA Compliance Officer and Health System Public Affairs.
   i. If computer is not located within 72 hours, regardless of evidence of a crime being committed, direct that a report be made with the appropriate law enforcement jurisdiction.
   j. If the computer is not located within 7 days, in consultation with the Compliance Officer and Health System Legal Counsel, begin notification and mitigation procedures.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## ADVANCED BENEFICIARY NOTICE OF NONCOVERAGE (ABN)

**PURPOSE:** The ABN is a notice given to beneficiaries to convey that Medicare is not likely to provide coverage in a specific case. The ABN must be completed as described in the procedure below, and delivered to the beneficiaries or their representative before providing services. CMS recently revised the Advanced Beneficiary Notice of Non Coverage form to include the Notice of Exclusion of Benefits form, formerly known as NEMB. Note that some of the reasons for denial on the ABN form are due to statutorily non coverage. These are identified with an asterick*.

The ABN must be verbally reviewed with the beneficiary or his/her representative and any questions raised during that review must be answered before it is signed. The ABN must be delivered far enough in advance that the beneficiary or representative has time to consider the options and make an informed choice. **ABN' are never required in emergency or urgent care situations.** ABN's are also not required for transports performed for the benefit of the Health System which do not meet medically necessity i.e. transport from a Mercy facility ER or floor to nursing facility or residence where no other options for transport are available. ABN's are not required for services that are statutorily non covered by Medicare, but are highly encouraged to allow the patient to again make an informed decision regarding the service being provided.

Once all blanks are completed and the form is signed, a copy is given to the beneficiary or representative. The ABN must be retained with other documentation related to the treatment and transport of the patient.

| ABN – "MAY USE" SCENARIOS | ABN – "MUST USE" SCENARIOS |
|---|---|
| Transport from residence or SNF to hospital for something that could more economically be performed at the residence or SNF. | Transports to doctor's offices and other non-covered destinations such Urgent Care Centers, outpatient clinics etc. |
| If the service does not meet medical necessity guidelines (patient not in duress) | |
| Patient/family/physician convenience transports. | |
| Excess mileage | |

# 3-5 Advanced Beneficiary of Noncoverage

**PROCEDURE:** The following sections shall be completed by the EMS co-worker:

1. Patient Name: EMS co-workers must enter the first and last name of the beneficiary receiving the notice, and middle initial should also be used if on the beneficiary's Medicare or Medicaid card.
2. Identification Number: The date of birth of the beneficiary receiving the notice shall be entered into this space. The DOB will link the notice with the related claim and other medical records.
3. Body: The body of the notice consists of the items, services, reasons coverage is not expected and estimated cost. EMS co-workers shall select the appropriate reason from the four selections available:
    a. Medicare does not pay for ambulance services that are not medically necessary. Example an emergency dispatch for shortness of breath, you arrive on scene to find an ambulatory patient, A&Ox4 and in no apparent distress, who requires no emergency medical care. You transport the patient to the emergency department for evaluation.
    b. Medicare does not pay for ambulance transport to a doctor's office or other non-covered destinations such as an outpatient imaging department or other location for testing.
    c. Medicare does not pay for transports for the convenience of a patient, family or a specific physician. Example could be a family decides they do not like the current nursing home or home that a patient is currently residing and request ambulance transport to a different facility. Another example would be a patient who has been injured while visiting the area and following stabilization and treatment requests to be transported home to another hospital.
    d. Medicare does not pay for transportation from a residence or a Skilled Nursing Facility (SNF) for services that could more economically be performed at the residence or SNF. i.e. simple suture removal, catheter replacement etc.
4. Cost Estimate: EMS co-workers completing the ABN are also required to enter a cost estimate for the services described. For ground EMS purposes the current BLS emergency or non-emergency charge and the current per mile charge shall be listed. The ABN will not be considered valid absent a good faith attempt to estimate cost.
5. Options: These three checkboxes represent the beneficiary's possible choices regarding the potentially non-covered care described in the body of the ABN. The beneficiary or representative must select only 1 of the 3 checkboxes, Under no circumstances can EMS co-workers decide for the beneficiary or representative which of the 3 checkboxes to select. If the beneficiary cannot or will not make a choice, the EMS co-worker shall note this in the additional information section of the form and also have a witness sign as well.
6. Signature Box: The beneficiary or representative must sign the notice, with his or her own name. The signature indicates that he or she has received the notice and understands its contents.
7. Date Box: The beneficiary or representative must enter the date he or she signed the ABN.
8. Completed ABN forms should be sent to Patient Access along with the charge ticket in order for these services to be identified in appending the appropriate modifier to the ambulance charge.
9. The following scripting scenarios may be utilized by ambulance staff in explaining the possible non payment by Medicare:

## Scripts to utilize when speaking with a Medicare patient regarding the Advanced Beneficiary Notice

*Medicare regulations indicate that all services must be reasonable and necessary for payment. In your case, Medicare is likely to deny payment for ambulance services for your condition. We will submit the claim to Medicare, but we are required to notify you that payment may be denied and you may receive a bill for this service.*

*Please review this ABN which outlines the service you are having and the approximate cost. Medicare requires us to notify you of any potential financial liability prior to having the service performed.*

*Medicare excludes coverage for ambulance services due to the reason listed.*

## Scripts <u>not</u> to utilize when speaking with a Medicare patient regarding the Advanced Beneficiary Notice

*We do not have a valid reason to transport you by ambulance..*

*Medicare may not pay for this because your physician did not order the transport.*

*Please sign this form, it gives us permission to bill Medicare for the ambulance service provided.*

*Medicare says that you have to sign this form before we can transport you..*

*Medicare may not pay for this because your physician did not follow Medicare guidelines.*

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## TRANSPORTING EMERGENCY SERVICE PERSONNEL

**PURPOSE:** To establish guidelines of when to charge emergency services personnel for services rendered by Mercy Emergency Medical Services.

**PROCEDURE:** If Mercy EMS is called to treat and/or transport a law enforcement officer, firefighter, first responder, volunteer, and/or members of other ambulance services, that are injured while in the performance of their duty; there will be no charge for the transportation and care, unless their department requests otherwise. The appropriate EMS Supervisor shall contact the Fire Department, Law Enforcement or Rescue agency and ascertain whether they would like to be charged in order to meet insurance and/or worker's compensation requirements. If they request to be charged follow established billing procedures, noting all responsible party information.

All other logs and reports will be completed in the usual fashion. The Executive Director of EMS shall be notified as soon as possible after the incident has occurred.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## RADIO IDENTIFICATION NUMBERING PROCEDURE

**PURPOSE:** To provide an organized radio ID numbering system for all EMS and Life Line units and personnel. Mercy personnel, dispatch agencies, hospitals, and other emergency services will have immediate recognition of what department a unit or individual is assigned.

**PROCEDURE:**

1. A radio number will be assigned to each unit and employee. (See addendum 1)
2. Units will be marked on both sides with radio ID numbers and will coordinate with the Mercy graphic design.
3. These radio numbers will be permanent for each department. When a unit is retired, the unit replacing it will assume its radio ID number to maintain consistency within the department.
4. When a unit is rotated to be temporarily used in another department or as another function, the unit ID will end in "0", with the rest of the unit number being consistent with the area of assignment. Example: 7720.

**Unit Identification**

1. First digit to denote the Region the unit is assigned to.
2. Second digit to denote the Service the unit is assigned to.
3. Third and Fourth digits to denote the Unit number.

| Region | Service | Unit Number | |
|---|---|---|---|
| 3 | 1 | 0 | 9 |

**Unit "Typing"**

The "Typing" of Unit number assignments (ALS, BLS, SRT, etc.) should be as follows:

| Number Series | Unit Type |
|---|---|
| 01-09 | Supervisor Vehicles |
| 11-19 | Special Operations Ambulances |
| 21-69 | ALS Ambulances |
| 71-89 | BLS Ambulances |
| 91-99 | Operational Support Vehicles |
| Last digit of 0 | Vehicles Borrowed from Another Service Area |

## Region and Service Number Assignments

| Region | Service Number | Name |
|---|---|---|
| 1 | 1 | Life Line 1 – Branson West, MO |
| 1 | 2 | Life Line 2 – Saint Robert, MO |
| 1 | 3 | Open for Expansion |
| 1 | 4 | Life Line 4 – Forst Smith, AR |
| 1 | 5 | Life Line 5 – Rogers, AR |
| 1 | 9 | Mercy Kids Transport Team – Springfield, MO |
| 2 | 0 | Perry County, MO |
| 2 | 1 | Open for Expansion |
| 2 | 2 | Ada, OK |
| 2 | 3 | Open for Expansion |
| 2 | 4 | Open for Expansion |
| 2 | 5 | Paul's Valley, OK |
| 3 | 1 | Springfield, MO |
| 3 | 2 | Willard, MO |
| 3 | 3 | Fair Grove, MO |
| 3 | 4 | Ozark, MO – Mercy Springfield South ER |
| 3 | 5 | Springfield, MO – Non-Ambulance Transport |
| 4 | 0 | Open for Expansion |
| 5 | 1 | Wright County, MO |
| 5 | 2 | Mountain View, MO |
| 5 | 3 | Summersville, MO |
| 6 | 1 | Laclede County, MO |
| 6 | 2 | Camden County, MO |
| 6 | 3 | Dallas County, MO |
| 7 | 1 | Open for Expansion |
| 7 | 2 | Open for Expansion |
| 7 | 3 | Open for Expansion |
| 7 | 4 | Open for Expansion |
| 7 | 5 | Open for Expansion |
| 7 | 6 | Stone County, MO |
| 7 | 7 | Barry County, MO |
| 8 | 1 | Open for Expansion |
| 8 | 2 | Lawrence County, MO |
| 8 | 3 | Jasper County, MO |
| 9 | 1 | Open for Expansion |

## Administrative Radio Identification

| Position | Radio ID |
|---|---|
| EMS Medical Director - Ground | MD 1 |
| EMS Medical Director – Flight | MD 2 |
| EMS Director – Ground | Car 1 |
| EMS Director – Flight | Air 1 |
| EMS Operations Manager | Car 2 |
| EMS Manager – Flight Program | Air 2 |
| Manager – EMS Communications Center | Car 3 |
| Manager – Oklahoma Region | 200 |
| EMS Manager – Missouri East Region | 500 |
| EMS Manager – Missouri North Region | 600 |
| EMS Manager – Missouri South Region | 700 |
| EMS Manager – Missouri West Region | 800 |

## Co-Worker Radio Identification

| Region | Position | Numbers |
|---|---|---|
| Oklahoma | Leaders | 201-215 |
| | Paramedics | 216-259 |
| | EMT's | 260-299 |
| Missouri – Central Region | Leaders | 301-315 |
| | Paramedics | 316-399 |
| | Special Service Caregivers | 400-415 |
| | EMT's | 416-499 |
| Missouri – East Region | Leaders | 501-515 |
| | Paramedics | 516-559 |
| | EMT's | 560-599 |
| Missouri – North Region | Leaders | 601-615 |
| | Paramedics | 616-659 |
| | EMT's | 660-699 |
| Missouri - South Region | Leaders | 701-715 |
| | Paramedics | 716-759 |
| | EMT's | 760-799 |
| Missouri – West Region | | 801-815 |
| | | 816-859 |
| | | 860-899 |
| Flight Program[1] | Leaders | xx00-09 |
| | On Duty RN | xx10 |
| | On Duty Paramedic | xx11 |
| | On Duty Pilot | xx12 |
| | Nurses | xx20-29 |
| | Respiratory Therapists | xx30-39 |
| | EMT's | xx40-49 |
| | Paramedics | xx50-59 |
| | Pilots | xx60-69 |
| | Mechanics | xx80-89 |
| | Visiting Pilot | xx90 |
| | Physician Rider | xx95 |
| | SOAR | xx99 |

[1] xx should be replaced with local base numbering

## RADIO COMMUNICATIONS/OPERATIONS

**PURPOSE:** EMS co-workers utilize radio equipment/frequencies to communicate with Ambulances, Helicopters, First Responders and Base Stations. A standardized approach to radio transmissions is needed due to multiple frequencies, multiple agencies, emergent nature of transmissions, as well as FCC Rules and Regulations.

**PROCEDURE:** All procedures shall be in accordance with FCC Rules and Regulations.

### Frequency Coordination

- All licensing information for frequencies utilized by the EMS Communications Center will be kept and displayed in the EMS Communications Center.
- The EMS Communications Center will maintain a list of frequencies that EMS and Life Line co-workers are authorized to communicate on.
  - When necessary, copies of letters granting Mercy co-workers authorization to communicate on frequencies not licensed to Mercy will be forwarded to the EMS Communications Center to be kept on file.
  - A programming standard will be maintained for all portable and mobile radios utilized by EMS and Life Line.
  - This will include a standard Alpha Character naming convention, so as to allow easy recognition of frequencies regardless of geographical location. (i.e. Dallas Co. EMS mobile radio will have same frequencies names as Springfield EMS.)
- Mercy co-workers are **not** to give out frequencies to anyone, unless required for an incident or request in progress (i.e. an Air Medical Helicopter requesting "Mercy Comm Common" frequency in order to communicate with the EMS Communications Center)
  - Forward all non-emergent requests for frequency disclosure or use to the EMS Communications Center Manager for consideration.

### Standard Radio Principles

- All radio communications will be brief and clear.
- Co-workers should first think to themselves what they are ABOUT to say BEFORE they transmit.
- Proper microphone placement should be considered, as well as volume.
  - Example: It is **NOT** appropriate to press the Push-To-Talk button on a handheld, while the handheld is still on the belt, and attempt to transmit your response.
- Proper names will not be utilized during radio broadcasts unless the use of the name is emergent in nature.
- Some radio communications may be related to administrative or procedural activities, in these cases the co-workers shall first consider whether radio transmission is necessary or if other means of communications could be utilized.
  - Non-essential communications will be done via telephone.
  - Emergency Radio traffic will always take precedence.

- Co-workers should monitor the radio traffic of the frequency they are about to utilize, prior to transmission. This will prevent "covering" another user's traffic.
- Personal radio traffic is **not** permitted.
- Co-workers will identify their appropriate unit number or individual call sign identifier when transmitting.
- The party initializing radio traffic will identify who they want to talk to first, and then give their assigned radio or unit number. This format is often referred to as, "Hey you, it's me." Whenever off of the primary frequency this should be immediately followed by the frequency channel name. This will be used for communication with ambulances, helicopters, and other services.
  - Example:

    6172 "600, from 6172; on V-Fire 21 (Fire Mutual Aid)"

    Radio # 600 "6172; go ahead"

- Radio transmissions will not be ignored, and will be responded to for proper communication as soon as possible.
- Phonetic spelling will be utilized when the clarity of a message may be or is misunderstood. See attachment "International Phonetic Alphabet."
- Military time (24 hour time) will be utilized for all timekeeping and radio transmissions.
- Many of the radio towers Mercy utilizes are remote or repeater sites, which require an average of one second to activate re-broadcasting. Due to this all co-workers should adopt the standard of pressing the microphone's Push-To-Talk button for one seconds prior to transmission of voice. This will prevent "clipping" of the beginning of the radio traffic.
- The receiving party is responsible for providing feedback to the sending party and identifying or clarifying the information transmitted.

**Specific Radio Guidelines**

The following guidelines will be utilized in circumstances where this information is not input into the Mobile CAD.

- **Communicating with the EMS Communications Center**
  - Mercy EMS Communications Center will be identified as "MercyComm"
  - Co-workers **MUST** wait for the EMD to acknowledge the unit or radio number prior to transmitting their radio traffic.
    - Example of **INCORRECT** method:

      6172 "MercyComm – Medic 6172 is arriving [location], mileage is 239."

    - **CORRECT** method:

      6172 "MercyComm from 6172."

      MercyComm "6172 go ahead." (or "… stand-by 6172")

      6172 "6172 has arrived location, mileage is 239."

- Co-workers may have an emergency transmission that cannot wait for the frequency to "clear". This emergency traffic should be stated as "Rush Traffic" or "Emergency Traffic."

- The EMD may still have to announce "ALL UNITS STANDBY FOR EMERGENCY TRAFFIC" in order to stop all other transmissions, before the traffic can be heard.
- The unit with traffic must still wait to be acknowledged.
- For example:

6172: "MercyComm from 6172 - EMERGENCY TRAFFIC"

MercyComm "6172; go ahead with EMERGENCY TRAFFIC."

- EMD's will repeat the important information of all transmissions initiated to them, ending this with a time stamp. This will facilitate accurate documentation into the CAD system, and will minimize errors.

- For example:

6172 "MercyComm from 6172."

MercyComm "6172; go ahead."

6172 "6172 has arrived location, mileage is 239."

MercyComm **"Copy 6172 has arrived mileage 239 at 21:00 hrs."**

- **Ambulance Guidelines**
- **Ambulance Dispatch**
  - Whenever possible for emergent requests, the EMD will utilize the Early Assignment of a unit, in which limited information will be provided during initial dispatch. These responses will always be as "Priority 2" until further information is obtained.

- For example:

MercyComm - "3132; Priority 2; 200 South Main in Springfield, for a general medical."

- The EMD shall provide the initial alert or "page" for a unit to respond to an emergency call in this format: Unit – Priority - Address/Location – Nearest City/Community - Business Name – Repeat Address/Location, Nearest City/Community, and Business Name - Chief Complaint (MPDS Card Name) – any Safety/Hazards Information - Time of Page/Alert

- For example:

MercyComm - "5221; Priority 1; 200 South Main in Mountain View, 2-0-0 South Main in Mountain View, for Chest Pain; at 21:00 hrs."

- **Ambulance Walk-up or Field Reported Incident**
  - Special circumstances exist when an ambulance has a patient that presents themselves to the ambulance crew without first calling for help. Typically this involves a patient walk-up to the station, patient contacted an ambulance crew while they are in standby mode in the community, while assigned to an unrelated incident, or when the ambulance is driving and crew members witnesses a patient in need (i.e. car accident.)
  - Crews will notify MercyComm of the special situation and current status while beginning to render aid. This will be recorded in CAD.
- For example:

  6172 "MercyComm, from 6172"

  MercyComm – "6172; go ahead.

  6172 - "6172 has a walk-up patient at our ambulance station. Will be outside rendering aid. [Include chief complaint, if known.]"

- **Ambulance Acknowledge**

  - The crew should respond with Unit name and "Acknowledged".

    6172 – "6172 Acknowledges"

- **Ambulance Enroute**
  - The co-workers will notify the EMS Communications Center they are enroute and give their mileage (last three digits and tenths).
  - The EMD will repeat the enroute mileage and time stamp.
  - The EMD will give secondary information in this format: Unit - Priority - Address/Location – Nearest City/Community - Business Name (if known) – Directions to scene – Facility/Apartment Name – Chief Complaint (MPDS Card Name) – any Safety/Hazards Information – any additional information about patient – Resources that have been requested – Time stamp
- For example:

  MercyComm - "5221; your responding Priority 1; to 200 South Main in Mountain View; at McDonalds; be in the parking lot; for Chest Pain; patient is turning pale and has a positive cardiac history; Rescue has been requested; 21:00 hrs.)

  - The Ambulance co-workers will respond with clear or ask any follow up questions. In cases where directions were given it would be appropriate for the co-workers to repeat all the directions to the scene.
- **Ambulance On-Scene**
  - The Ambulance co-workers will notify dispatch when they are on-scene and give their mileage (last three digits and tenths).
  - The EMD will repeat the on-scene mileage and time stamp.

- **Ambulance Transporting to Destination**
  - The Ambulance co-workers will notify dispatch when they are departing the scene, where they are going, and if they have any additional persons on board. If the Ambulance will be using lights and sirens then this should also be relayed.
- For example:

  6172 "6172 will be transporting two patients, and one rider to Mercy – Springfield, Emergency."

  - The EMD will repeat the information and time stamp.
- **Ambulance Communication with hospitals**
  - Guidelines for radio transmission to hospitals can be found in "Incoming Ambulance Patient Report Guide" policy/procedure.

- **Ambulance Arrive Destination**
  - The Ambulance co-workers will notify dispatch via radio when they are arriving and give their mileage (last three digits and tenths).
  - Co-workers should keep the EMS Communications Center informed of any potential delays.
  - The EMD will repeat the arrival mileage and time stamp.

- **Ambulance Enroute back to service area and available**
  - The Ambulance co-workers will notify dispatch via radio when they are enroute back to their service area. If there will be any delays in their returning to service this should also be noted.
  - The ambulance co-workers will notify dispatch via radio when they are back in their stations/ service areas.
  - The EMD will repeat and time stamp.

- **Helicopter Guidelines**

- **Helicopter Dispatch and Secondary Information:** (Note: Follow appropriate guidelines regarding weather related activations and sterile cockpit procedures.)
  - The EMD shall provide the initial alert or "page" for a unit to respond to an emergency call in this format: Unit – Request Type – A General Physical Description of Location – Distance and Heading – and Chief Complaint – any Safety/Hazards Information - Time of Page/Alert
- For example:

  MercyComm "Life Line 1 / Flight Request to Buffalo / Distance and Heading of xxx hrs at xxx degrees / for a 30 YOM Chest Pain / at 21:00 hrs."
  - The crew should respond with Unit name "Acknowledged".

    Life Line – "Life Line 1 – Acknowledged"
  - Secondary dispatch information should include the same information as the primary with addition of coordinates as able. Whenever providing coordinates the EMD and crew should read back the coordinates to confirm information received.

**International Phonetic Alphabet**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A | Alpha | H | Hotel | O | Oscar | V | Victor |
| B | Bravo | I | India | P | Papa | W | Whiskey |
| C | Charlie | J | Juliet | Q | Quebec | X | Xray |
| D | Delta | K | Kilo | R | Romeo | Y | Yankee |
| E | Echo | L | Lima | S | Sierra | Z | Zulu |
| F | Foxtrot | M | Mike | T | Tango | | |
| G | Gulf | N | November | U | Uniform | | |

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## RADIO EMERGENCY ALERT PROCEDURE

**PURPOSE:** To provide assistance to EMS co-workers who may be under distress and needing immediate assistance. Situations such as violent patients, hostage situations, or other situations that are placing the co-workers lives in immediate danger. In these situations the caregiver may have the need to signal for help without the threatening individual (or patient) knowing that the caregiver is requesting the help.

**PROCEDURE:**

1. The EMS Communications Center will maintain equipment necessary to decode an emergency activation.
2. At the beginning of each shift EMS co-workers will be issued a portable radio that is capable of an emergency activation. When an ambulance crew comes on-duty they will call the EMS Communications Center on the radio and make notification that they are in-service. Crews should notify the communications center anytime they are using a portable radio that is not usually assigned to their unit.
3. The EMD will record this information and keep on file until the crew goes off-duty.

### Emergency Activation

1. In order for a caregiver to issue an emergency alert they need to do the following:
    1. Press the designated button on the radio unit to alarm the system.
    2. Press the push-to-talk button to issue the activation.
    3. The radio will emit several seconds of squelch to signify the emergency alert has been activated and that a channel has been dedicated and locked into the system.
    4. The radio will continue to issue the emergency alert beacon every 60 seconds and keep a dedicated channel until the activation is cancelled. The activation can only be cancelled by the radio that issued it.
2. The EMD will receive a visual and audible notification of the emergency alert – this will happen at all EMS Communications Center consoles. The EMD will do the following:
    1. Identify the specific radio and corresponding caregiver radio number that has issued the alert.
    2. **Make one attempt to contact the caregiver or unit by radio.** For example: “Medic 3111 status check” During this time the EMD should be aware of how the phrase their radio communications in the event a threatening individual (or patient) is listening to the radio.
    3. If no response **– the EMD should assume an emergency situation exists and request immediate assistance for the crew utilizing established guidelines.** See policy/procedure “Crews Remaining in Contact with Dispatch”.
    4. If the crew responds and advises of an accidental activation then the crew will need to re-set their radio.

**Re-setting/Canceling an Emergency Activation**

1. Portable or Mobile radios:
    1. Press and hold the orange button for 2 seconds – then release. The radio will emit a short beep.
    2. Press the push-to-talk button to normalize the radio.
    3. Turning of the radio and turning back on typically does not re-set the emergency functions.
2. Communication Center Consoles – These steps must be repeated at all consoles.
    1. To cancel the audible alarm: Find the "Alarm Acknowledge" button. With the "Greene Co 800 MHz." channel selected – press the "Alarm Acknowledge" button.
    2. When the caregiver resets their portable radio the alert will automatically clear from the console

**Testing/Training of the Emergency Activation System**

1. The system will be tested each quarter during the Mobile Communications Trailer Set-Up and Testing exercise.
2. The EMD Supervisor will ensure that all EMD's are prepared for the test alert. NO SURPRISES.
4. The EMD Supervisor will coordinate with the Operation's Supervisor/Regional Manager who will select one EMS caregiver/crew to initiate the test.
5. The EMS caregiver will announce on the radio that they will be conducting a test of the emergency activation system.
6. The EMD should take the same steps as they would in a real emergency (PRACTICE just as you would perform in an emergency.)
    1. Identify the specific radio and corresponding caregiver radio number that has issued the alert.
    2. Make one attempt to contact the caregiver or unit by radio. For example: "Medic 3111 status check" During this time the EMD should be aware of how the phrase their radio communications in the event a threatening individual (or patient) is listening to the radio.
7. The EMS caregiver will announce on the radio the test has concluded.
8. Re-set the radio and all EMS Communications Center consoles.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## MPDS CALL-TAKING STANDARDS

**PURPOSE:** Mercy EMS supports the high standard of excellence for emergency dispatch as recommended by the International Academies of Emergency Dispatch (IAED). EMDs are expected to maintain proficiency in call-taking by meeting or exceeding the minimum IAED accreditation standards.

**PROCEDURE:**

1. Mercy EMS is committed to assisting EMDs in maintaining and improving their professional knowledge, skills, and competence.

2. All new co-workers will receive initial training and consultation of call-taker compliance and review programs by a certified EMD-Q.

3. During their mentoring period, new co-workers will have their recorded interactions of persons calling the center to request emergency medical assistance reviewed by an EMD-Q at a sufficient frequency of which will allow for effective mentoring. These 'special cases' will function as a training aid.

4. EMD-Qs will periodically review recorded EMD interactions of persons calling the center to request emergency medical assistance at the frequency recommended by the IAED for the current agency size. The cases to be reviewed will be selected at random except as minimally adjusted to ensure that each EMD receives enough case reviews each month in order to allow for monitoring of compliance.

5. Additional 'special case' review of recorded EMD interactions of persons calling the center to request emergency medical assistance may occur when cases are under evidentiary or court process, pending release from the department, or under other administrative review.

6. Approved IAED Accredited Center of Excellence standards will be utilized to ensure compliance.

7. Compliance with ACE standards for each case reviewed will be provided to the co-worker.

8. After completion of the probationary period, if an EMD's performance level is below the minimum acceptable level in two or more categories for two or more months in a row a first violation will be issued.

9. First violation:
    a. Written advisement and remediation
        i. Written advisement is a statement of facts and will include advisement of previous violations and the consequences of future violations.
        ii. EMD will complete one self paced computerized training session OR complete a minimum of 2 CDEs through other means (research articles, offsite training, or etc). Topics can be selected by the co-worker provided the same topic has not been attempted in the past 6 months.
    b. Once an EMD has achieved compliance standards for one month the PIP process will reset and no further action is warranted.

10. Second violation (in the month following a previous violation)
    a. Written advisement and remediation
        i. Written advisement is a statement of facts and will include advisement of previous violations and the consequences of future violations.
        ii. EMD will complete one self paced computerized training session AND complete a minimum of 2 CDEs through other means (research articles, offsite training, or etc). Topic will assigned by supervisor based on evaluated needs.
        iii. A performance improvement planning session will be initiated to include the supervisor, EMD and an EMD-Q. A minimum of 4 case reviews from the previous month should be discussed and applicable recordings should be reviewed.

11. Third violation (in the month following a previous violation)
    a. Written advisement and remediation
        i. Written advisement is a statement of facts and will include advisement of previous violations and the consequences of future violations.
        ii. EMD will complete one self paced computerized training session AND complete a minimum of 2 CDEs through other means (research articles, offsite training, or etc). Topic will assigned by supervisor based on evaluated needs.
        iii. A performance improvement planning session will be initiated to include the supervisor, EMD and an EMD-Q. A minimum of 6 case reviews from the previous month should be discussed and applicable recordings should be reviewed.
        iv. Session will be scheduled with the EMD and EMD-Q to receive minimum 4 hours of mentoring while call-taking.

12. Fourth violation (in the month following a previous violation)
    a. Written advisement and remediation
        i. Written advisement is a statement of facts and will include advisement of previous violations and the consequences of future violations.
        ii. EMD will complete one self paced computerized training session AND complete a minimum of 2 CDEs through other means (research articles, offsite training, or etc). Topic will assigned by supervisor based on evaluated needs.
        iii. A performance improvement planning session will be initiated to include the supervisor, EMD and an EMD-Q. A minimum of 6 case reviews from the previous month should be discussed and applicable recordings should be reviewed.
        iv. Session will be scheduled with the EMD and EMD-Q to receive minimum 4 hours of mentoring while call-taking.
    b. A second written warning will be issued.

13. Fifth violation (in the month following a previous violation)
    a. Written advisement and remediation will occur as described for a fourth violation.
    b. A final warning will be issued and a one day suspension.

14. Sixth violation: Termination

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## MEDICAL PRIORITY DISPATCH SYSTEM (MPDS) IMPLEMENTATION

**PURPOSE:** Call receipt and dispatch of medical assistance shall be provided in a standardized manner following approved Medical Priority Dispatch System (MPDS) guidelines for EMS caller triage interviewing, determination of appropriate response configurations and modes, and provisions for post dispatch and pre-arrival instructions. Co-workers functioning as call-takers will be current Emergency Medical Dispatch (EMD) certified and in good-standing with the International Academies of Emergency Dispatch (IAED).

**PROCEDURE:**

### Dispatch Tools

- PROQA (a software version of the guideline) will be available at all call-takers consoles and shall be the preferred method for guideline utilization.
- A flip-chart card system containing guidelines for Emergency Medical Dispatching will be provided at each console position and used whenever PROQA is not available.
- The guideline system will provide standardized key questions, post-dispatch and pre-arrival instructions, and response-based codes.
- The Advanced Medical Priority Dispatch System (AMPDS) including computerized versions of the guidelines have been approved by the Mercy EMS Medical Director.
- Response Configurations are periodically reviewed or at time of guideline revision (PROQA and/or card systems) for appropriateness and adherence to “Priority Dispatch Policy” by committee, to include at minimum the EMS Medical Director, EMS Director, and Communications Center Manager.
- The AMPDS guidelines shall be followed on all incoming EMS-related emergency calls in accordance with policy. (See “Answering Emergency Calls”)
- The most recent versions of guidelines (PROQA and/or card systems) and the Scoring Standards will be implemented within one year of release.
- Continuing Dispatch Education (CDE) is made available on a routine basis and EMDs are required to maintain competency of skills (i.e. EMD Advancement Series, Journal Articles, and local training opportunities.)

### Call Triage and Interviewing

- In addition to the information outlined for call processing, the EMD shall always ask the following questions of the 911 caller:
  - What is the problem? (Tell me exactly what happened.)
  - How old is the patient? (approximate if necessary)
  - Is(Are) the patient(s) conscious?
  - Is(Are) the patient(s) breathing?
- All attempts to obtain Case Entry and Key Question information from the caller will utilize good communication techniques and by reading the questions **exactly** as written in the guideline.
- If the initial pre-structured question is not understood, or an appropriate answer is not initially forthcoming, the EMD may rephrase the question in an appropriately clarified form.

- Questions may only be omitted if the answer is obvious or has already been clearly provided; however, questions which relate to the priority symptoms of:
  - Altered level of consciousness
  - Breathing problems
  - Chest pain
  - Sever bleeding

  **…MUST** be asked each time they appear.
- EMDs may alter the tense of the questions to the first person is the caller is the patient (that is, for "first-party" calls).
- State of consciousness, including "alertness" and "ability to talk," may be inferred as obvious when **the caller is the patient.**
- Refer to the "Language Translation Services" procedure for assistance in translating the guideline if the caller does not speak your native language.

**Response Configuration and Modes**

- When using PROQA software response configuration will be 'passed' to the CAD system. The CAD system will then display the priority. The EMD should verify the priority displayed is in accordance with the "Priority Dispatch Policy" prior to dispatching units.
- When using the flip-card version of the guideline the EMDs will select and enter into the CAD system the currently used incident type and subtype, as well as priority as determined by the "Priority Dispatch Policy."

**Relay of Information to Responding Units**

- The following items shall be regarded as the minimum dispatch information for responding personnel:
  - Incident Location (including building name and access details)
  - Incident Type (MPDS Card Title)
  - Patient Age (if not known, estimated as ADULT or PEDIATRIC)
  - Status of Consciousness and Breathing
  - Chief Complaint (In most cases, the incident type is the Chief Complaint)
  - Hazards (particularly staging information if required, See "Hazard/Safety Notification" policy.)
- Should additional information become available prior to crew arrival, as a result of patient condition change or a subsequent call on the same incident, that information should be passed along to responding units (call volume permitting).

**Post-Dispatch Instructions (PDI)**

- The EMD will refer to the Post-Dispatch Instruction list for the selected Chief Complaint if using the flip-card system or with PROQA will utilize the PDI displayed by the software.
- The EMD providing PDIs will follow the guideline for instructions appropriate to each individual call, **avoiding improvised instructions unless they ENHANCE and DO NOT REPLACE the written guideline.**

# EMS Policies: Communications

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- PDIs shall be provided to the caller whenever possible and appropriate to do so.
- Whenever possible, the EMD receiving the call should personally provide the PDIs.
- Should the workload of the EMS Communications Center dictate (e.g. unanswered incoming calls) the EMD must apply the "Emergency Rule" and temporarily suspend the provision of PDIs.
  - This is vital to ensure the safe and effective operation of the EMS Communications Center for all individuals requiring it services.
  - Should unanswered calls, or other vital operations require it, EMDs should place caller receiving PDIs on hold.
  - EMDs are expected to give the caller a reason for placing them on hold, and to assure the caller that they will return as soon as possible.

**Pre-Arrival Instructions (PAI)**

- PAIs should be read directly from the appropriate PAI Panel Logic Guideline Script if using the flip-card system or with PROQA as displayed by the software.
- ALL GUIDELINES LISTED UNDER THE POST-DISPATCH INSTRUCTIONS (PDI) APPLY LIKEWISE TO PRE-ARRIVAL INSTRUCTIONS (PAI).

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## ANSWERING EMERGENCY CALLS

**PURPOSE:** Emergency Dispatchers answer emergency calls for Ambulance, Air Medical Service, Safety and Security on a routine basis. Emergency requests for service can come from several sources: Primary Service Answering Points (PSAP) with or without caller transfers, direct dialed callers (800 and 7 digit lines), and other agencies (EMS, Fire, First Responders, Law Enforcement, or etc). Emergency Dispatchers must answer and process these emergency calls using a standardized format, which may be clarified and enhanced when necessary, but not unjustifiably altered or abandoned.

**PROCEDURE:**

**Initial Receipt of an Emergency Call**

- When answering emergency phone lines the call-taker will say,
  **"Mercy EMS Communications, this is {name}?"**
  **OR**
  **"Public Safety Communications, this is {name}?"**
- When answering Life Line phone lines the EMD will say, **"Mercy Life Line, this is {EMD's name}?"**

**Confirmation of Location**

- Enter the stated address directly into the appropriate portion of the CAD incident form.
- Ask the caller to verify the address
  - Ask: **"Can you repeat the address back to me so I can be sure I've got it right?"** (or similar question)
  - DO NOT READ THE ADDRESS BACK TO THE CALLER.
- As the caller repeats the address, actively compare it to the CAD (or written) incident form.
- If they do not match, say to the caller: **"That is not the same address I originally got. Could you repeat it once more, please?" (**or similar statement/question)

**Confirmation of Call-Back Number**

- Ask the caller, **"What is the phone number you are calling from?"**
- Enter call-back number into the CAD incident form immediately as received.
- Ask the caller to verify the call-back number.
  - Ask: **"Can you repeat the telephone number for me so I can be sure I've got it right?" (**or similar statement/question)
- As the caller repeats the telephone number, actively compare it to the CAD (or written) incident form.
- If they do not match, say to the caller: **"That is not the phone number I originally got. Could you repeat it once more, please?" (**or similar statement/question)

**Obtaining the nature of the Emergency**

- If the caller identifies the need for air medical service or an interfacility transfer, the Emergency Dispatcher should follow the applicable guidelines for these specific requests.
- Emergency Dispatcher will utilize PROQA to ask the following questions, reading from the script in accordance with MPDS/EPDS procedure.
- Ask the caller: **"Okay, Tell me exactly what happened?"**
- If the caller starts to give you a long medical history, rephrase and repeat the question as **"What's the problem now? What's happening now?"**
- If the caller's response does not enable you to select a Chief Compliant card, seek clarification of the chief complaint, if possible.
- If you are still **unable to identify the specific Chief Complaint, select either card 26/Sick (second party callers) or CARD 32/UNKNOWN (third party callers) for medical complaints.**
- If you are still **unable to identify the specific Chief Complaint, select card 134/UNKNOWN (third party callers) for Safety and Security complaints.**
- Ask the remaining questions on the Case Entry card in the correct order (or as prompted by PROQA.)
- Politely but firmly focus the caller on answering all questions as you ask them. Do not allow callers to offer additional information until they have answered all scripted questions. If callers lose their focus and do not concentrate on answering questions as asked, say: "Sir/Madam, I need you to answer this question so I can get help to you as quickly as possible." Repeat this as often as necessary using exactly the same phrasing.

**Chief Complaint Cards**

- Go to the appropriate Chief Complaint card when you have gathered all Case Entry information. PROQA will automatically progress to this.
- Say to the caller: **"The ambulance is on the way. Please stay on the line. I need to ask you a few more questions so I can tell you what to do to help the patient."**
- Ask all of the Key Questions in the order they appear on the card (or as prompted by PROQA), following the script.
- Politely but firmly focus the caller on answering all questions as you ask them. Do not allow callers to offer additional information until they have answered all scripted questions. If callers lose their focus and do not concentrate on answering questions as asked, say: "Sir/Madam, I need you to answer this question so I can get help to you as quickly as possible." Repeat this as often as necessary using exactly the same phrasing.

**Coping with Distressed, Hysterical, Aggressive/Abusive Callers**

- Callers who fall into any of these categories present a great challenge to the Emergency Dispatcher; however, all of them (especially those who are aggressive or abusive) behave this way because they are frightened and feel that they have no control over the situation. The following techniques will help calm them, but require a very professional delivery from the EMD. YOU MUST NOT LET THE CALLER'S ATTITUDE AFFECT THE WAY YOU BEHAVE OR COMMMUNICATE.
- REMAIN CALM AND COURTEOUS AT ALL TIMES, regardless of what the caller says or does.

- KEEP YOUR VOICE LEVEL AND EVEN AT ALL TIMES. Do not shout at the caller, or even raise your voice.
- NEVER DISPLAY IRRITATION WITH THE CALLER.
- NEVER THREATEN THE CALLER.
- GIVE AN EXPLANATION, WITH A MOTIVE, FOR EVERYTHING YOU DO OR ASK THE CALLER TO DO.
    - For instance, explain why you are asking Key Questions (so that you can tell them how to help the patient) or why you need to put the caller on hold (so that you can get the Paramedics on the way.)
- ASSURE THE CALLER THAT THE PARAMEDICS ARE ON THE WAY. Repeat this as often as necessary.
- USE A CHILD CALLER'S FIRST NAME. This may also be helpful technique for hysterical adults.
- Use "REPETITIVE PERSISTANCE" This works for many abusive and aggressive callers, as well as those who are hysterical. Give the caller an action, followed by a reason for complying with this action. Repeat this, using exactly the same phrasing and in the same calm, level voice, as often as necessary until the caller listens and cooperates. Be prepared to use this technique more then once.
- USE "POSITIVE AMBIGUITY". Do NOT 'lie' to the caller, even if motivated by kindness. Do not make promises that are not within your ability to keep.
    - Example: The caller asks, "How long will the ambulance be?" The Emergency Dispatcher should reply, **"The ambulance is on the way. They will be with you as soon as possible."** DO NOT GIVE AN EXACT TIME OF ARRIVAL.
    - Example: The caller asks, "The patient is going to be all right, isn't s/he?" The Emergency Dispatcher should reply, **"Everyone will do the best they can to help."**
    - Example: The caller asks, "Will this save him/her?" The Emergency Dispatcher should reply, **"This will help give him/her the best possible chance.**
- GIVE THE CALLER FIRM BUT GENTLE ENCOURAGEMENT.
    - Example: The caller says, "Nothing's working!" Emergency Dispatcher should say, **"Don't give up. You've got to keep doing it. This may keep him/her going until the paramedics arrive."**

ASK IF THERE IS SOMEONE ELSE YOU CAN SPEAK TO. This should **only be used as a last resort**, as you will no longer be in a position to calm the caller.

**Pre-Arrival Instructions (PAIs)**

- **DO NOT ASK FOR PERMISSION TO GIVE PAIs**.
    - For example do **NOT** say, "Would you like me to tell you how to do CPR?"
- If the caller refuses to follow PAIs say: **"The ambulance is on the way, but this is important to give the patient the best possible chance."** Repeat necessary.
- If the caller still refuses to administer aid, ask if there is someone else you can speak to.

**Third Party Calls**

- Do **NOT** assume that third party callers know nothing, even if they say they know nothing.
- **ALWAYS** ask all Case Entry and Key Questions.
- **ALWAYS** ask the caller if they will return to the patient to render aid. If so, provide PDIs and PAIs as possible and appropriate.

**Fourth Party Calls**

- The Fourth Party caller frequently has access to additional information if requested.
- The Emergency Dispatcher should inquire if there is a callback number to the original reporting party. If provided the Emergency Dispatcher should call-back the number and follow normal MPDS/PPDS procedures, if able to.
- The Emergency Dispatcher should advise the Fourth Party caller to call Mercy Emergency Services Communications Center back if any additional information is obtained.

**Requests Received from JASCO 911, Barry County 911 and/or WRICOMM**

- Requests received from JASCO 911, Barry County 911 and/or WRICOMM will follow process agreed upon in joint procedure.

**Emerging Infectious Disease Surveillance Tool**

- When risk of infectious disease is heightened in the community (i.e. EBOLA, SARS, etc.) with medical control approval the emergency call will be processed thorough Case Entry and Key Questions and a Final Code determinant will be generated as standard practice. If at that point the patient has symptoms consistent with specific infectious diseases, additional questions to including a check for risk factors should occur through use of the EIDS tool.
- Responders should be notified as soon as possible of any symptoms and risk factors identified.

**Specific Infectious Disease Guidelines:**

- Ebola Virus Disease (EVD)**:** Chief Complaints we recommend for use of the EID tool are those that represent typical flu-like symptoms and unexplained bleeding:
  Guideline 26 Sick Person,
  Guideline 6 Breathing Problems,
  Guideline 18 Headache,
  Guideline 10 Chest Pain, and
  Guideline 21 Hemorrhage (MEDICAL)
  - If PSAP call takers suspect a caller is reporting symptoms of Ebola, they should screen callers for risk factors within the past 3 weeks before onset of symptoms. Risk factors include:
    - Contact with blood or body fluids of a patient known to have or suspected to have Ebola;
    - Residence in–or travel to–a country where an Ebola outbreak is occurring (a list of impacted countries can be accessed at the following link: http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html); or
    - Direct handling of bats or nonhuman primates from disease-endemic areas.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## REQUEST FOR RESCUE, FIRE DEPARTMENT, OR LAW ENFORCEMENT

**PURPOSE:** To standardize the way an Emergency Medical Dispatcher request services to a scene from Rescue, Fire Department, and Law Enforcement.

**PROCEDURE:**

1) EMD (call taker) will screen the caller utilizing MPDS (Medical Priority Dispatch System) guideline, identifying the MPDS Card and Determinate Descriptor (type and subtype) of the EMS request.

2) The call taker will determine if the type and subtype of request requires Rescue, Fire Department, or Law Enforcement.

3) The call-taker will contact the appropriate dispatch entity and utilize the wording below when making the request. Note: The call taker may be on-line with the caller and the dispatch entity.

1) Rescue/Fire Department: The call taker will state the entity that we are requesting. When able the EMD should identify the reason for request, using the MPDS card type and subtype as the chief complaint.

   1st Example: "I am requesting Rescue only.

   2nd Example: "I am requesting Rescue for this due to Headache with abnormal breathing."

2) Law Enforcement: In order to keep this request confidential and prevent possibly escalating the situation on scene, the EMD may choose to call the Law Enforcement agency back after disconnecting with the original caller. When able the EMD should identify the reason for request, using the MPDS card type and subtype as the chief complaint or other specific information.

   THE EMD SHOULD NOT REQUEST A "FULL RESPONSE" WHEN ONLY A LAW ENFORCEMENT OFFICER IS NEEDED.

   SPECIFIC INFORMATION REGARDING THE NEEDS OF A UNIT REQUESTING A RESPONSE FROM LAW ENFORCEMENT SHOULD ALWAYS BE RELAYED TO THE LAW ENFORCEMENT AGENCY.

   Example: "I am requesting a Law Enforcement response for…"

3) Requesting all three entities: The call taker will state that we are requesting a "Full Response" and the reason for request, using the MPDS card type and subtype as the chief complaint.

   Example: "I am requesting a Full Response for this due to Headache with abnormal breathing."

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## PROCESSING REQUESTS FOR AIR MEDICAL SERVICE

**PURPOSE:** To ensure timely triage, rapid identification of the needs of the caller, and assignment of the most appropriate helicopter.

**PROCEDURE:** After a caller identifies the need for air medical service the following steps should be taken. See also: "Answering Emergency Calls" procedure.

**Life Line Rapid Activation**

- EMD should document all pertinent information obtained in CAD (or paper flight form).

- **Minimum information** needed to proceed to the next step of "Assigning a Flight Request" is**:**
  - Name and call back phone number?
- The confirmation of address/location and phone number should occur as noted in the "Answering Emergency Calls" policy.
  - **"What agency is requesting this flight?"**
  - **"Has any other air service been requested for this flight?"**
- If appropriate call-taker should ask and obtain the following information prior to acceptance of any flight:
- **"Which other air services are responding?"**
- **"Was flight denied for weather?"**
  - **"What is the closest community to where the aircraft needs to respond to?"**
- LZ common name or facility may also be obtained.
- Call-taker should not delay activation to obtain coordinates.
  - **"It is not required for aircraft activation; however has a transport destination decision been made? If so, to where?"**

- Call-taker identifies ETA, using known time-table reference, of the most appropriate aircraft.

- Create CAD Event to ensure all stages of the call are appropriately documented in the CAD system's dispatch record.

- Advise caller, **"Our flight coordinator will be activating the aircraft immediately. Our estimated time of arrival will be in (xx) minutes, including lift time."**
- **"I have some additional questions to complete our mission briefing for the pilot and crew. Do you have time to provide information now or would you like me to call you back?"**

- **Scene Flight**
  - Landing Zone specifics (coordinates if available)?
  - Primary responding ambulance?
  - Dept name & radio number?
  - Common radio frequency for communication?
  - LZ Coordinator (Fire/EMS/Law)?
  - Chief Complaint or mechanism of injury?
  - Pt. weight, age, gender (if known)?
- **Interfacility Flight**
  - Pt. demographics?
  - Patient location (ER, ICU, L&D, etc)?
  - Patient destination?
  - Pt. weight, age, gender?
  - Medical considerations (airway control, medication drips, special needs)?
- Proceed to "Assignment of Flight Requests" for further steps in communicating with the caller.

**Inquiries of Available Resources and "Missed" Flights**

- If the caller asks for status or location of Life Line Air Medical Service, provide the caller with the information they have requested.
  - Status should be give as one of the following: "**Available", "Weather Check", or "Out of Service."**
- Ask the caller: **"Would you like to request a helicopter?"**
- If the caller does not indicate they would like a helicopter or we are unable to send a helicopter, ask the caller: **"Will you give me information about what the flight request would have been for, so I can log this?"**
- If the caller refuses to cooperate or hangs-up, considered the call to have been an inquiry of status only and no CAD record should be initiated.
- If the caller is able to provide a location (or vicinity) of where the incident was located, create the request **(for the aircraft that would have been assigned)** in the CAD system and close out with the appropriate disposition for the circumstances. **"Missed Flight"** THE MINIMUM INFORMATION NEEDED TO CREATE A RECORD OF "MISSED" FLIGHT IS THE REQUEST LOCATION.

**Request Received from a Private Individual (May be a first or second party caller)**

- Occasionally a Flight Request will be received from a private individual (may be a first or second party caller). In those instances the EMD should follow the MPDS procedures and then provide Pre-Arrival Instructions (PAIs) and Post Dispatch Instructions (PDIs) when appropriate.
- The EMD will obtain the necessary information to request an appropriate response from other resources. Generally an Ambulance and First Responders would be requested to respond with a Helicopter.
- Proceed to "Assignment of Flight Requests" for further steps in communicating with the caller.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## EARLY ACTIVATION OF AIR MEDICAL SERVICE

**PURPOSE:** Reduce the time interval from a patient's on-set of injury/condition to arrival at the hospital by early activation of Air Medical Service through the recognition of potential Flight Requests by the Emergency Medical Dispatcher (EMD).

**PROCEDURE:** The EMD interviews callers to identify chief complaint (MPDS Response Code) of requests for service. The EMD will identify potential Flight Requests and provide early notification of Life Line.

**Recognizing Potential Flight Requests**

- When successful first, second, or third party caller interviewing has resulted in a MPDS response code (specific card number and code) this will be compared to addendum 1 to identify a potential Flight Request.
- Occasionally third or fourth party callers have enough limited information about a specific incident or medical need to allow the EMD to identify a potential Flight Request as compared to addendum 1.
    - Example: EMD receives phone call from a 911 agency stating, "There has been a collision between a motorcycle and a truck – with injuries, no further information available."

**Early Activation of Life Line Helicopter**

- Upon identification of a potential flight the EMD will create a Flight Request utilizing the CAD system. The EMD will document the "Requester" as an 'Early Activation' and document any specific additional information in the call.
- The responding primary Ambulance will be notified that "Early Activation of Life Line {1, 2, or 4, etc} has occurred". ETA should be provided as soon as it is known.
- Proceed to "Assignment of Flight Requests" for further steps.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## MEDICAL PRIORITY DISPATCH POLICY

PURPOSE: To consistently define ambulance response.

PROCEDURE: The EMD shall utilize the current version of the Advanced Medical Priority Dispatch System (AMPDS) to prioritize all incoming requests for ambulance service into one of five priority assignments modes. Each request, based on the information received, will be assigned one of the following 'Response Priority Modes" based on the assigned determinant code:

(See also 'MPDS Implementation Policy" and "Answering Emergency Calls")

1. Priority 1
   - A. Immediate response indicated.
     - i. Crews working shifts 24-hours or longer are to respond within two (2) minutes during the hours of 0700-2300, and four (4) minutes during the hours of 2301-0659. For units working 12-hours shifts, response should occur within two (2) minutes.
     - ii. Warning lights and sirens are indicated
   - B. Life threatening, potentially life threatening, or priority symptoms exist or are believed to exist.
   - C. If no Mercy EMS unit is immediately available for assignment to a priority one, the next closest EMS unit should be assigned through mutual aid arrangements.

2. Priority 2
   - A. Immediate response indicated
     - i. Crews working shifts 24-hours or longer are to respond within two (2) minutes during the hours of 0700-2300, and four (4) minutes during the hours of 2301-0659. For units working 12-hours shifts, response should occur within two (2) minutes.
     - ii. Warning lights and sirens are NOT indicated
   - B. NO immediate life threatening conditions or NO priority symptoms exist or are believed to exist.
   - C. If no Mercy EMS unit is immediately available for assignment to a priority two, the next closest EMS unit should be assigned through mutual aid arrangements.

3. Priority 3
   - A. Immediate response indicated.
     - i. Crews working shifts 24-hours or longer are to respond within two (2) minutes during the hours of 0700-2300, and four (4) minutes during the hours of 2301-0659. For units working 12-hours shifts, response should occur within two (2) minutes.
     - ii. Warning lights and sirens are NOT indicated
   - B. NO immediate life threatening conditions or NO priority symptoms exist or are believed to exist AND the patient will be transported from one of the following locations:
     - i. Where the patient is under the supervision of health care professionals in a health care facility.
     - ii. Where the patient is at home in a health care environment.
   - C. In locations where the emergency request is from a hospital with acute care capabilities local rotation procedures would apply for assignment of ambulance.

4. Priority 4
   - **A. Unscheduled Non-emergency.**
     - i. Crews are to respond within five minutes from time of dispatch.
     - ii. Warning lights and sirens are NOT indicated
   - B. NO immediate life threatening conditions or NO priority symptoms exist or are believed to exist AND the patient will be transported from or for one of the following:
     - i. a facility of higher care to one of lower care
     - ii. for a medical procedure
     - iii. for a clinical appointment
     - iv. for a direct admission to a medical facility

5. Priority 5
   - **A. Scheduled Non-emergency.**
     - i. Response is requested for a specific time or time frame to meet a scheduled obligation.
     - ii. Crews are to respond within five minutes from time of dispatch.
     - iii. Warning lights and sirens are NOT indicated
   - B. NO immediate life threatening conditions or NO priority symptoms exist or are believed to exist AND the patient will be transported from or for one of the following:
     - i. a facility of higher care to one of lower care
     - ii. for a medical procedure
     - iii. for a clinical appointment
     - iv. for a direct admission to a medical facility

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## HAZARD / SAFETY NOTIFICATION TO RESPONDING UNITS

**PURPOSE:** Information affecting the safety of all patients and EMS responders, including First Responders and other support agencies will be promptly communicated to all parties responding to the incidents.

**PROCEDURE:**

**1) Information to be transmitted over the radio:**

- Scenes that are not secure (i.e. domestic disturbances, assaults or crimes in progress)
- Supplemental information concerning hazardous material incidents
- Specific directions regarding access to the scene or building details

**2) Information NOT to be transmitted over the radio:**

- Reports of patients with an infectious medical condition requiring precautions **(Per infection control guidelines, all care givers utilize universal precautions on ALL patients.)**
- Any information that the EMD feels could violate patient confidentiality.
- Information regarding the security of the scene
  - Location of a key (to the house, building, apartment, etc.)
  - Security codes to enter the premise
  - Law Enforcement activity in progress on the scene (e.g. “officers are positioned on the roof and North side of residence.”)

**3) Information NOT to be transmitted over the radio will be relayed as follows:**

- Information will be sent by the EMD to the responding unit’s CAD
- Responding units will be advised to “Check CAD notes for priority message.”
- Responding units will report if they did not receive this Priority message, within one minute.
- If unable to deliver the message, alternative methods should be considered. (e.g. cell phone ).

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## SYSTEM STATUS MANAGEMENT

**PURPOSE:** Maintaining EMS system readiness to ensure appropriate and timely response to emergency and non-emergency requests for service from the public, hospital, physician and clinic offices, and other public safety entities within community based, hospital based, and ambulance district service areas.

**PROCEDURE:**

**Common Procedures**

1. When making post assignments the EMD should utilize the pre-established posting assignment card.

2. Ambulances will attempt to be available to be posted after 20 minutes of arrival at destination.

3. When an ambulance is assigned a post, they need to respond to that post within two minutes and remain within 0.5 mile of the posting location

4. Ambulances should report when they are enroute to a post and when they have arrived at a post. EMDs will ensure the post assignment and each movement is recorded in the CAD.

5. Posting for services areas other than Springfield will occur from hours of 07:00 to 21:00 with crews being released to their own stations in order to be back in quarters before 21:30.

6. Springfield posting will occur during all hours of the day. Every effort will be made to move ambulances to **Post 3** (Mercy EMS Headquarters) within 15 – 30 minutes (coverage dependent) before the end of their shift for restock and cleaning duties.

7. When any service area is at level ‘zero’ and expected to be there for greater than 30 minutes, the on-call supervisor should be notified.

8. During an active MCI (as outlined by EMS policy) posting past 21:00 can occur to assist in maintaining coverage for service area with the MCI. As the MCI starts to involve fewer ambulances, crews should be returned to home service area when possible to minimize fatigue.

9. The on-duty Communication Supervisor or Senior should consider suspending out-of- station posting locations during times of inclement weather such as heat index above 95 degrees, wind-chill below 25 degrees, icing conditions, or severe weather potential.

**Service Area Specific Assignments**

**South Barry County**

a. Posting locations are as follows:
   i. Cassville EMS Station
   ii. Shell Knob EMS Station
   iii. Eagle Rock EMS Station

- During times of construction or traffic congestion, these may be altered to allow best access to response areas.

b. Following order should be followed for ALS ambulances:

i. <u>When 4 ambulances are posted (in-service):</u>
2 ambulances at Cassville EMS Station
1 ambulance at Shell Knob EMS Station
1 ambulance at Eagle Rock EMS Station

ii. <u>When 3 ambulances are posted (in-service):</u>
1 ambulance at Cassville EMS Station
1 ambulance at Shell Knob EMS Station
1 ambulance at Eagle Rock EMS Station

iii. <u>When 2 ambulances are posted (in-service):</u>
1 ambulance at Cassville EMS Station
1 ambulance at Eagle Rock EMS **or** Shell Knob EMS Station
   a. Odd Days Shell Knob to Cassville
   b. Even Days Eagle Rock to Cassville

*iv.* <u>When 1 ambulance is posted (in-service):</u>
1 Ambulance at Cassville EMS Station
   a. If Lawrence County is at Level 3 or higher then move-up Aurora to Shell Knob
   b. If Stone County is at Level 3 or higher then move-up Lampe to Eagle Rock Station and rotate based on Stone County SSM. Units DO NOT post at Carr Lane

v. <u>When 0 ambulances are in-service</u>
   a. Notify all units of zero status.
   b. If Stone County is at Level 3 or higher then move-up Lampe to Shell Knob Station and rotate 2nd Branson West ambulance to Lampe. Units DO NOT post at Carr Lane
   c. If Lawrence County is at Level 3 or higher with an Aurora unit available, then move-up to Cassville EMS Station

**Carthage EMS**

a. Posting locations are as follows:
   i. Carthage EMS Station

b. Following order should be followed for ALS ambulances:
   i. <u>When 3 ambulances are posted (in-service):</u>
   Ambulances remain at home station

   ii. <u>When 2 ambulances are posted (in-service):</u>
   Ambulances remain at home station

   iii. <u>When 1 ambulance is posted (in-service):</u>
   Ambulance remains at home station

   iv. <u>When 0 ambulances are posted (in-service):</u>
      a. Notify all units of zero status
      b. If Lawrence County is at Level 2 or higher, move up a Lawrence County unit to Carthage EMS Station

**Lawrence County**

a. Posting positions are as follows:
   i. Aurora EMS Station
   ii. Mt. Vernon EMS Station

b. Following order should be followed for ALS ambulances:
   i. <u>When 4 ambulances are posted (in-service):</u>
   2 ambulances at Aurora EMS Station
   2 ambulances at Mt. Vernon EMS Station

   ii. <u>When 3 ambulances are posted (in-service):</u>
   1 ambulance at Aurora EMS Station
   2 ambulances at Mt. Vernon EMS Station
   -or -
   2 ambulance at Aurora EMS Station
   1 ambulance at Mt. Vernon EMS Station

   iii. <u>When 2 ambulances are posted (in-service):</u>
   1 ambulance at Aurora EMS Station
   1 ambulance at Mt. Vernon EMS Station

   iv. <u>When 1 ambulance is posted (in-service):</u>
   a. If Carthage EMS is at Level 2 or higher then move-up a Carthage unit to Mt. Vernon EMS Station and once Carthage is in the Lawrence area, move the Lawrence County unit to Aurora Station.
   -or-
   b. If Stone County or South Barry are level 2 or higher, then move-up a unit to Aurora EMS Station and once that unit arrives, move the Lawrence County Unit to Mt. Vernon EMS Station.

   v. <u>When 0 ambulances are in-service</u>
      a. Notify all units of zero status
      b. If Carthage EMS is at Level 2 or higher then move-up a Carthage unit to Mt. Vernon EMS Station.
      c. If Stone County or South Barry are at Level 2 or higher, move-up a unit to Aurora EMS Station

**Stone County**

a. Posting locations are as follows:
   i. Branson West Station
   ii. Lampe Station
   iii. Crane Station
   iv. Stonebridge Station
   v. Galena (Post)

b. Following order should be followed for ALS ambulances:

   i. <u>When 5 ambulances are posted (in-service):</u>
   1 Ambulance at Crane Station
   1 Ambulance at Branson West Station
   1 Ambulance at Stonebridge Station
   1 Ambulance at Lampe Station
   1 Ambulance at Galena (Post)

   ii. <u>When 4 ambulances are posted (in-service):</u>
   1 Ambulance at Crane Station
   1 Ambulance at Branson West Station
   1 Ambulance at Stonebridge Station
   1 Ambulance at Lampe Station

   iii. <u>When 3 ambulances are posted (in-service):</u>
   1 Ambulance at Crane Station
   1 Ambulance at Branson West OR Stonebridge Station
   1 Ambulance at Lampe Station

   iv. <u>When 2 ambulances is posted (in-service):</u>
   1 Ambulance at Crane Station
   1 Ambulance at Branson West Station

   v. <u>When 1 ambulance is in-service:</u>
   a. If South Barry County is at Level 2 or higher then move-up a unit to Lampe Station and once it is in the area, move the Stone County unit to Crane Station.

   -or-

   b. If Lawrence County is at level 2 or higher, then move-up a unit to Crane Station and once that unit is in the area, move the Stone County Unit to Stonebridge Station

   v. <u>When 0 ambulances are in-service:</u>
   a. Notify all units of zero status
   b. If South Barry County is at Level 2 or higher then move-up a unit to Lampe Station
   c. If Lawrence County is at level 2 or higher, then move-up a unit to Crane Station

**Dallas County**

a. Posting locations are as follows:
   i. Buffalo EMS Station
   ii. A Hwy. & OO Hwy. (Laclede Co)

- During times of construction or traffic congestion, these positions may be altered to allow best access to response areas.

b. Following order should be followed for ALS ambulances:
   i. <u>When 2 ambulances are posted (in-service):</u>
   2 ambulances at Buffalo EMS Station

   ii. <u>When 1 ambulance is posted (in-service):</u>
   1 Ambulance at Buffalo EMS Station

   iii. <u>When 0 ambulances are in-service:</u>
      1. Notify all units of zero status
      2. If Fair Grove and Willard units are in station, move Fair Grove to Buffalo EMS station
      2. If Fair Grove is unable to post them move-up a Lebanon ambulance to A Hwy. & OO Hwy.
      3. If Lebanon and Fair Grove are unable to cover, and Macks Creek unit is in station, that unit will cover calls for Buffalo from the Macks Creek EMS station.
      3. If no ambulances are available in Fair Grove AND Macks Creek AND Lebanon is at status 2 or higher, move up Lebanon Ambulance to Buffalo EMS Station.

      <u>--- OR ---</u>

      If no ambulances are available in Fair Grove AND Lebanon is at status 1 or 0, move up Macks Creek to Buffalo Station.

**Camden County**

a. Posting locations are as follows:
   i. Camdenton EMS station
   ii. Climax Springs EMS station
   iii. Montreal EMS station
   iv. Macks Creek EMS station
   v. Linn Creek EMS station
   vi. Decaturville (Post)

•During times of construction or traffic congestion, these positions may be altered to allow best access to response areas.

b. Following order should be followed for ALS ambulances:
   i. <u>When 5 ambulances are posted (in-service):</u>
   1 ambulance at Camdenton EMS station
   1 ambulance at Climax Springs EMS station
   1 ambulance at Montreal EMS station
   1 ambulance at Macks Creek EMS station
   1 ambulance at Linn Creek EMS station

   ii. <u>When 4 ambulances are posted (in-service):</u>
   Ambulances remain at home station.

   iii. <u>When 3 ambulances are posted (in-service):</u>
   Ambulances remain at home station except if Camdenton EMS and Linn Creek are the 2 units that are out, then move- up Macks Creek to J and 54 on odd days and Montreal to 5 and 7 on even days.

   iv. <u>When 2 ambulances are posted (in-service):</u>
   Ambulances remain at home station except if Camdenton EMS and Linn Creek are the 2 of the units that are out. Then move up Macks Creek or Montreal to Camdenton whichever is available.

   v. <u>When 1 ambulance is posted (in-service):</u>
   1 ambulance Camdenton EMS station

   vi. <u>When 0 ambulances are in-service:</u>
   Move-up Dallas Co ambulance to 54 and 73 Hwy
   Move-up Lebanon ambulance to Decaturville (post).
   Notify Lake West ambulance that they are requested to *cover* Camdenton area (no move-up).

**Laclede County**

**Postings will only occur if an assigned ambulance is transporting outside their service area.**

a. Posting locations are as follows:
   i. Lebanon - North EMS Station
   ii. Lebanon - South EMS Station
   iii. A Hwy. & OO Hwy. (Laclede Co)
   iv. Decaturville (Post)

•During times of construction or traffic congestion, these positions may be altered to allow best access to response areas.

b. Following order should be followed for ALS ambulances:

   i. <u>When 4 ambulances are posted (in-service):</u>
   2 ambulances at North EMS Station
   2 ambulances at South EMS Station

   ii. <u>When 3 ambulances are posted (in-service):</u>
   1 ambulance at North EMS Station
   2 ambulances at South EMS Station
   -or-
   2 ambulances at North EMS Station
   1 ambulance at South EMS Station

   iii. <u>When 2 ambulances are posted (in-service):</u>
   Ambulances remain at home station

   iv. <u>When 1 ambulance is posted (in-service):</u>
   Ambulance remains at home station

   v. <u>When 0 ambulances are in-service:</u>
   Move-up Montreal (or Camdenton) ambulance to Decaturville.
   Move-up Dallas Co. (Buffalo) ambulance to A Hwy. & OO Hwy.
   Move-up Wright Co. to Lebanon EMS Station if Level 1 or higher in both Dallas and Laclede.
   If Dallas Co. is at level zero, ambulances are out, move Montreal (or Camdenton) ambulance to Lebanon Fire Station 1.

**4. Wright County**

a. Posting position are as follows:
   i. Mountain Grove EMS Station
   ii. Mansfield EMS Station
   iii. Road Side Park, Hwy 60 at the Howell-Texas County Line (Post)
   iv. Hartville (Post)
   v. Grovespring (Post)

•During times of construction or traffic congestion, these positions may be altered to allow best access to response areas.

b. Following order should be followed for ALS ambulances:
   i. <u>When 3 ambulances are posted (in-service):</u>
   2 ambulances at Mountain Grove EMS Station
   1 ambulance at Mansfield EMS Station

   ii. <u>When 2 ambulances are posted (in-service):</u>
   1 ambulance at Mountain Grove EMS Station
   1 ambulance at Mansfield EMS Station (which may require a move-up.)

   iii. <u>When 1 ambulance is posted (in-service):</u>
   Ambulance remains at home station

   iv. <u>When 0 ambulances are in-service:</u>
   Move-up Mountain View ambulance to the Road Side Park if level 2 or higher in Shannon/Mountain View area.
   Move-up Laclede ambulance to Mansfield if Laclede is at level 2 or higher.

**Shannon County/Mountain View/Summersville**

a. Posting position are as follows:
   i. Mountain View EMS Station
   ii. Summersville EMS Station
   iii. Winona EMS Station
   iv. Road Side Park, Hwy 60 at the Howell-Texas County Line

- During times of construction or traffic congestion, these positions may be altered to allow best access to response areas.

b. Following order should be followed for ALS ambulances:
   i. <u>When 3 ambulances are posted (in-service):</u>
   1 ambulance at Mountain View EMS Station
   1 ambulance at Summersville EMS Station
   1 ambulance at Winona EMS Station

   ii. <u>When 2 ambulances are posted (in-service):</u>
   Ambulances remains at home stations

   iii. <u>When 1 ambulance is posted (in-service):</u>
   Ambulance to the Summersville or Winona EMS Station
   Move-up a Wright County ambulance to Mountain View EMS Station if Level 3 or higher in Wright County.

   Crew will use posting location at Road Side Park if a Mountain View or Shannon County ambulance is anticipated back in area in 60 minutes or less from assignment.

   iv. <u>When 0 ambulances are in-service:</u>
   Move-up a Wright County ambulance to the Mountain View EMS Station if at Level 2 or higher in Wright County.

   Crew will use posting location at Road Side Park if a Mountain View or Shannon County ambulance is anticipated back in area in 60 minutes or less from assignment.

**Perry County EMS**

a. Posting locations are as follows:
   i. Perryville EMS Station

b. Following order should be followed for ALS ambulances:
   i. <u>When 3 ambulances are posted (in-service):</u>
   Ambulances remain at home station

   ii. <u>When 2 ambulances are posted (in-service):</u>
   Ambulances remain at home station

   iii. <u>When 1 ambulance is posted (in-service):</u>
   Ambulance remains at home station

   iv. <u>When 0 ambulances are posted (in-service):</u>
   a. Notify all units of zero status

**Springfield**

a. Posting locations are as follows:
   i. Mercy Hospital Springfield (Post 1)
   ii. Mercy EMS Station 2 (Post 2)
   iii. Mercy EMS Headquarters (Post 3)
   iv. Mercy Springfield South Emergency Department (Ozark, MO)
   v. Fair Grove EMS Station
   vi. Willard EMS Station

- During times of construction or traffic congestion, these positions may be altered to allow best access to response areas.

b. Following order should be followed for **ALS** ambulances:

   i. <u>When 7 ambulances are posted:</u>
   2 ambulances at **Post 1** (Mercy Hospital)
   2 ambulances at **Post 2** (Mercy EMS Station 2)
   2 ambulance at **Post 3** (Mercy EMS Headquarters)
   1 ambulance at Mercy Hospital South E.R.

   ii. <u>When 6 ambulances are posted:</u>
   2 ambulances at **Post 1** (Mercy Hospital)
   1 ambulance at **Post 2** (Mercy EMS Station 2)
   2 ambulances at **Post 3** (Mercy EMS Headquarters)
   1 ambulance at Mercy Springfield South E.R.

   iii. <u>When 5 ambulances are posted:</u>
   1 ambulance at **Post 1** (Mercy Hospital)
   1 ambulance at **Post 2** (Mercy EMS Station 2)
   2 ambulance at **Post 3** (Mercy EMS Headquarters)
   1 ambulance at Mercy Springfield South E.R.

   iv. <u>When 4 ambulances are posted:</u>
   1 ambulance at **Post 1** (Mercy Hospital)
   1 ambulance at **Post 2** (Mercy EMS Station 2)
   2 ambulances at **Post 3** (Mercy EMS Headquarters)

v. When 3 ambulances are posted:
1 ambulance at **Post 1** (Mercy Hospital)
1 ambulance at **Post 2** (Mercy EMS Station 2)
1 ambulance at **Post 3** (Mercy EMS Headquarters)

vi. When 2 ambulances are posted:
1 ambulance at **Post 1** (Mercy Hospital)
1 ambulance at **Post 2** (Mercy EMS Station 2)

vii. When 1 ambulance is posted:
1 ambulance at **Post 3** (Mercy EMS Headquarters)

viii. When 0 ambulances (ALS or BLS) are in-service:
If Willard or Fair Grove ambulances are available, move one to Sunshine St. and Campbell Ave.
Consider use of other county services for posting as needed.
Notify all units of zero status.

c. Following order should be used for Fair Grove and Willard Ambulances
   i. When 2 ambulances are posted:
   1 ambulance at Willard EMS Station
   1 ambulance at Fair Grove EMS Station

   ii. When 1 ambulance is posted:
   Ambulance will remain in home station

   iii. When 0 ambulances are available:
   Consider use of other county services for calls as needed

d. Following order should be followed for BLS ambulances:
   i. When 3 ambulances are posted:
   2 ambulances at **Post 1** (Mercy Hospital)
   1 ambulance at **Post 3** (Mercy EMS Headquarters)

   i. When 2 ambulances are posted:
   1 ambulances at **Post 1** (Mercy Hospital)
   1 ambulance at **Post 3** (Mercy EMS Headquarters)

   ii. When 1 ambulances is posted:
   1 ambulance at **Post 1** (Mercy Hospital)

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## CREW CONTACT WITH DISPATCH

**PURPOSE:** Crew members have mobile radios, portable radios, station alerting pager systems, and cell-phones for methods of contact. Effective utilization of the system resources depends on effective communication between all on-duty crew members. Crews unable to be contacted by the EMS Communication Center may be experiencing an emergency situation.

**PROCEDURE:**

1) Each service area will establish the primary method of alerting and communicating with the EMS Dispatch Center while awaiting notification of a call.

2) Each Ambulance crew **MUST** notify dispatch if they are going to be temporarily unable to be contacted via the primary method of communication. (i.e. crew is going inside a building that doesn't allow effective radio use)
   - The crew will relay a method they can be contacted by (i.e. a phone number of the building they are entering.)
   - If no means of communication will be possible the ambulance should be listed as "out of service" until which time some form of communication is established.

3) If a crew does not respond to an alert for an emergency call within the following time frames: crews working shifts 24-hours or longer within two (2) minutes during the hours of 0700-2300, and four (4) minutes during the hours of 2301-0659, units working 12-hours shifts, within two (2) minutes:
   - The EMD will make one additional attempt by paging the unit using tone alert, and cell phone, or base phone, if appropriate.
   - If no response after two attempts, the next appropriate ambulance should be requested to handle the call.
   - Consider other methods to contact the unit (Other units or departments in the area)
   - The EMS Communication Center Manager and the service area EMS Manager/On-duty supervisor should be contacted immediately.

ATTEMPTS TO PAGE (ALERT) THE PRIMARY UNIT SHOULD NOT LAST GREATER THEN 3 MINUTES WITHOUT FIRST TURNING THE CALL TO THE NEXT CLOSER UNIT.

4) The EMD will notify the crew when they have been on-scene for 20 minutes. This will serve as a notification only of the time the crew has been on scene. The EMD will do this by transmitting:

   **"{Unit} 20 minute notification"**

   The crew is REQUIRED to respond to the status check.

5) **If a crew is on an incident** and does not respond to an attempt to contact via radio:

- The EMD will make one additional attempt by paging the unit using tone alert, and cell phone.

THESE ADDITIONAL ATTEMPTS TO CONTACT THE ON-SCENE CREW SHOULD NOT TAKE LONGER THAN FIVE (5) MINUTES.

- REQUEST HELP FROM THE OTHER EMD's IN CENTER. Consider other methods to contact the unit. (Other units or departments in the area, use call-back number to contact the location of the incident)
- **If no response, assume an emergency situation exists and do the following:**
  - Dispatch the closest appropriate ambulance or supervisor to respond Priority 1 to the last known location, advise them to stage in area if appropriate to situation.
  - Request the appropriate Law Enforcement agency and First Responders to respond Priority 1 to the last known location.
  - Immediately notify the following of the situation:
    - EMS Dispatch Manager
    - EMS Manager/Operations Supervisor for the service area
    - EMS Operations Manager
    - EMS Director

6) If a crew is assigned to an incident in which they will be traveling for more than 2 hours (i.e. long distance transfer) the EMD should attempt to check on the crew as able every 2-4 hours (cell phone, pulse, system tracking, etc)

7) Crew members that have been dispatched to an emergent or non-emergent request should take immediate steps to respond to the request. Crew members should only contact the communication center as needed to obtain additional information, clarification, or to aid in the response to an emergency request. Contact should be done by radio whenever possible unless confidential information is to be shared.

- In the event that a crew member or EMD feels that a specific Unit assignment is not the best choice for the situation, they are encouraged to contact their on-duty/on-call supervisor for resolution, unless in an emergency situation and then only to aid in the response.

8) Crew members and EMD's are encouraged to keep communication short and concise at all times. Recognizing that unnecessary or lengthy communications may be distractive to other tasks at hand and may create a risk to crews and (or) patients.

## ASSIGNMENT OF FLIGHT REQUESTS

**PURPOSE:** To facilitate rapid decision making for assignment of the most appropriate helicopter for each flight request.

**PROCEDURE:** After caller needs have been identified, (see "Processing Requests for Air Medical Service") the following steps should be taken.

**Life Line Rapid Activation**

- Upon creation of a CAD event, the Life Line EMD will alert the crew and pilot giving the following minimum information via radio:
  - Closest community or LZ common name
  - Destination (if known)

- Life Line EMD ***initiates Flight Risk Analysis*** and approval process (Pilot ***Accepts Assignment*** and OCC is assigned)

- Life Line EMD Provides ***Mission Briefing*** Prior to Lift via radio or phone, preferably in this order:
  - Distance and heading
  - Coordinates or designated LZ (name or number)
  - OCC number confirmed on Complete Flight
  - Any mission risks identified (i.e. weather phenomenon, TFR, LZ hazards, other aircrafts in vicinity, etc.)
- For scene flight:
  - Landing Zone specifics (coordinates if available)
  - Primary responding ambulance
  - Dept name & radio number
  - Common radio frequency for communication
  - LZ Coordinator (Fire/EMS/Law)
  - Chief Complaint or mechanism of injury
  - Pt. weight, age, gender (if known)
- For interfacility flight:
  - Pt. demographics
  - Patient location (ER, ICU, L&D, etc)
  - Patient destination
  - Pt. weight, age, gender
  - Medical considerations (airway control, medication drips, special needs)

- Once pilot in command determines all parameters are at ***Mission Ready Status,*** they will initiate lift.

- After lifting, pilot or crew will provide lift report including ETA.
- Transmissions to pilot or crew should be limited to safety or hazard information only during ***critical phase of flight***,
- EMD will provides **Updated ETA** to original requester, landing zone command, and (or) hospital destination.

**Request for a Mercy Network Hospital**

- When appropriate, the closest Life Line helicopter will be assigned.
- Advise the caller of the following information: **"A helicopter will respond."**
- Advise the caller where helicopter is responding from and ETA to scene.
- Use the "two miles per minute" rule as a way to estimate flight time.
- Advise the caller you will call back with a more accurate ETA after helicopter has lifted.
- Ensure that these stages of the call are appropriately documented in the CAD system's dispatch record.

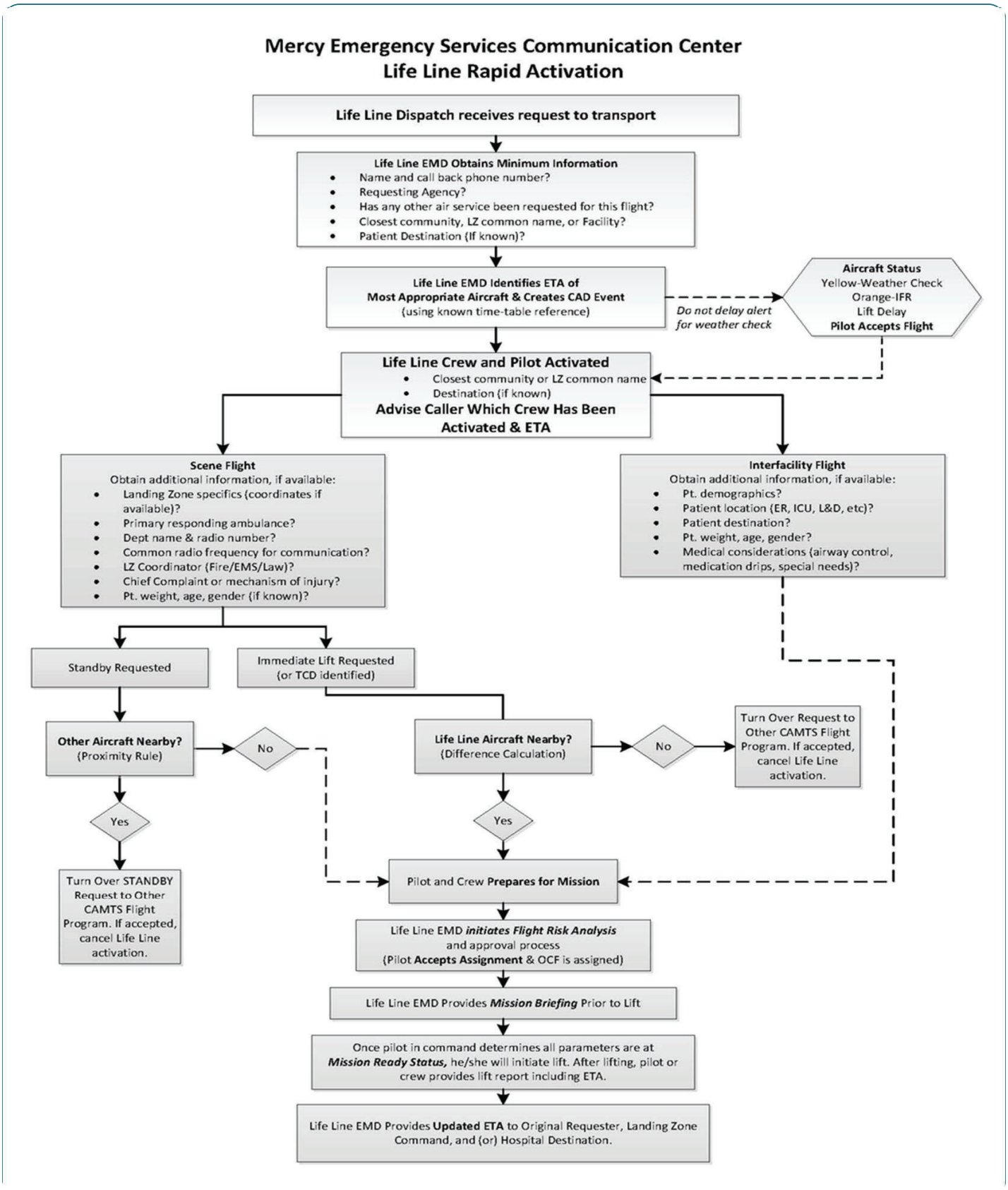
**Request for a Scene Flight**

- Advise the caller of the following information: **"A helicopter will respond."**
- Advise the caller where the helicopter will be responding from and ETA to scene.
  - Use the "two miles per minute" rule as a way to estimate flight time.
- Advise the caller we will call back with a more accurate ETA after the helicopter has lifted.
- Ensure that these stages of the call are appropriately documented in the CAD system's dispatch record.

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**Air Medical Services Membership Programs**

- If a flight is requested for a patient that is a member of an Air Medical Service Membership program, then attempt to "turn over" the request to the helicopter where there membership resides.


Mercy Emergency Services Communication Center
Life Line Rapid Activation
Life Line Dispatch receives request to transport
Life Line EMD Obtains Minimum Information
Name and call back phone number?
Requesting Agency?
Has any other air service been requested for this flight?
Closest community, LZ common name, or Facility?
Patient Destination (If known)?
Life Line EMD Identifies ETA of Most Appropriate Aircraft & Creates CAD Event (using known time-table reference)
Do not delay alert for weather check
Aircraft Status
Yellow-Weather Check
Orange-IFR
Lift Delay
Pilot Accepts Flight
Life Line Crew and Pilot Activated
Closest community or LZ common name
Destination (if known)
Advise Caller Which Crew Has Been Activated & ETA
Scene Flight
Obtain additional information, if available:
Landing Zone specifics (coordinates if available)?
Primary responding ambulance?
Dept name & radio number?
Common radio frequency for communication?
LZ Coordinator (Fire/EMS/Law)?
Chief Complaint or mechanism of injury?
Pt. weight, age, gender (if known)?
Interfacility Flight
Obtain additional information, if available:
Pt. demographics?
Patient location (ER, ICU, L&D, etc)?
Patient destination?
Pt. weight, age, gender?
Medical considerations (airway control, medication drips, special needs)?
Standby Requested
Immediate Lift Requested (or TCD identified)
Other Aircraft Nearby? (Proximity Rule)
No
Yes
Turn Over STANDBY Request to Other CAMTS Flight Program. If accepted, cancel Life Line activation.
Life Line Aircraft Nearby? (Difference Calculation)
No
Turn Over Request to Other CAMTS Flight Program. If accepted, cancel Life Line activation.
Yes
Pilot and Crew Prepares for Mission
Life Line EMD initiates Flight Risk Analysis and approval process (Pilot Accepts Assignment & OCF is assigned)
Life Line EMD Provides Mission Briefing Prior to Lift
Once pilot in command determines all parameters are at Mission Ready Status, he/she will initiate lift. After lifting, pilot or crew provides lift report including ETA.
Life Line EMD Provides Updated ETA to Original Requester, Landing Zone Command, and (or) Hospital Destination.

## FLIGHT REQUESTS DURING WEATHER CHECK

**PURPOSE:** To provide a systematic approach to dispatching flight requests during times when an aircraft(s) are on "Yellow - Weather Check".

**PROCEDURE:** After preferred aircraft has been identified (see "Assignment of Flight Requests"), the following steps should be taken.

- Always advise callers of any anticipated delays due to Weather Check.
- Pilot will be alerted as to the flight request as follows: **"LL1 <helicopter> have a weather check for a flight to <general city/county area>."**
  - NOTE: During the weather check the EMD will not advise of patient's chief complaint or condition.
- After acknowledgement from the pilot, provide the distance/heading to location of request.
- EMD should inquiry of the pilot as to the status of the Weather Check every 5 minutes
  - EXAMPLE: "**LL1 pilot - status check?"**
- EMD should provide status updates to the requester every 5 minutes. In the event of a turn down the EMD should advise the requester that the program in their coverage are share turn down's and weather information for safety reasons.
- Pilot will advise they are "accepting the flight" or "unable to take the flight." The pilot may state the flight request could be handled if the LZ or destination was different.
  - If pilot advises, **"Accepting**", then the EMD will continue with dispatching the flight as normal.
  - If pilot advises, **"Unable**", then the dispatcher may consider requesting a Life Line or mutual aid helicopter from another location where weather conditions may be acceptable.
  - Example: Life Line 2 (St. Robert) may have good conditions to fly in the northern region, where LL1 (Branson West) may not.
  - NOTE: Whenever requesting another helicopter for a location the pilot MUST be informed that another pilot had turned down the flight and what their location was.
  - If pilot advises the flight request could be handled if a LZ or destination was changed, then the EMD will offer this to the original caller.
  - The EMD may also consider requesting a Life Line or Mutual Aid helicopter from another location where weather conditions may be acceptable.
- The EMD shall after receiving a turn down, as soon as possible enter the information regarding the original request and the reason for the turn down by the pilot into the regional flight turndown notification system (i.e. WeatherTurndown.com)
  - EMD's should remove turn down notices from the regional notification system after a period of one hour.
- The EMD will use the regional flight turndown notification system to gain information regarding potential weather turn downs prior to launch of an aircraft and will provide any details to the pilot in command.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## EVACUATION OF EMERGENCY SERVICES COMMUNICATION CENTER

**PURPOSE: To provide general guidelines for co-workers in the event of a fire or other potentially life threatening hazard in the Emergency Services Communication Center.**

**PROCEDURE:**

1. Upon notification of a fire or other potentially life threatening hazard (or drill) in the area of the Emergency Services Communication Center:
   a. Monitor Mercy Public Safety frequency on Avtec radio for information as to location of fire or hazard and if evacuation of the center is indicated.
2. If fire or hazardous situation escalates and evacuation is required:
   a. Notify Supervisor and /or Senior and any nearby caregivers of evacuation.
   b. If safe to do so, notify all agencies and PSAPS that MercyComm temporarily off-line and they will be notified when back on-line.
3. If evacuation is deemed necessary, evacuate the center and follow EXIT signs to the nearest stairway that leads to the outside of the building.
   a. DO NOT USE ELEVATORS
4. After exiting the building, confirm all coworkers are accounted for and make preparations to staff the EMS Communications trailer.
   a. Manager and/or Supervisor will be available to assign tasks to bring MercyComm back online utilizing the EMS Communications trailer.
5. The on-duty Greene County EMS supervisor should be contacted as soon as practical to mobilize the Emergency Services Communications Trailer.
6. If news media are on scene, follow Health System Media procedures.

## CONTROLLED ACCESS TO THE EMERGENCY SERVICES COMMUNICATIONS CENTER

**PURPOSE:** Provide for an appropriate environment for co-workers to perform emergency life saving functions.

**PROCEDURE:**

1. The Emergency Services Communication Center is a controlled access area. The entry door will be kept closed and locked at all times.

2. Non-departmental personnel who are normally allowed in the Emergency Services Communications Center are:
   a. Environmental Services / Maintenance
   b. Department leaders within EMS, Life Line, and Mercy Public Safety

3. Other non-departmental personnel and Mercy contracted vendors shall request permission for entry from the on-duty communications leader.

4. Care should be taken to minimize distractions within the Emergency Services Communication Center during active medical transports and any high risk public safety operations.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## HOSPITAL DIVERSION NOTIFICATION

PURPOSE: To better facilitate the EMD's responsibilities in the event of Mercy ETC diversion and (or) diversion of hospitals that may affect the operations of Mercy EMS.

PROCEDURE: EMD's will utilize the EMSystem for all diversion notifications.

1) Radio call advisory to all ambulance, helicopter, and supervisory personnel during all hours of the day. This should occur as simulcast on all primary dispatch channels.

2) If a crew is toned during sleeping hours, the EMD shall notify them once enroute of any diversion status that is active.

3) When a diversion has been lifted, the same communication process noted above should be utilized to make notifications.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## FLIGHT FOLLOWING OF LIFE LINE AND OTHER HELICOPTERS

**PURPOSE**: To provide standardized methods by which to flight follow for Life Line and other helicopters thereby ensuring that the approximate position of the aircraft can be determined at all times while on a mission in case of distress.

**PROCEDURE**: EMD's will continuously track the progress of Life Line aircraft when Mercy co-workers are on board the aircraft. Additionally EMD's may be asked to flight follow for aircraft in-bound to Mercy or those that are flying through our regional area.

### Lifting Report

- Life Line crew will provide a report after liftoff that includes at minimum the following information: souls on board, fuel level, ETA to destination, and initial speed.
- EMD will record lifting report in the CAD system or appropriate flight following sheet if CAD system is unavailable.

### Position Reports

- Life Line crew members and the EMD will work together to relay current position and progress at a minimum of every 15 minutes during in-flight stage of missions. At minimum the position report should include: current position, speed, ETA to destination.
- EMD will record lifting report in the CAD system or appropriate flight following sheet if CAD system is unavailable.
- Electronic position reports may be used to satisfy the 15 minute reporting with the following considerations:
    - EMD must visualize the incoming flight data at a minimum of every 15 minutes to assure that the data received is appropriately formatted. EMD's can do this by verifying the location and speed of the aircraft are within expectations for the current mission.
    - If an EMD doubts the validity of any electronic data the EMD should contact crew by radio to obtain (or confirm) a position report.

### Other Aircraft

- Other, non Life Line aircraft may contact the EMD to ask for flight following services. These will be provided under the same guidelines as Life Line flights. Any lifting reports or position reports, including arriving and departing destinations, should be quickly relayed to the helicopters respective flight following agency.

# 6-21 Flight Following of Lifeline and Other Helicopters

**Continuity of Flight Following**

- Due to the recognized safety value of the flight following, steps must be taken to ensure continuity of flight following at all times while in-flight. If a flight crew attempts to contact the EMS Communication Center but is unable, other means of relaying flight following information should be attempted by endeavoring to provide reports a minimum of every 15 minutes. Such as, other helicopter programs with flight following capabilities, other aircraft operating in vicinity capable of relaying information to a flight following center, other ground personnel, or other entities available to the Pilot in Command (ATC, or etc.)

- EMD's may experience a lack of ability to contact the aircraft while it is in flight due to radio malfunctions, environmental hazards inside the center, or other severe emergency. In these situations the EMD's will take whatever steps are necessary to ensure their own safety of that of the flight personnel, such as contacting other centers to request they assume flight following responsibilities and (or) evacuate the center using established emergency procedures.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## SAFETY AND SECURITY PRIORITY DISPATCH POLICY

PURPOSE: To consistently define Security Officer Response.

PROCEDURE: The Security Communication Specialist will utilize the current version of the Police Priority Dispatch System (PPDS), where indicated (Bomb Threat, Active Shooter, Etc.) to prioritize incoming requests for Safety and Security service into one of five priority assignments modes. Each request, based on the information received, will be assigned one of the following 'Response Priority Modes" based on the assigned determinant code:

(See also 'MPDS Implementation Policy" and "Answering Emergency Calls")

1. Priority 1
   - A. Immediate (STAT) response indicated.
     - i. Multiple Security Officers are to respond immediately.
     - ii. Warning lights and sirens are allowed. Foot response should be at an accelerated pace.
   - B. Threat to life-safety or property in imminent danger.
   - C. If no Security Officer is immediately available for assignment to a priority one, the Officer in Charge (OIC) should be notified and designate responding officers immediately.

2. Priority 2
   - A. Immediate response indicated
     - i. Security Officers are to respond immediately.
     - ii. Warning lights and sirens are NOT allowed. Foot response should be at an accelerated pace.
   - B. NO threat to life-safety or NO property in imminent danger exists or believed to exists, but volatile conditions require security to respond in an exigent manner.
   - C. If no Security Officer is immediately available for assignment to a priority one, the Officer in Charge (OIC) should be notified and designate responding officers.

3. Priority 3
   - A. Immediate response indicated.
     - i. Security Officers are to respond within one - five minutes from time of dispatch.
   - B. NO threat to life-safety or NO property in imminent danger exists or believed to exists, but security is preferred for assistance or to stand by.
     - i. Where a patient or person is under the supervision of health care professionals or law enforcement.
     - ii. Where the security event taking place requires that the response is needed as soon as reasonable.

4. Priority 4
   - **A. Unscheduled Non-emergency.**
     - i. Security Officers are to respond within ten minutes from time of dispatch.
     - ii. NO threat to life-safety or NO property in imminent danger exists or believed to exists, but security assistance is requested.
       1. for general staff assistance
       2. for general public assistance
       3. for general inquiries

5. Priority 5
   - **A. Scheduled Non-emergency.**
     - i. Response is requested for a specific time or time frame to meet a scheduled obligation deadline or timeline.
     - ii. Security Officers are to respond within requested parameters as requested through requester.
   - B. NO threat to life-safety or NO property in imminent danger exists or believed to exists, but a deadline exists or a timeline has been given.
     - i. for general assistance
     - ii. for a security escort
     - iii. for special events
     - iv. for parking

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## Leadership Notification of Hospital Wide Incident and Disaster

**PURPOSE:** Facilitate timely notification and communication amongst leaders during hospital wide incidents or disasters.

**PROCEDURE:** A member of senior leadership, Director of Emergency Preparedness, house supervisor, or the administrator on call identifies the need to send an urgent leadership notification or initiate an emergency conference call.

1. Contact the Emergency Services Communication Center at **(417) 820-3003**. Ask for the **on-duty Communication Supervisor**.

2. Identify the need to alert one of the following groups:
   - **a.** **Hospital Leadership Emergency Management Notification** –hospital executives, senior leaders, physicians executives, and directors of emergency/safety services
   - **b.** **Hospital Surge** –hospital executive, senior leaders, physicians executives, and leaders of core departments and services

3. Request implementation of one of the following.
   - **a.** **Notification/Message Only** – A short message will be sent as text, email, or automated text-to-speech voice calling to all members. Text messages should be 100 characters or less.
     - i. Example: *"A significant weather event has impacted Mercy Hospital Springfield. A conf call will be scheduled for 30 minutes from now"*
   - **b.** **Emergency Conference/Live Call** – A short message will be sent as text or email to all members. This will include information for the conference call.
     - i. Example: *"A significant weather event has impacted Mercy Hospital Springfield. Please call (417) 200-0908 and enter your Entry code to begin the conference. Code= xxxx"*

**Information for Conference Call Participants**

1. The conference call will not begin until the moderator has entered their code and initiated the conference. Until that time the participants will hear music.

2. If a participant does not call into the conference line before the call is initiated, then after the moderator initiates the call, the system will automatically call the participant. After pressing a key, the participant will be joined to the conference.

3. If others need to join a call and were not on the original notification group, then they must obtain the conference/entry code from another participant. The conference/entry code that is sent to the participants is the same and can be reused by any participant for that individual conference call. Each new conference call will generate a new conference/entry code.

# 4-21 Leadership Notification of Hospital Wide Incident and Disaster

**Information for Conference Call Moderators**

1. Only one participant should be selected to be the moderator. Generally, this would be assigned to the leader that has chosen to activate the system.

2. The phone number and moderator code for each conference call stays the same.
   **Conference Number: (417) 200-0908**
   **Moderator Code: 106217**

3. The conference call will not begin until the moderator has entered their code and initiated the conference. Until that time the participants will hear music.

4. If the moderator hangs up or is disconnected, the conference call will end and all participants will be disconnected. For this reason, it is recommend the moderator use a land line to initiate the conference call, as cellular devices are more likely to experience interruptions of service.

5. If the moderator has left the conference, for a short time, the conference call can be re-initiated by calling back into the conference number and entering the moderator code.

6. If the moderator is not part of the group being notified, then the moderator will not receive a text message or an automated call from the system. The moderator will need to call the conference number and enter the moderator code to join.

7. The moderator should wait to ensure the call has been opened/activated in the SmartNotice system prior to calling in to enter their moderator code. Please verify this with the on-duty Communication Supervisor. The process to open/activate a conference call can be expected to take approximately 5 minutes.

8. The moderator code can only be used once for each conference.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## ***Everbridge Request to ESCC***

1. The Emergency Services Communication Center will be contacted by House Supervisor, AOC, Senior Leadership or ESEM that an Everbridge page be sent depending on the need of the hospital or incident taking place.

Events built in Everbridge under TEAM ACTIVATION:

i. Hospital Surge

ii. Hospital Leadership Emergency Management Notification

2. For a Surge call the requester will be giving this information:

a. "This is ***(Name)*** AOC. I need a Hospital Surge call due to ***(topic for discussion)*** sent for ***(time: give 15 mins)"***

b. An example of this: This is Joanna, House Supervisor. I need a Hospital Surge call due to ER overcrowding sent for 1:30pm.

c. The message that will be sent out will be: "*The Hospital Surge call has been activated at 1:15 pm, 7/20/2021 due to ER overcrowding. Please join the Conference Call at 1:30pm*."

*****Surge Calls will always need the conference bridge. There is no need to ask them if it is needed. It is automatically defaulted as attached in this template in Everbridge *****

3. For a Hospital Leadership Emergency Management Notification page, the requester will be giving this information:

**a. Notification:** "This is ***(Name)*** House Supervisor. I need a Hospital Leadership Emergency Management Notification page sent out. Stating Mercy SPRG is experiencing ***(Incident description)*** sent for ***(blank time)***"

b. An example of this: This is Joanna, House Supervisor. I need a Hospital Leadership Emergency Management Notification page sent out. Stating Mercy SPRG is experiencing an MCI due to airplane crash. Conference call in 10 mins.

c. The message that will be sent out will be: *"The Hospital Leadership Emergency Management Notification has been activated due to airplane crash. Please join the Conference Call at 02:00pm*

****Disaster conference is the same page in Everbridge. The only thing needed to be added is the time of conference call ****

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## FIRE, SMOKE, AND HEAT ALARM RESPONSE AND NOTIFICATIONS

**PURPOSE:** Identify steps to take when the Emergency Services Communication Center (ESCC) is notified of a fire, smoke, or heat alarm with a prioritization on those responsibilities and functions that will protect life and property.

**DEFINITIONS**:
**Main Campus Buildings (not including main hospital):** Marian Center, Daycare, Fremont, Hammons Medical Building, Convent, Cancer Center, Whiteside, Sports Med, Surgery Center, Energy Center

**Off campus buildings not monitored by Simplex Alarm Panel**

**PROCEDURE:** The ESCC may be notified of a fire, smoke, heat, trouble, or supervisory alarm via the Simplex Alarm Panel/Monitor or be called in by an alarm company.

### Monitoring Mode

1. During normal operations the Maintenance Department will contact the ESCC to advise whenever a planned maintenance cycle may trigger a "false alarm" event. These alarms can be silenced by the Security Communication Specialist or from the computer located in the Electric Shop.
2. Any fire alarm activation not specifically identified in advance as a planned maintenance event should be assumed to be a true emergency. Do not assume an alarm event is a "false alarm" without specific prior knowledge.
3. "Trouble" alarms or "Supervisory" alarms indicate a need for service to the monitoring system and may indicate the need for immediate maintenance. In these instances, contact the maintenance department to notify them of the alarm and details received. If after hours contact the Energy Center (2-2033).

### Simplex Alarm Panel/Software Activation

1. A fire alarm will activate on the Simplex alarm panel/computer monitor.
    a. MAIN HOSPITAL ONLY: Alarm will remain "local" for 5 minutes, and then go into "general" alarm status.
2. Acknowledge the alarm on the Simplex alarm screen to silence the alarm in the communication center only.
    a. [Action]: Select the alarm and press the "acknowledge" button.
3. Priority Notifications to be made:
    a. MAIN HOSPITAL ONLY:
        i. A Public Security Officer will be dispatched to the location
        ii. The alarm company will call on the designated alarm phone line. The Security Communication Specialist should confirm if they have notified the fire department and if they are enroute. Calling the fire dept is an automatic first call for the alarm company if the alarm is in the hospital building only. If known, use appropriate cancelation code.

i. Call the hospital operator by dialing zero (0) and notify them of an alarm in progress. Be specific and give the location and type of alarm.
ii. Dispatch a Public Safety Officer to the parking garage to stand by for fire department arrival.

b. MAIN CAMPUS BULDINGS and SMITH GLYNN CALLOWAY:
i. Dispatch a Public Safety Officer to the location
ii. Call the hospital operator by dialing zero (0) and notify them of an alarm in progress. Be specific and give the location and type of alarm.
iii. Call Greene County 911 at 417-862-7911 to request a fire response. Provide the alarm location and any pertinent details.

2. Once a Security Officer responds to the scene they will advise when to silence the alarm.
a. [Action]: Select the alarm and press the "alarm silence" button.
3. If it is reported that a fire is in progress (smoke or fire showing) additional resources should be dispatched to the scene of the incident. Verify that fire department and EMS are responding. Notify the Security OIC.
4. When the Security Officer advises to "silence" the alarm, the Security Communication Specialist should inquire if the "all clear" needs to be given. At times, this may be delayed while the Officer confirms the area is safe to return to normal operations. For the main hospital only, this will prevent the alarm from going to a "general alarm" status hospital wide.
a. [Action]: Select the alarm and press the "silence" button.
b. If the Security Officer on scene is unable to silence or clear the alarm from the panel, have the Officer call into the center by phone. Transfer the Officer to the Electric Shop (2-2747) or the Energy Center (2-2033) if after hours. Advise the maintenance person you are speaking to of the alarm and that an Officer is on the line requesting assistance by phone in silencing or resetting the alarm.
5. The Security Officer on scene will advise when to reset the alarm when appropriate.
a. [Action]: Select the alarm, and press the "system reset" button.
6. Cancellations to be made:
a. MAIN HOSPITAL ONLY:
i. Call the alarm company and use the appropriate cancellation code if known.
ii. Call the hospital operator by dialing zero (0) to advise the alarm has been cancelled.
b. MAIN CAMPUS BULDINGS and SMITH GLYNN CALLOWAY:
i. Call Greene County 911 at 417- 862-7911 to advise of alarm cancellation.
ii. Call the hospital operation by dialing zero (0) to advise the alarm has been cancelled.

**Alarms Received By Alarm Monitoring Service**

1. A fire alarm is called into the ESCC by the alarm monitoring service (i.e. Simplex/Grinnell, Atlas, etc.) These buildings do not appear on the Simplex alarm panel/software system within the ESCC.
2. Priority Notifications to be made:
a. SMITH GLYNN CALLOWAY ONLY:
i. Dispatch a Public Safety Officer to the location
ii. Call Greene County 911 at 417- 862-7911 to request a fire response. Provide the alarm location and any pertinent details.

b. OFF-CAMPUS BUILDINGS ONLY:
   i. Dispatch a Public Safety Officer to the location
   ii. Call Greene County 911 at 417- 862-7911 to request a fire response. Provide the alarm location and any pertinent details.

2. Once a Security Officer responds to the scene they will advise the status of the alarm. The Security Communication Specialist should inquire if the "all clear" needs to be given. At times this may be delayed while the Officer confirms the area is safe to return to normal operations.
3. If it is reported that a fire is in progress (smoke or fire showing) additional resources should be dispatched to the scene of the incident. Verify that fire department and EMS are responding. Notify the Security OIC.
4. If the Security Officer on scene is unable to silence or clear the alarm from the panel, have the Officer call into the center by phone. Transfer the Officer to the Electric Shop (2-2747) or the Energy Center (2-2033) if after hours. Advise the maintenance person you are speaking to of the alarm and that an Officer is on the line requesting assistance by phone in silencing or resetting the alarm.
5. Cancellations to be made:
   a. SMITH GLYNN CALLOWAY:
      i. Call Greene County 911 at 417- 862-7911 to advise of alarm cancellation.

   b. OFF-CAMPUS BUILDINGS ONLY:
      i. Call Greene County 911 at 417- 862-7911 to advise of alarm cancellation.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# 4-23 Assignment of Non-Emergency Transfers Between 2300-0700

## ASSIGNMENT OF NON-EMERGENCY TRANSFER REQUEST BETWEEN 2300 AND 0700

**PURPOSE:** To identify the appropriate procedure to assign non-emergency transfer requests between 2300 and 0700 in Mercy EMS service area working 24-hour (or longer) schedules.

**PROCEDURE:** To ensure the safety of our personnel and emergency coverage of the service area(s) the following procedure shall be followed for the assignment of non-emergency transfers during the designated sleep period.

1. Take the information from the requesting facility. Priority should be given to Mercy facilities. Non-emergent transfers from other hospitals should be carefully considered if the patient's destination is not a Mercy facility and not approved by the Director of EMS. Advise the requesting person that we will work on the assignment, and that follow-up can be expected within 30 minutes.

2. If the one-way mileage is less than 125 miles *from pick-up to destination*, locate the appropriate Mercy ambulance for the requested destination and assign them the request.

3. If the total one-way mileage for the requested transfer exceeds 125 miles *from pick to destination*, advise the requesting party that we will contact the on-duty supervisor for the area to evaluate the request and will provide an update once completed.

| | 0-3 hours | 3-6 hours | 6-9 hours | 9-12-hours | 12-14 hours | 14+ hours | UNIT SCORE |
|---|---|---|---|---|---|---|---|
| Time on Duty | 1 | 2 | 3 | 4 | 5 | 6 | 6 |
| Productive Time Prior to Request | 1 | 2 | 3 | 4 | 5 | 6 | 2 |
| Length of Scheduled Shift | ≤ 12 hours | | 12 + to 24 hours | | ≥ 24 hours | | |
| | 1 | | 2 | | 3 | | 3 |
| Time of Day | 0700-1500 | | 1500-2300 | | 2300-0700 | | |
| | 1 | | 2 | | 3 | | 2 |
| Outside Temperature | T < 0 | 0-30 | 30-50 | 50-70 | 70-90 | 90 < T | |
| | 3 | 2 | 1 | 1 | 2 | 3 | 2 |
| Wind Speed | None | 0-10 | 10-20 | 20-30 | 30-40 | 40+ | |
| | 1 | 1 | 2 | 2 | 3 | 3 | 1 |
| Precipitation | None | | Light-Moderate | | Heavy | | |
| | 1 | | 2 | | 3 | | 1 |
| UNIT SCORE | | | | | | | #REF! |

Matrix Score < 8 - 12 > No Action Required

Matrix Score < 13 - 17 > Crew Safety Briefing

Matrix Score < 18-21 > Crew Safety Briefing, Consider adding additional crew member, Consider postponing transfer for oncoming shift

Matrix Score < 21 or Greater> Transfer will be postponed until Oncoming Shift or Auxillary Staffing arrives

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# 5-1 CHEMPACK Deployment

**PURPOSE** This policy establishes guidelines for the deployment and use of the CHEMPACK by pre-hospital care providers in response to incidents involving suspected nerve agent exposure.

**POLICY:**. The CHEMPACK program is a national, voluntary program, overseen by the Administration for Strategic Preparedness and Response's Strategic National Stockpile.

CHEMPACKS are containers of nerve agent antidotes and supplies that can be quickly accessed by first responders and medical professionals in a chemical incident.

There are two types of CHEMPACKs available. The "Hospital CHEMPACK" is designed for hospital and healthcare provider use, consisting mostly of single dose vials and a small quantity of auto-injectors. "Hospital CHEMPACKs" have the capacity to treat 1,000 patients.

The "EMS CHEMPACK" is designed for field use and contains mostly auto-injectors. The "EMS CHEMPACK" has the capacity to treat 454 patients.

The actual location of CHEMPACKs will be maintained as confidential.90% of the U.S. population are within one-hour of a CHEMPACK.

Any Mercy EMS Leader may request deployment of a CHEMPACK to a location within the Mercy EMS footprint for any qualifying event. Requests will be made to Mercy Emergency Communications Center by phone, to the on-duty supervisor in the center.

**Qualifying Events**:

A. Release of a nerve agent or potential organophosphate with human effects or immediate threats too great to adequately manage with other pharmaceutical supplies available.

B. Large or unusual occurrence of patient presenting with signs and/or symptoms of nerve agent or organophosphate exposure.

C. A credible threat of an imminent event of a magnitude likely to require the assists of the CHEMPACK

D. Any mutual aid request from another area/region in which CHEMPACK assets are being deployed or stagged.

In the event of a CHEMPACK request and/or deployment, the on-duty supervisor shall notify the Executive Director of EMS and the EMS Operations Manager as soon as practical.

The U.S. Food and Drug Administration (FDA) has issued an Emergency Use Authorization (EUA) to permit the emergency use of the Atropine Auto-Injector manufactured by Rafa Laboratories, Ltd. The Rafa Atropine Auto-Injector is authorized for the initial treatment of muscarinic symptoms of known or suspected poisoning in individuals exposed to nerve agents or certain insecticides (organophosphorus and/or carbamate).

What is the Rafa Atropine Auto-Injector and why is it needed at this time?
Public health officials have determined that nerve agent and certain insecticide (organophosphorus and/or carbamate) poisoning pose a potential public health emergency. Atropine is used as the initial treatment for symptoms of nerve agent or certain insecticide poisoning. The Rafa Atropine Auto-Injector comes in a self-containing unit for healthcare provider, self, or caregiver administration and delivers atropine in 0.7 mL of sterile pyrogen-free solution containing glycerin, phenol, citrate buffer, and water for injection. The Rafa Atropine Auto-Injector is available in three dosage strengths: 0.5 mg, 1 mg, or 2 mg. The doses are color-coded, as shown below.



0.5 mg Atropine Auto-Injector (Blue Label)



0.5 mg Atropine Auto-Injector (Red Label)



2 mg Atropine Auto-Injector (Green Label)

The U.S. Department of Health and Human Services (HHS) has declared that circumstances exist to justify the emergency use of injectable treatments for nerve agent or certain insecticide (organophosphorus and/or carbamate) poisoning. The EUA will terminate when the HHS Secretary's declaration terminates, unless FDA revokes it sooner.

The Rafa Atropine Auto-Injector is not an FDA-approved product. While other atropine auto-injectors (such as AtroPen) have been approved by FDA for treatment of nerve agent and certain insecticide (organophosphorus and/or carbamate) poisoning in adults and children, at this time there is a lack of available approved atropine auto-injectors from other manufacturers. Therefore, FDA has issued this EUA to allow access to and use of the Rafa Atropine Auto-Injector.

This EUA Fact Sheet provides information about nerve agent and certain insecticide poisoning, the significant known and potential risks and benefits, and dosing instructions on the emergency use of the Rafa Atropine Auto-Injector. For additional information, please refer to https://www.cdc.gov/phpr/stockpile/chempack.htm and https://www.fda.gov/EmergencyPreparedness/Counterterrorism/ucm182568.htm.

RAFA ATROPINE AUTO-INJECTOR: HIGHLIGHTS FOR USE

1. The Rafa Atropine Auto-Injector is intended as an initial treatment of the muscarinic symptoms of nerve agent and certain insecticide (organophosphorus and/or carbamate) poisoning. Individuals should NOT rely solely upon antidotes such as atropine to provide complete protection from nerve agent and insecticide poisoning. Definitive medical care should be sought immediately upon exposure.
2. Rafa Atropine Auto-Injectors are available in three (3) dosage strengths based on weight (or age if weight is unknown). Infants weighing less than 15 lbs [7 kg] (generally less than 6 months of age) should NOT be given Rafa Atropine Auto-Injectors. Once activated, the auto-injector delivers the full dose; partial doses are not possible. See Table 1 for dose by weight.
3. Choose the correct dose and administer the correct number of Rafa Atropine Auto-Injector(s) as soon as possible based on signs/symptoms following known or suspected nerve agent or certain insecticide exposure (see Table 2). Injections should be made into the patient's mid-lateral outer thigh. Injections can be given through clothing, but make sure pockets at the injection site are empty. The needle that springs out of the device to deliver a single dose cannot be drawn back and the device cannot be reused.

a) One (1) Rafa Atropine Auto-Injector is recommended if two or more MILD symptoms (listed in Table 2) of nerve agent or certain insecticide poisoning appear in individuals whose exposure is known or suspected. Two (2) additional Rafa Atropine Auto-Injectors given in rapid succession are recommended 10 minutes after receiving the first Rafa Atropine Auto-Injector if the patient develops any of the SEVERE symptoms listed in Table 2. If possible, a person other than the patient should administer the second and third Rafa Atropine Auto-Injectors. OR

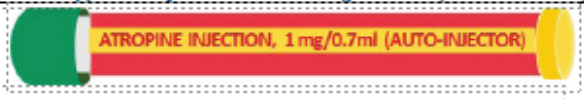
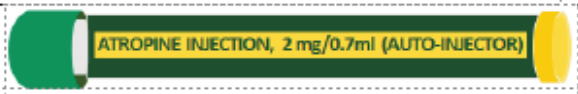
b) Three (3) Rafa Atropine Auto-Injectors given in rapid succession are recommended if an individual isfound either unconscious or has any of the SEVERE symptoms (listed in Table 2) in the setting of suspected or known nerve agent or insecticide exposure.

4. In severe poisonings, concurrent administration of an anticonvulsant (preferably a benzodiazepine) may be warranted if seizure is suspected in the unconscious individual because overt jerking may not be apparent due to the effects of the poison. Note: Barbiturates are potentiated by the anticholinesterases; therefore, barbiturates should be used cautiously in the treatment of convulsions resulting from exposure to anticholinesterases.
5. Elderly or debilitated individuals may be more susceptible to the pharmacologic effects of atropine. Dose selection for an elderly individual should be cautious, usually starting at the low end of the dosing range. Monitor elderly individuals closely for atropine toxicity (see Atropine Toxicity Resulting from Overdosage section).
6. The Rafa Atropine Auto-Injector should be administered by individuals who have had adequate training (but may be administered by a caregiver or by self-administration if a trained provider is not available) in the recognition and treatment of nerve agent or certain insecticide poisoning.
7. Healthcare providers (or administering individuals) should avoid exposure to the patient's contaminated clothing; when possible, wear protective garments including gloves, eye protection, and masks.
8. Immediate evacuation from the contaminated environment is critical. Aggressive and safe decontamination should occur as soon as possible even after administration of an auto-injector.
9. Supportive treatment should be administered as indicated.

INSTRUCTIONS FOR ADMINISTRATION

STEP 1: Determine which dose of Rafa Atropine Auto-Injector is appropriate for the exposed individual based on weight (or age if weight is unknown).

- The Rafa Atropine Auto-Injector is intended for use ONLY in adults and pediatric patients weighing 15 lbs [7 kg] or more (generally 6 months of age and older).
- Do NOT administer the Rafa Atropine Auto-Injector to pediatric patients weighing less than 15 lbs [7 kg](generally younger than 6 months of age ). Dose adjustment is not possible on an auto-injector.
- Choose the correct dose of Rafa Atropine Auto-Injector for the exposed individual based on weight (or age if weight unknown) using Table 1 below.

| Weight (or age if weight unknown) | Atropine Dose |
|---|---|
| Children weighing **15 lbs to 40 lbs (7 kg to 18.4 kg)** (generally 6 months to 4 years of age) |   **0.5 mg Atropine Auto-Injector (Blue label)** |
| Children weighing **41 lbs to 90 lbs (18.5 kg to 41 kg)** (generally 5 years to 10 years of age) |   **1 mg Atropine Auto-Injector (Red label)** |
| Adults and children weighing **over 90 lbs (over 41 kg)** (generally over 10 years of age) |   **2 mg Atropine Auto-Injector (Green label)** |

STEP 2: Determine the severity of symptoms using Table 2 below.

Note: Not all of these symptoms may be exhibited in an exposed person.

Table 2. Signs/Symptoms in Individuals with Known or Suspected Nerve Agent or Certain Insecticide (Organophosphorus and/or Carbamate) Poisoning

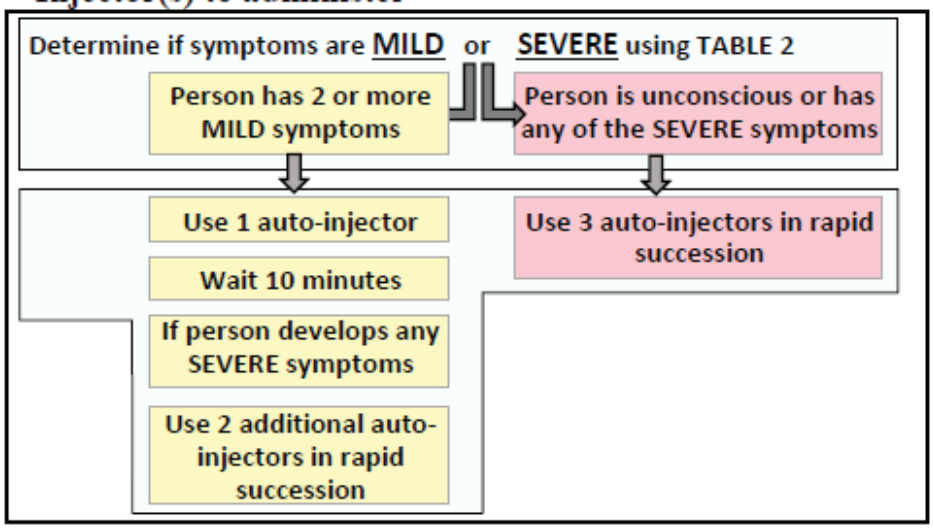
| **MILD symptoms include:** | **SEVERE symptoms include:** |
|---|---|
| • Blurred vision or miosis (constriction of the pupil)<br>• Unexplained excessive lacrimation (excessive teary eyes)*<br>• Unexplained excessive nasopharyngeal secretions (excessive runny nose)*<br>• Increased salivation (e.g., unexplained sudden excessive drooling)*<br>• Chest tightness, difficulty breathing, wheezing, or coughing<br>• Tremors throughout the body or muscular twitching (fasciculations)<br>• Nausea, vomiting, abdominal cramping, or diarrhea<br>• Tachycardia or bradycardia | • Altered mental status (strange or confused behavior)<br>• Loss of consciousness<br>• Respiratory distress (severe difficulty breathing)<br>• Excessive secretions from the lungs/airway<br>• Severe muscular twitching (fasciculations), generalized weakness or paralysis**<br>• Involuntary urination and/or defecation (release of feces)*<br>• Convulsions or seizures |

* These symptoms are sometimes observed in healthy infants and young children. In this age group, these symptoms are less reliable than other symptoms listed. Symptoms must be considered collectively when nerve agent or insecticide exposure is known or suspected.

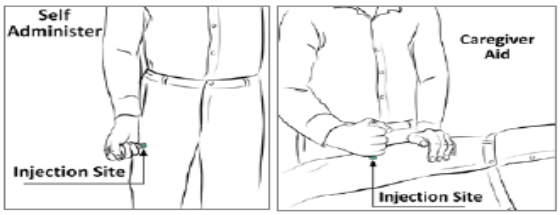
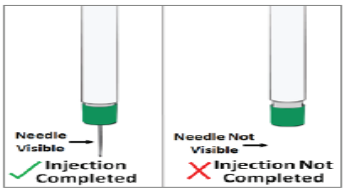
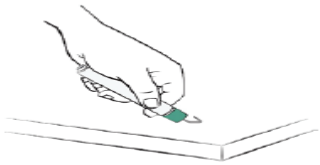
STEP 3: Determine the number of Rafa Atropine Auto-Injectors to administer based on severity of symptoms. See Table 2 and Figure 1.

One (1) Rafa Atropine Auto-Injector is recommended if two or more MILD symptoms of nerve agent or certain insecticide poisoning appear in situations when exposure is known or suspected.
Two (2) additional Rafa Atropine Auto-Injectors given in rapid succession are recommended 10 minutes after receiving the first Rafa Atropine Auto-Injector if the patient develops any of the SEVERE symptoms listed above. If possible, a person other than the patient should administer the second and third Rafa Atropine Auto-Injectors.
SEVERE SYMPTOMS (see Table 2) If an individual is found either unconscious or has any of the SEVERE symptoms listed in Table 2 in the setting of suspected or known nerve agent or certain insecticide poisoning, immediately administer three (3) Rafa Atropine Auto-Injectors in rapid succession.

**Figure 1. Determining number of Rafa Atropine Auto-Injector(s) to administer**



**STEP 4: Instructions for administration of the Rafa Atropine Auto-Injector:**

| | |
|---|---|
|  | (A) Confirm the correct dose has been selected based on the person's weight or age (see **Table 1**). Hold the plastic sleeve on both sides of the perforation and tear apart at edge to open. Remove the auto-injector from the plastic sleeve. **Caution: do not place fingers on the green tip.** |
|  | (B) Firmly hold the auto-injector with the green tip pointed down. |
|  | (C) Pull off the yellow safety cap with your other hand. |
|  | (D) Aim and firmly jab the green tip straight down (at 90° angle) against the mid-lateral outer thigh. The auto-injector device will activate and deliver the medicine when you do this. **You can inject through clothing, but make sure pockets at the injection site are empty.**<br><br>* Infants, small children, and adults who may not have a lot of fat at the injection site should also be injected in the thigh, but before giving the injection, bunch up the thigh to provide a thicker area of injection. |
|  | (E) Hold the auto-injector firmly in place for at least 10 seconds to allow the injection to finish. |
|  | (F) After 10 seconds, remove the auto-injector from the thigh and massage the injection site in a circle motion for several seconds.<br><br>**Note: If you do not see the needle visible after removal from the thigh, it means an injection did not occur. Check to be sure the yellow safety cap has been removed. After yellow safety cap removal has been verified, repeat steps D and E pressing harder against the thigh to activate the injector. If you still do not see the needle, use a new auto-injector and start over again at step A.** |
|  | (G) After the injection, avoid contact with blood or needle by carefully bending the needle back against the injector using a hard surface. Using the bent needle as a hook, pin the used auto-injector(s) to the patient's clothing. Alternatively, either place the used auto-injector(s) back into plastic sleeve(s) and leave it next to the patient or write the dose and number of auto-injector(s) used on a triage tag, hand, forehead, chest, etc. Move yourself and the exposed person away from the contaminated area right away.<br><br>**Auto-injectors contain only a single dose. If you need more than 1 injection**, obtain a fresh auto-injector, go back to step A, and follow the same instructions for each new auto-injector used. |

## RISKS AND ADVERSE EVENTS

Atropine should be used with caution in individuals with cardiac disease. Conventional systemic doses may precipitate acute glaucoma in susceptible individuals, convert partial pyloric stenosis into complete pyloric obstruction, precipitate urinary retention in individuals with prostatic hypertrophy, or cause inspissation of bronchial secretions and formation of dangerous viscid plugs in individuals with chronic lung disease.

Pediatric Use

The safety and effectiveness of atropine in the setting of nerve agent and certain insecticide (organophosphorus and/or carbamate) poisoning supports use in pediatric patients. Adverse events seen in pediatrics are similar to those that occur in adult patients although central nervous system complaints are often seen earlier and at lower doses. Weight/age dosage instructions should be strictly followed, and the Rafa Atropine Auto-Injector should NOT be administered to pediatric patients weighing less than 15 lbs [7 kg] (generally younger than 6 months of age).

Geriatric Use

Dose selection for an elderly individual should be cautious, usually starting at the low end of the dosing range. Elderly individuals may be more susceptible to the pharmacologic effects of atropine, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy. Monitor elderly individuals closely for atropine toxicity (see ***Atropine Toxicity Resulting from Overdosage*** below).

Pregnancy and Nursing Mothers

Adequate animal reproduction studies have not been conducted with atropine. It is unknown whether atropine can cause fetal harm when administered to a pregnant woman or if atropine can affect reproductive capacity. Trace amounts of atropine have been found in human milk. The benefit of atropine treatment in known or suspected exposure of nerve agent or certain insecticide poisoning may outweigh the risk

***Adverse Reactions***

Mild to moderate pain may be experienced at the injection site. The most common and major reactions to atropine are attributed to its antimuscarinic action. These include dryness of the mouth, blurred vision, photophobia, confusion, headache, dizziness, tachycardia, palpitations, flushing, urinary hesitance or retention, constipation, abdominal distention, nausea, vomiting, loss of libido, and impotency. Anhidrosis can produce heat intolerance and impairment of temperature regulation. For severe overdosage reactions see section below (***Atropine Toxicity Resulting from Overdosage***). In such cases, hypotension and death due to respiratory failure may ensue following paralysis and coma. Constipation and difficulty in micturition may occur in elderly patients. Occasional hypersensitivity reactions have been observed, especially skin rashes, which in some instances progressed to exfoliation. Other reactions include palpitations, flushing, abdominal distention, nausea, and vomiting. Please refer to the package insert for AtroPen Auto-Injector for more information [https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=e2d4307d-da8f-49f5-aac0-02355dd9ffb7].

***Pediatric Adverse Reactions***

Adverse events seen in pediatrics are similar to those that occur in adult patients although central nervous system complaints are often seen earlier and at lower doses. In a case series study of 240 children receiving atropine auto-injector with no nerve agent or insecticide exposure (Amitai et. al. JAMA 1992) adverse reactions reported were dilated pupils (43%), tachycardia (39%), dry membranes (35%), flushed skin (20%), temperature >37.8°C/100°F (4%), and neurologic abnormalities (5%). There was also local pain and swelling. In 91 children with ECGs, no abnormalities were noted other than sinus tachycardia; 22 children had severe tachycardia of 160-190 bpm. Neurologic abnormalities consisted of irritability, agitation, confusion, lethargy, and ataxia.

***Atropine Toxicity Resulting from Overdosage***

Severe overdosage resulting in atropine toxicity is characterized by widespread paralysis of parasympathetically innervated organs. Dry mucous membranes, widely dilated and nonresponsive pupils, tachycardia, fever, and cutaneous flush are especially prominent, as are mental and neurological symptoms. Disorientation, mania, hallucinations, gait disturbances, and symptoms may last 48 hours or longer. These symptoms can progress to respiratory depression, coma, circulatory collapse, and death. The fatal dose of atropine in adults is unknown.

Supportive treatment should be administered as indicated. Ventilator support with oxygen is necessary for depressed respiration. Ice bags placed near the axilla and groin, hypothermia blankets, and/or evaporative cooling technique (after removal of clothing, continuously spraying the patient with water and using a large fan to cause evaporation) may be needed to reduce hyperthermia, especially in children. Benzodiazepines may be administered to reduce shivering. Bladder catheterization may be necessary if urinary retention occurs. Since atropine elimination takes place through the kidneys, urinary output must be maintained and increased if possible; however, dialysis has not been shown to be helpful in overdose situations. Intravenous fluids may be indicated. For toxic overdosage, a short acting barbiturate or diazepam may be given as needed for marked agitation and convulsions. Large doses for sedation should be avoided. Centrally-acting stimulants are not recommended. Intravenous physostigmine (1 to 4 mg in adults or 0.5 to 1 mg in children) rapidly abolishes delirium and coma caused by large doses of atropine but has a short duration of action and repeated doses may be necessary. Neostigmine, pilocarpine, and methacholine are of little benefit as they do not penetrate the blood-brain barrier. Contact the poison control center for information or assistance (1-800-222-1222).

***Risk and Benefit Statement***

Treatment of nerve agent and certain insecticide (organophosphorus and/or carbamate) poisoning should be instituted without waiting for the results of laboratory tests. In instances when the Rafa Atropine Auto-Injector should be used with caution, the potential risk of developing serious treatment-related adverse events must be weighed against the risk of illness or death due to exposure to life-threatening poisonings from nerve agents or certain insecticides.
The expected benefit of treatment with the Rafa Atropine Auto-Injector is to increase human survival by mitigating the symptoms caused by nerve agent and certain insecticides

**Reporting Adverse Events or Medication Errors To MedWatch**

Report adverse events or medication errors to MedWatch at www.fda.gov/medwatch, by submitting a MedWatch Form 3500 (available at https://www.accessdata.fda.gov/scripts/medwatch/index.cfm?action=reporting.home), or by calling 1-800-FDA-1088. Submitted reports should state that the Rafa Atropine Auto-Injector was used under an EUA and should include the dose that was administered (i.e., 0.5 mg, 1 mg, or 2 mg) and the number of auto-injectors used.

**Storage Conditions**

Store the Rafa Atropine Auto-Injector at 25°C (77°F); excursions permitted to 15–30°C (59–86°F). Do not freeze. During an emergency response when it is not feasible to maintain these storage conditions, the Rafa Atropine Auto-Injector may be stored with temperature excursions up to 40° C (104° F) for a total period of up to 7 days.

**Expiration Date for Stockpiled Rafa Atropine Auto-Injectors**

FDA may extend the expiration date of the Rafa Atropine Auto-Injector based on FDA's examination of the medication. Any expiration date(s) that FDA may extend in the future will be made available at https://www.cdc.gov/phpr/stockpile/chempack.htm.

**Patients or caregivers should receive the *Fact Sheet for Patients and Caregivers* about this product.**

**For additional information:**

• Contact your state/local health department and/or EMS or hospital • Contact the poison control center by phone: 1-800-222-1222 or visit www.aapcc.org • Visit https://chemm.nlm.nih.gov • Visit www.cdc.gov or call 1-800-CDC-INFO (1-800-232-4630) • Visit https://www.fda.gov/EmergencyPreparedness/Counterterrorism/ucm182568.htm

# 5-2 EMS Operations Around Bodies of Water

**Purpose:** To establish clear guidelines for EMS caregivers responding to emergencies in or near bodies of water. This policy prioritizes caregiver safety, limits water exposure risks, and ensures proper coordination with specialized rescue services.

**Scope:** This policy applies to all EMS caregivers operating in any location where bodies of water are present, including but not limited to: lakes, rivers, oceans, ponds, flood zones, canals, and stormwater areas.

**EMS caregivers shall not enter any body of water—including shallow, fast-moving, or stagnant water. Patient care and scene safety must be conducted from a dry and stable location, and operations near water will be coordinated with appropriate rescue agencies trained in water entry and recovery.**

**Definitions:**

**Body of water**: Any natural or man-made area containing water including lakes, rivers, streams, oceans, ponds, or floodwaters.

**Water rescue team:** Certified personnel (e.g., fire department dive teams, swift water rescue units) t rained and equipped to operate in aquatic environments.

**Hazard zone:** An area within proximity to water that poses a potential risk of falling in or being swept away.

**Procedure**

**1. Scene Assessment**

Upon arrival, caregivers must assess the scene for:

Proximity to the waterline

Stability of the ground near the edge

Weather and water conditions (tide, flow rate, ice, etc.)

Presence of downed power lines, contaminants, or other hazards

Caregivers must maintain a **minimum safe distance** of **15 feet** from any unprotected water edge.

**2. Personal and Crew Safety**

Under no circumstance should EMS personnel:

Enter the water to access a patient

Walk across ice or submerged areas

Attempt to swim or wade in shallow waters

All personnel must wear approved personal flotation devices and ensure communications equipment is functional before approaching water-adjacent areas.

**3. Patient Access and Care**

If the patient is in the water, caregivers must:

Immediately notify dispatch and request water rescue resources

Observe and communicate the patient's condition and location without entering the water

Prepare equipment at the shoreline or nearby to assist once the patient is brought to land

**If the patient is near the water:**

Ensure caregiver safety using proper positioning (e.g., upstream, on stable ground)

Consider using throw rope if patient retrieval is safe for caregiver

Do not attempt "stretching" or "climbing" maneuvers over water

**4. Coordination with Water Rescue Teams**

On arrival of water rescue teams:

Provide incident report and patient details

Defer water entry and extrication tasks to rescue team

Stand by with necessary equipment for post-rescue medical care

**Training Requirements**

All EMS caregivers shall receive annual training on:
Scene safety near water environments
Communication and coordination with water rescue teams
Use of emergency flotation and shoreline safety equipment including PFD and throw rope use.

## Hazardous Material Incident Operations

The Hazardous Materials Incident procedure shall be utilized anytime there is the potential for contamination by a hazardous material. The responsibility for definitive hazardous materials containment, identification, and decontamination, and victim evacuation rests with fire and/or law enforcement agencies. In scenes with five (5) or more victims, the management structure utilizing the Incident Management System shall be followed according to the Multi-Casualty Incident (MCI) Field Operations Policy. In scenes with less than five (5) victims, EMS personnel shall report to the Incident Commander or designee immediately upon arrival.

Pre-Arrival Consideration
Generally, hazardous materials come in three basic forms: solids, liquids and gases. The hazards associated with these forms are due to one or a combination of the following factors:

1. Flammability
2. Toxicity
3. Radioactivity
4. Reactivity
5. Corrosive

General safety considerations based on these factors include the fact that EMS personnel may become involved in a hazardous materials situation while managing a medical emergency. Examples of such potential exposures include, but are not limited to, vehicle collisions, industrial incidents, and residential areas, terrorism, (e.g., meth labs,
household chemical storage, pesticides, rail derailment, etc.). EMS personnel must be able to recognize potential exposures and take steps to minimize their risks from such
exposure, and to take appropriate steps once a hazard is identified. Specific safety considerations for each type of hazardous materials are listed in the Emergency Response Guidebook for Hazardous Material Incidents (DOT P.5800.3).

PROCEDURE:

A. Dispatch
Units dispatched to a possible hazardous materials incident will be advised by the EMS Communications Center (in addition to the usual information) of the following:

1. EMS personnel may be responding only to provide support for the hazardous materials response team (fire department). When requested by the Incident Command or Medical Sector Officer the Special Operations Team will be deployed.
2. Confirmation of activation of the hazardous materials plan.
3. Type of transporting vehicle – train, tractor-trailer, etc.

4. Type of hazardous material(s) involved (if known). (Specific safety considerations for each type of hazardous materials are listed in the North American Emergency Response Guidebook for Hazardous Material incidents (DOT P. 5800.3)).
5. On-scene wind direction and recommended approach route – coordinate with Incident Commander.
6. Estimated number of patients.
7. Provide location of Incident Command Post and agency that the Incident Command is from if known.
8. EMS Staging Area location if known.
9. Other responding agencies.

B. Arrival at Known Hazmat Scene:

At no time shall EMS personnel enter the scene of a known hazardous materials incident without the clearance from the Incident Commander or designee. Once the support zone (see Appendix B) is established, the responding EMS unit(s) will stage as directed by Incident Commander or designee. EMS vehicles will stage in an upwind and uphill of the incident where possible. EMS Vehicles shall be positioned (backed in) for rapid egress in the event of a catastrophe or change in environmental conditions. Once at scene, in coordination with the Incident Commander or designee, EMS will provide treatment and transport of patient(s) after decontamination.

C. Recognition of a Hazardous Material (On-Scene or During Transport):

EMS personnel may become aware of a hazardous material while on scene or during transport. If such a situation occurs, EMS personnel will take the following measures:

1. EMS personnel should consider themselves contaminated;
2. Evacuate to an upwind/uphill safe location (minimize exposure);
3. Notify the EMS Communications Center and advise them of the potential contamination;
4. EMS personnel will then request fire department response to the scene for site control and emergency decontamination. EMS personnel will follow the direction of the fire department once they arrive.
5. The scene will be managed as a hazardous materials site using principles of the Incident Management System. Specific directions can be found in Appendix “A” of this policy.
6. Activate Local Area Hazmat Incident Plan where applicable, the Incident Commander for a hazardous materials incident is defined as the “appropriate public safety agency having primary investigative authority.” In the case of multi-jurisdictional incidents, a unified command may be established. All levels of government accept the basic responsibility for the immediate protection of people, property, and the environment from an accidental (uncontrolled) discharge and/or spill of hazardous substances. In fulfilling this obligation, specific roles and tasks are herein assigned. It is anticipated that those jurisdictions requesting assistance through the activation of this plan will be aware of and abide by these concepts.
7. Scene management responsibility is dictated by statute and jurisdiction and is a prime consideration in dealing effectively with a hazardous material incident.

IV. EMS FIELD MANAGEMENT

All hazardous materials incidents with five (5) or more patients shall be managed in accordance with EMS Operations Policy # – "Multi-Casualty Incident (MCI) Management – Prehospital Operations." Any patients who have been properly decontaminated may be transported to a remote Treatment Area for management. EMS personnel may, at times, provide only a support role and function to the hazardous materials response team (fire department) in some situations. This may include monitoring of hazmat personnel, acting in the capacity of Medical Branch Director, etc. where possible the Special Operations Team shall be utilized in this function.

A. Function

In a hazardous materials incident with multiple patients (MCI), the Medical Branch Director may be responsible for overall medical scene control in coordination with the Incident Commander and/or designee.

Guidelines:

1. The Medical Sector Officer will appoint personnel depending upon the needs of the incident.
2. Personnel can be placed in charge of several areas simultaneously if this is the best utilization of available resources. Responsibilities for these positions are described in Multi-Casualty Incident (MCI) Field Operations Policy.

B. Patient Care

1. EMS personnel shall not attempt to enter any hazmat scene or render medical aid beyond the support zone unless a member of and functioning with the Special Operations Team within the Incident Management System. Medical treatment and transportation are secondary to the protection of spreading the contaminate and the management of the hazmat incident. Management of the hazardous material and the prevention of further exposure take precedence over patient care. EMS
personnel may be requested to receive non-ambulatory patients from the Contamination Reduction Zone after decontamination has been completed.
2. The hazardous materials response team (fire department) may initiate patient care within the inner perimeter of the exposure area(s). EMS personnel may only provide and/or initiate patient care after the patient has been transferred to them in the designated area (support zone) after decontamination considerations have been addressed.
3. Deceased victims shall be left undisturbed at the scene.
4. The mattress shall be removed from the stretcher for transport and all patients transported on a backboard in case of residual contamination.
5. The use of EMS helicopters for the transport of suspected hazardous materials patient's is prohibited.

C. Considerations for Hospital Arrival

1. If, during patient transport personnel become aware of information that the patient is a victim of hazardous material exposure or contamination, they shall immediately notify the EMS Communications Center. The transport unit shall make contact with the receiving hospital and provide them with all available information. The receiving hospital may direct the transporting unit to:
   a. Discontinue transport for emergency decontamination; or
   b. Continue transport to a hospital.
2. The patient is not to be moved into the hospital until properly decontaminated.

3. After the patient is transferred, the crew must leave all equipment, trash, contaminated clothing, etc. in the ambulance and lock its doors. Personnel shall not leave the area, eat or drink and should consider self-decontamination. The ambulance will remain out of service until it has been monitored for contamination and cleared as a non-toxic.
4. In the event a crew notifies the EMS Communications Center they have been contaminated, the area Manager-Emergency Services and the EMS Director shall be notified.

****Never transport a contaminated patient! Remember leave the contamination at the scene of the emergency, and NEVER take it with you to the hospital!**

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## EARTHQUAKE PLAN

**PURPOSE:** Our ambulance services are located in a geographic area that is likely, at sometime, to be affected by an earthquake.

This policy gives guidance for administrative and staff personnel regarding their duties prior to, during, and after an earthquake.

**PROCEDURE:**

I. Objective

To prepare for additional and emergency transportation of patients by ambulance to functioning medical facilities throughout the area.

II. Preparation

A. Train all personnel in procedures for dealing with the situation.

B. Bolt down, tie down and secure all equipment, supplies and shelving to wall or floor structures of the building that may fall and be damaged or injure someone. Strap water heaters to the wall.

C. Know all exit routes from your buildings.

D. Know where fire extinguishers are and how to use them.

E. Know where all utility shut-offs are and have available tools or key to shut them off.

F. Have all personnel prepared to report to ambulance station or pre-designated area as soon as possible after the initial shock.

G. Circulate "Earthquake Safety Checklist" by FEMA to employees and general public.

III. Impact

A. There will be no advance warning. A major earthquake in the New Madrid Area will generate lateral forces up to 15% of the force of gravity and may be one minute in duration. There will be aftershocks.

B. These forces may displace up to 50% of the contents of this facility. Utility interruption is anticipated; however, these should be minor in nature and short-term in length. No structural damage is expected in the Springfield area. However, there may be damage to structures further east of Springfield in our outlying ambulance service areas.

IV. Recovery Plan

Stage I - Following initial impact

A. Self protection

1. Exit buildings
2. Avoid down wires, windows, and overhangs
3. If possible, remove ambulances from building or overhangs

B. Render medical care for on-site injuries

C. Notify supervisor and call in all off duty EMTs and Paramedics

D. Safety - turn off all accessible utilities
E. Be prepared for aftershocks

Stage II - Damage assessment / stabilization

A. Inspect, repair as you are able, without risk of injury
B. Minor damage
   1. Reconnect utilities as possible
   2. Remove debris
   3. Resume operations
   4. Contact EMS Communications Center and inform them of your status
      a. Ability to respond
      b. Damage
      c. Other information
   5. EMS Communications Center will notify all co-workers to provide updates and instructions.

C. Major damage
   1. Vacate building
   2. Cordon off area
   3. Establish communications link
      a. VHF radios
      b. Ham radio operators
      c. CB radios
      d. Other
   4. Resume operations
   5. Contact Mercy EMS Communications Center and inform them of your status:
      a. Ability to respond
      b. Damage
      c. Other information
   6. EMS Communications Center will notify all co-workers to provide updates and instructions.

Stage III - Support role, New Madrid Area
Stand by for directions for response

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## SEVERE WEATHER WARNINGS

**PURPOSE:** To provide clear guidelines in the event of a Severe Thunderstorm or Tornado Warning in our coverage area. Further, to improve safety for crews, minimize storm damage to vehicles and provide for staged response in the event of a disaster striking the community.

Definition of Terms (For information only)
Severe Thunderstorm -- Severe weather conditions which would possibly produce tornadoes.

Tornado Warning -- Very severe weather conditions which have produced an actual tornado or a funnel cloud which, if it touches the ground, becomes a tornado.

**PROCEDURE:** When a Severe Thunderstorm or Tornado Warning is issued for the service area, the crew(s) in that service area will be responsible for the following actions:

1. Communications Center will notify all on-duty crews and on-call Supervisors.

2. Prepare for a power outage. Follow all general safety rules for severe weather. The Manager or Field Supervisor, if not already assigned to a crew, they may elect to staff a backup unit.

3. Safety of the crews is the number one priority. Avoid the direct path of the storm. If a tornado is reported to be heading in the direction of an Mercy EMS Facility, ambulances should move into a safe location in the service area until the threat of severe weather ends.

4. In the event of a disaster, assess the need for additional resources and make the request immediately to your local dispatch and to Mercy Dispatch as the situation warrants.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## FIRE SCENE STANDBY PROCEDURES

**PURPOSE:** To provide clear guidelines for fire scene standby operations for MERCY EMS personnel.

**PROCEDURE:** When specifically requested for EMS standby when a structure fire is confirmed, or as needed for other incidents such as large-scale wild land fires:

1. Respond for standby only at the request of Fire Department Command or by local dispatch guideline.
2. If injuries are not confirmed, the appropriate unit will respond Priority 2, yielding the right of way to fire personnel and apparatus responding to the scene. If injuries are reported, the assigned ambulance(s) will respond Priority 1.
3. The ambulance and/or Supervisors assigned to the fire incident will remain committed until such time as a Priority 1 request is received, and the on-scene ambulance is the only available ambulance in the area, and no injuries are anticipated on the fire scene. At the request of the Incident Commander a second ambulance will be requested to resume standby operations.
4. Arriving MERCY EMS units will notify MERCYCOM and the Incident Commander of their arrival in the area, requesting staging location and frequency assignment for medical Branch operations.
5. MERCY ambulance and Supervisor vehicles will stage at a safe distance; not more than one minute from the working fire scene, parking so as not to be blocked in by other arriving emergency vehicles. The ambulance will be placed no closer than 200-300 feet from the fire scene in an upwind position.
6. While driving in and out of the area, do not drive over fire hoses, unless directed to do so by the Incident Commander, **NEVER** drive over hose couplings.
7. MERCY EMS personnel will consider the scene to be an unsafe hazardous materials scene until declared safe by the Incident Commander.
8. MERCY EMS personnel will assume medical Branch responsibilities only while on standby. At no time will on-duty MERCY EMS personnel operate fire apparatus or assume firefighting assignments.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## REHABILIATION SECTOR OPERATIONS

**PURPOSE:** To provide guidance on the implementation of EMS monitoring in the Rehabilitation Sector at the scene of a fire, Hazardous Materials incident, or other large-scale emergency situation. It will ensure that personnel who might be suffering the effects of metabolic heat buildup, dehydration, physical exertion, and/or extreme weather receive evaluation and rehabilitation during emergency operations. In areas where Fire Departments have established procedures for rehabilitation, Mercy EMS co-workers should assist and support the local plan at the direction of the Incident Commander.

**PROCEDURE:**

1. Area Considerations:
   - Select and area large enough to accommodate the number of personnel expected for medical monitoring.
   - Have a separate area for members to remove Personal Protective Equipment.
   - Be accessible for an ambulance and EMS personnel should transport be required.
   - Provide protection from inclement weather and extreme temperatures.
   - Follow guidelines outlined in the Fire Standby Policy and Procedure.
   - Be away from spectators and media.

2. Methodology
   - Report to the incident commander and coordinate with rehabilitation manager if one has been assigned.
   - Don Hi-visibility vest or Hi-visibility jacket.
   - Document members entering or leaving rehabilitation.
   - Ensure personnel in rehabilitation “dress down” by removing their bunker coats, helmets, hoods, and opening their bunker pants to promote cooling.
   - Ensure personnel rehydrate themselves with water during the first hour of the incident, then a 50% Water/Sport drink mix after the first hour if available.
   - Check vital signs, monitor for heat stress and signs of medical issues when personnel first enter rehabilitation. A second set of vitals should be obtained after 15 minutes of rest and rehydration. If a member is demonstration abnormal vital signs, he or she shall be monitored more frequently during rest and rehydration period.
   - Document all findings on the Medical Monitoring form.
   - If a member is showing signs of a medical emergency, he or she should have a full assessment performed and appropriate guideline be utilized.
   - Inform the incident commander when personnel require transportation and request a replacement ambulance if necessary to resume monitoring.
   - Personnel falling outside of the criteria after the second set of vitals and not requesting transport should sign a PRC form and the Incident Commander should be notified of the situation.
   - No tobacco use shall be permitted in or near the rehabilitation area.

3. Medical Monitoring Criteria:

- ALOC or signs of Hypoglycemia.
- Vomiting, diarrhea, Hypo or Hyperthermia.
- Wheezing congested lung sounds or signs of respiratory distress.
- Irregular pulse, chest pain, or signs of cardiac dysrhythmias.
- Severe headache, numbness or signs of CVA.
- Systolic B/P > 160 after 15 minutes of rest
- Diastolic B/P > 100 after 15 minutes of rest.
- Respiratory rate < 12 or > 20 after 15 minutes of rest.
- Temperature < 97.8 F or > 102.0 F after 15 minutes of active cooling.
- Pulse > 120 bpm or irregular after 15 minutes of rest.
- O2 sat < 95% after 15 minutes of rest.
- CO level > 8%. Reevaluate after place on high flow O2 for 5 min.
- Blood glucose < 70 mg/dl.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## BIOLOGICAL RESPONSE – PATIENT PREPARATION FOR TRANSPORT, PATIENT MOVEMENT AND DECONTAMINATION PROCEDURES

**PURPOSE:** To provide guidance for MERCY EMS co-workers responding to potential biological situations including Ebola Virus Disease (EVD).

**PROCEDURE:**

**Emergency (911) Response**

During and emergency response, Mercy EMS providers shall maintain a high degree of suspicion and utilize the Biological Containment Assessment and Decision Matrix to determine the proper PPE at all times. If Ebola is suspected isolate the patient to the degree possible and elevate the use of PPE accordingly following all elements of the plan to the extent possible. In the case of a suspected biological exposure such as EVD, EMS Communications will be notified and the appropriate EMS Leadership activated for response. The use of the Special Operations team with PAPRS and other should be considered.

**Scheduled High Consequence Pathogen Patient Transport**

*CALL PRE-SCREENING/PLANNING*

In the event that Mercy EMS is requested to transfer a suspected or confirmed High Consequence Pathogen patient between healthcare facilities. We must assure patient, public, and co-worker safety; as such a transport must be carefully planned. The steps below describe the process and practices to follow:

During the prescreening and planning process EMS Communications will notify the Mercy Hospital Springfield Disaster Notification Group of the request. The Executive Director of EMS or his delegate will follow the steps below.

- Ask for, or coordinate a phone discussion between the treating physician and Mercy EMS Medical Director or Infectious Disease Physician accepting the patient. The purpose of this call is to clarify the patient's diagnosis and discuss the patient's acuity and treatment plan. It will also be important to establish that the patient's condition is stable enough for transport.
- Identify hospital personnel who will be planning the transfer, accepting the patient, and coordinating disinfection and cleanup following the transport.
- As with any inter-facility transport, confirm the treatment that the patient will need to receive during transport.
- Assure that the receiving facility is aware of the patient's status and has the appropriate team to receive the patient. Confirm the estimated timing of the transport i.e. departure, travel and arrival times.
- Identify EMS Leaders who will supervise vehicle preparation, monitor transfer, and provide information and support to crews following the transport.
- Secure appropriate equipment and supplies for the transport, as listed below. As you plan for the transport, consider disposables if needed and any airway or IV access equipment that could be necessary. Gloves and respirators should be obtained from the ambulance. Duct tape and plastic sheeting will be maintained by the Regional EMS Managers and Springfield EMS Operations Supervisors and precut to facilitate rapid installation into the transport ambulance as deemed necessary.

*PERSONAL PROTECTION*

Various means of protection will include protecting the EMS co-worker from all routes of entry through the use of PPE, barriers in the patient compartment of the ambulance, proper decontamination of the ambulance/ equipment and proper disposal of the waste generated. The following guidelines will be observed:

- Isolation of the ambulance surfaces in the Patient Compartment while making available necessary patient care equipment.
- Wearing of appropriate PPE will follow the Mercy EMS Biological Containment Assessment Decision Matrix. Donning checklists will be followed during the placement of PPE.
- Remove carry cases from equipment such as monitor/defibrillators, IV pumps etc.
- Prudent hand washing will occur prior to donning of equipment.
- Avoid aerosol-generating procedures, such as airway placement, administration of nebulized medications, tracheal suction, CPAP, etc. If it is absolutely necessary to perform these procedures, do so after the unit pulls to a safe location and stops and only after careful consideration of risk versus benefit.
- If possible avoid starting IV access during transport. If necessary, venous access should be obtained after the unit pulls to a safe location and stops. Careful attention should be taken with the disposal of all sharps in the sharps container.

*AMBULANCE PATIENT COMPARTMENT PREPARATION HIGH RISK CONTACT*

Ambulance preparation will be done with the purpose of segregating the cab from the patient compartment and covering the cabinetry/shelving, ceiling, seating and floor with
an impermeable barrier. Divider door between cab and patient compartment will remain closed and secured at all times during transport.

Supplies:

- 6 mil clear plastic sheeting
- Duct Tape
- Scissors

Procedures:

*All sheeting should overlap prior sheets of plastic by a minimum of 1 inch. All seams should be sealed completely by duct tape.*

1. Place sheeting on the floor of the ambulance and affix to bench seat, jump seat and walls to create a bowl effect in an effort to channel any body fluids towards the center of the floor which will cause fluids to collect in one area.
2. Place plastic sheeting over the walls (sides and bulkhead) by affixing it to the edges of the sheeting for the ceiling and floor with duct tape to enable any flow of fluid to be captured on the sheet on the floor.
3. Wall sheeting should overlap with the upper portion over the lower portion to prevent any body fluid from leaking between sheets by gravity.
4. The cot securing mechanisms i.e. antlers and clamps will need to be accessible through the plastic sheeting for safe transport of the gurney and patient. Seal these openings generously with duct tape so that all fluids flow to the sheeting on the floor.
5. Leave openings around ventilation ports to allow proper air flow and exchange.
6. Continue to overlap sheeting down and over seating to the floor. Cover rear doors with plastic sheeting and duct tape.

*COT PREPARATION*

Supplies:

- Impermeable mattress cover and Duct Tape, cover mattress pad with fitted impermeable mattress cover. If no impermeable mattress cover is available then use plastic sheeting and seal with duct tape.

*AMBULANCE CAB*

Supplies:

- Backup High Consequence Pathogen PPE Kit or Equivalent
- N95
- Impermeable Decontamination Disposal Sheet
- Multiple Red Biohazard Bags
- Extra Gloves and Shoe Covers
- Medications

*SPECIAL OPERATIONS CREW PREPARATION*

Suspected or confirmed High Consequence Pathogen patient inter facility transport will be done by a three person crew. The third crew member "Driver" will act as the "Safety Officer/Trained Observer" and will assume no patient contact nor enter the patient compartment, so as to remain non-contaminated during the transport and to avoid contamination of the cab area. Prior to patient contact, each patient caregiver will don the PPE while the third crew member assists by both checking for integrity issues or exposed body parts.

Supplies:

- 3M Turbo PAPR
- 3M High Efficiency Particulate Filter x 3
- 3M PAPR Battery x 2
- Tychem "F" or "QC" Suit
- N95 mask
- Face shield
- Gloves X3 (Triple Glove)
- Chemical resistant boots

*FACILITY ARRIVAL*

Driver will notify the receiving facility of arrival and don PPE. Throughout movement of patient into facility the patient care crew will take steps to prevent secondary contamination of any surfaces, such as avoiding the touching doors handles with contaminated gloves.

Procedure:

1. After notifying receiving facility staff of arrival, coordinate with Hospital staff for the transfer of the patient from the ambulance into the facility.
2. The following items may be considered with regard to the movement of the patient from the ambulance into the facility:
   - The Driver should take all precautions to remain a safe distance from the patient to avoid contamination.
     The Driver may assist by opening doors and clearing the path for patient movement.

- The Driver will take decontamination and disposal sheet placing it on the ground at rear of unit with a change of shoe coverings and gloves available for the patient crew.
- Any body fluid contamination on gurney wheels will be disinfected with a disinfectant that is proven to kill non-enveloped viruses.
- Patient crew will unload patient and then remove current shoe covering and outer gloves and put on clean ones so as not to track potential contamination into the receiving facility. Dispose of used PPE in Red Biohazard Bag.
- Patient will be transferred into hospital by patient crew at the direction of hospital staff.
- Patient crew will remove and dispose of PPE in the hospital isolation area at their Direction following infection control procedures or on the decontamination sheet at the rear of the unit.
- The cot will be considered infectious and handled with the appropriate PPE until decontaminated at the receiving facility. The decontamination sheet, PPE, materials, and equipment will be collected and double bagged with Red Biohazard Bags at the ambulance observing body fluid precautions and then placed in the rear of the ambulance for proper decontamination and disposal later.

*AMBULANCE DECONTAMINATION*

At Mercy Springfield and Cox South Hospitals, the ambulance will be decontaminated onsite at their direction. Otherwise, the Ambulance will be driven to a Mercy EMS location for decontamination, taking into consideration segregating it from non-involved co-workers. Also, consider an indoor facility to prevent contaminated materials from incidentally getting blown away and to protect it from the weather.

Supplies:

- Impermeable Decontamination Sheet placed behind the rear doors of the ambulance.
- Disinfectant proven to kill non-enveloped viruses, such as a 1:10 bleach to water solution allowed to dry for 10 minutes (use bleach only in well-ventilated area with both rear and side doors open).
- Disposable rags
- Red Biohazard Bags
- High Consequence Pathogen Containers or Red Biohazard Containers labeled “Class A Infectious Waste”
- High Consequence Pathogen PPE Kit or Equivalent

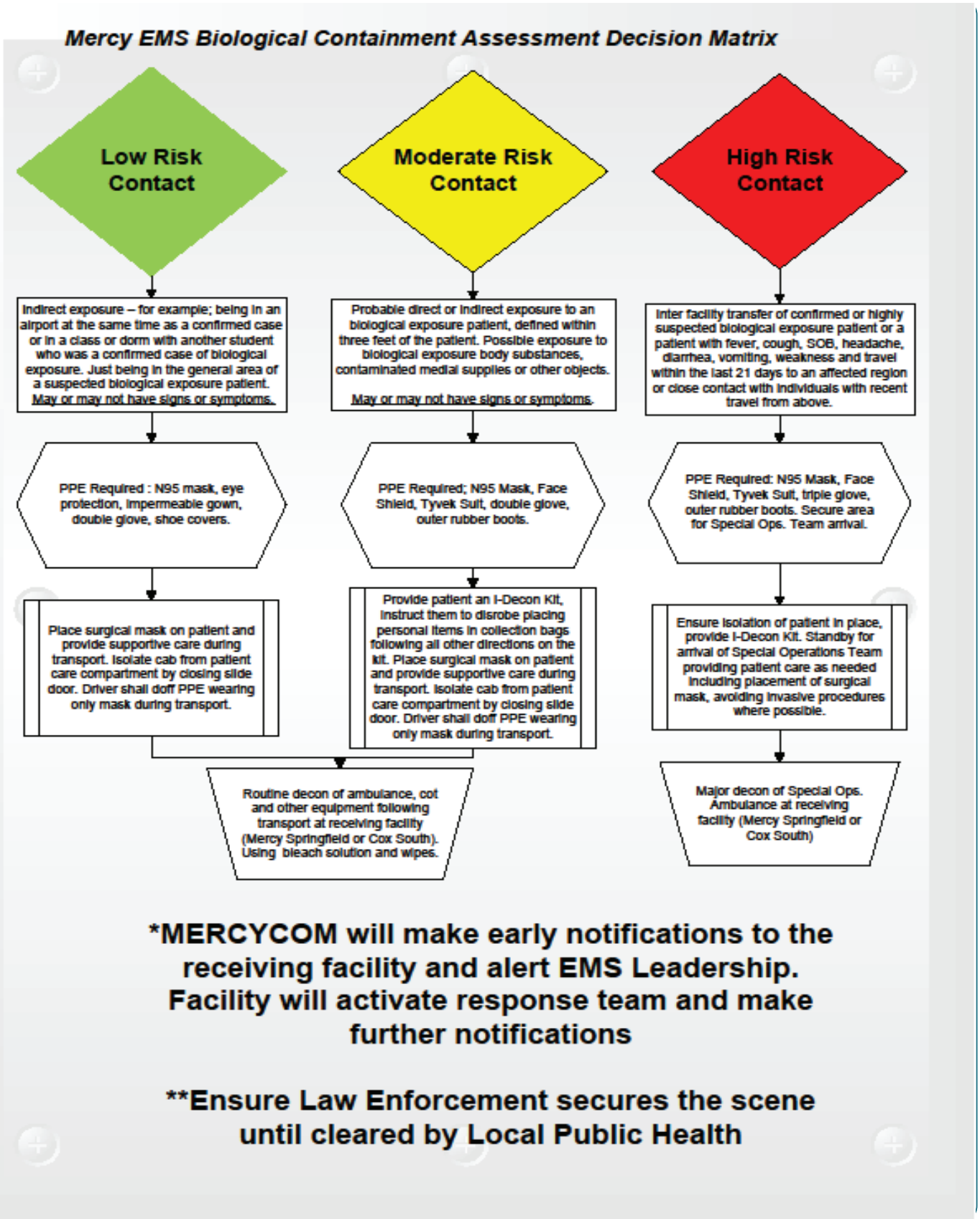
Decontamination Procedures:

1. Don PPE (Tyvek suit, N95 Mask, double glove, double shoe cover)
2. Lay impermeable decontamination sheet on the ground at the back of the ambulance and side doors and have containers available.
3. Clean up any body fluids and double bag (Red Biohazard Bags) cleaning materials placing those materials in High Consequence Pathogen containers.
4. High Consequence Pathogen containers should be red-biohazard containers labelled “Class A Infectious Waste” and maintained separate from all other red bag waste.
5. Double bag (Red Biohazard Bags) all disposable materials/equipment and place into High Consequence Pathogen containers.

6. Place equipment including gurney antlers on decontamination sheet for proper disinfecting.
7. Remove any contaminated materials from equipment and disinfect equipment using recommended disinfectant and place on clean sheet for drying.
8. Double bag (Red Biohazard Bags) all contaminated rags/wipes into properly labeled Red Biohazard Bags.
9. Remove impermeable barriers from unit and double bag (Red Biohazard Bags) placing those properly labeled High Consequence Pathogen containers.
10. Fold decontamination sheets and double bag (Red Biohazard Bags) placing those in proper High Consequence Pathogen containers.
11. Place new contamination sheets out.
12. Wipe down all surfaces inside ambulance and outside door handles with recommended disinfectant and double bag (Red Biohazard Bags) materials placing them in properly labeled High Consequence Pathogen containers.
13. Remove PPE and place PPE in double bag (Red Biohazard Bags) and place in High Consequence Pathogen containers.
14. Using gloves fold decontamination sheets and place in double bag (Red Biohazard Bags) with PPE and put into High Consequence Pathogen containers.
15. Wash outside of ambulance in normal fashion and location using PPE. Disinfectant solution proven to kill non-enveloped viruses is a 1:10 bleach to water solution allowed to dry for 10 minutes or other approved disinfectant.

EMS co-workers will be monitored for appropriate number days post transport according to the incubation period of the pathogen even if no exposure is suspected.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS


Mercy EMS Biological Containment Assessment Decision Matrix
Low Risk Contact
Moderate Risk Contact
High Risk Contact
Indirect exposure – for example; being in an airport at the same time as a confirmed case or in a class or dorm with another student who was a confirmed case of biological exposure. Just being in the general area of a suspected biological exposure patient. May or may not have signs or symptoms.
Probable direct or indirect exposure to an biological exposure patient, defined within three feet of the patient. Possible exposure to biological exposure body substances, contaminated medial supplies or other objects. May or may not have signs or symptoms.
Inter facility transfer of confirmed or highly suspected biological exposure patient or a patient with fever, cough, SOB, headache, diarrhea, vomiting, weakness and travel within the last 21 days to an affected region or close contact with individuals with recent travel from above.
PPE Required : N95 mask, eye protection, impermeable gown, double glove, shoe covers.
PPE Required; N95 Mask, Face Shield, Tyvek Suit, double glove, outer rubber boots.
PPE Required: N95 Mask, Face Shield, Tyvek Suit, triple glove, outer rubber boots. Secure area for Special Ops. Team arrival.
Place surgical mask on patient and provide supportive care during transport. Isolate cab from patient care compartment by closing slide door. Driver shall doff PPE wearing only mask during transport.
Provide patient an I-Decon Kit, instruct them to disrobe placing personal items in collection bags following all other directions on the kit. Place surgical mask on patient and provide supportive care during transport. Isolate cab from patient care compartment by closing slide door. Driver shall doff PPE wearing only mask during transport.
Ensure isolation of patient in place, provide I-Decon Kit. Standby for arrival of Special Operations Team providing patient care as needed including placement of surgical mask, avoiding invasive procedures where possible.
Routine decon of ambulance, cot and other equipment following transport at receiving facility (Mercy Springfield or Cox South). Using bleach solution and wipes.
Major decon of Special Ops. Ambulance at receiving facility (Mercy Springfield or Cox South)
*MERCYCOM will make early notifications to the receiving facility and alert EMS Leadership. Facility will activate response team and make further notifications
**Ensure Law Enforcement secures the scene until cleared by Local Public Health

## FORCED ENTRY INTO A STRUCTURE

**PURPOSE:** EMS co-workers may be faced with a situation where no one appears to be present or responds to voice, doorbell or knocking on arrival at a home or business. The patient/occupant may be able to respond but is unable to unlock or allow access into the structure. EMS co-workers may need to consider the use of forced entry to gain access to the patient.

**PROCEDURE:** The on-scene personnel will determine if forcible entry is required, and act according to the following procedures:

1. If there is no answer at the residence, request EMS Communications try to establish contact by phone.
2. If the call number is ineffective, without endangering themselves, EMS personnel will attempt to gain access by all available unsecured doors and windows.
3. Once the decision has been made to use forced entry, law enforcement and/or fire department assistance shall be requested if not already on scene, and the on-duty EMS Supervisor or the EMS Director will be notified. At the discretion of the on-scene crew and with the approval of the EMS Supervisor forced entry should not be delayed for either law enforcement or fire response.
4. Once forcible entry has been authorized, the following procedures are to be followed:
   - Where possible forcible entry locations will be selected that will minimize damage to the structure. However, reasonable efforts to gain access should be made regardless of damage estimations.
   - All personnel will use extreme caution in providing for their own safety and will wear during the process of access leather gloves and eye protection.
   - The details of the forced entry will be documented in a written statement to the Supervisor.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## ACTIVITIES DURING HOMELAND SECURITY THREAT LEVELS

**PURPOSE:** To identify precautions for EMS co-workers during the various threat levels identified by the United States Homeland Advisory System.

**PROCEDURE:** EMS Managers and Supervisors will be alerted to a change in the current threat level by the EMS Communications Center. It is the EMS Managers and Supervisors responsibility to ensure that the appropriate precautions are being taken in their area(s) of responsibility.

**Green – Low**
Routine operations. All ambulances and other EMS vehicles are locked at all times when not secured in an ambulance facility. The EMS Dispatch Center is secured granting access to authorized persons only. All on-duty co-workers shall have their issued Mercy photo ID nametag, driver's license and EMT or Paramedic license at all times. Report suspicious circumstances and / or individuals to a supervisor and local law enforcement agencies. Observe responder safety and common-sense practices in daily routines. On-duty co-workers shall ensure that hazmat kits and other disaster equipment are in place.

**Blue – General**
Continue all measures listed in the green advisory. Ambulance facility garage and outer doors shall be secured while co-workers are not present.

**Yellow – Significant**
Continue measures as listed previously. Remind all co-workers to be suspicious and alert to unusual activity – maintaining a heightened awareness of people and vehicles. Do not leave ambulances unattended / out of sight wherever possible. If it is necessary to leave the ambulance unattended, lock it and perform a walk-around inspection before departing. Be cautious of suspicious packages and other deliveries and report them to the appropriate EMS Supervisor.

**Orange – High**
Continue all measures previously listed. Inspect ambulance facilities at the beginning and end of each shift for any suspicious activity, unfamiliar package, box or bag. Exterior doors to ambulance facilities should be secured after normal business hours (8am-5pm). Check all visitors closely verifying their purpose and intent. Ensure that contractors on the premises are authorized. Escort visitors while in the facility. Check areas where contractors or visitors were or have worked to assure that nothing is amiss or left behind. Be especially alert during standby or activity at public events. Only students from approved education programs and co-workers on orientation will be allowed to ride during this condition.

**Red – Severe**
Designate a representative to staff the EOC if activated. Review local disaster procedures and activate them as necessary. Implement the appropriate staff recall. Keep all co-workers apprised of the current situation and additional security measures that may be necessary. Visitors (including students) are not allowed in the ambulance facilities during this condition.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# 6-1 Daily Vehicle and Equipment Check

## VEHICLE AND EQUIPMENT CHECK POLICY

**PURPOSE:** To ensure that every ambulance operating within the Mercy system is equipped and operating in a fashion that provides for consistent and optimal patient care. Operating problems or issues identified during the daily check will be reported to the appropriate EMS Supervisor for action and guidance. All vehicles and equipment will be checked at the beginning of each shift or as soon as possible during the shift.

**PROCEDURE:**

1. A complete inventory of the contents of each ambulance shall be done daily or at the beginning of each shift, or as soon as possible during the shift. This shall be done using the approved checklist for the type of ambulance or vehicle assigned.

2. Oxygen levels will be checked daily, or at the start of each shift. This will be done as soon as possible each day or each shift and documented on the daily checklist. Oxygen tanks shall be replaced at the levels provided on the daily checklist.

3. Reusable medical equipment shall be checked for defect and cleaned a minimum of monthly. All battery and oxygen powered equipment shall be checked daily with the exception of the EZ IO drill which is checked monthly. Examples include: Suction units, ventilators, laryngoscope handles/ blades and oxygen regulators.

4. Fire Extinguishers shall be checked daily. Any Fire Extinguisher found not to be appropriately charged will be removed and replaced immediately.

5. Medical equipment and medications shall be checked monthly for approaching expiration dates and removed prior to expiration.

6. Defibrillator/monitors shall be checked according to the monitor/defibrillator daily checklist.

7. Mechanical operation of each ambulance shall be checked daily using the approved vehicle checklist.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

# Mercy EMS BLS Truck Inventory

## Oxygen Compartment

___ M Tank
___ Blue Bags

## Action Area

___ Suction w/ Yankauer
___ Kleenex Box
___ Various Glove Sizes
___ Lifepak 500 (AED)
___ Thermometer
___ Bite Stick (Optional)

## O2 Stand & Walk Through

___ Spare D Cylinder
___ D Tank w/ Regulator
___ Portable Suction

## Cabinet A

___ Infant Warmer
___ Plastic Wrap
___ OB Kit
___ 1 C.A.T. & 1 SWAT-T

## Cabinet B

___ 2 - Trauma Dressings

## Cabinet C

___ 2 - Sterile H2O 1,000 ml
___ 2 - Blood Tubing

## Cabinet D

___ 1 - AED Pads
___ 1- Eip Pen
___ Foam Hand Sanitizer
___ Amphyl Spray
___ Thermometer Probes
___ 1 - Bottle Aspirin (MO Only)
___ 2 - Oral glucose

## Cabinet E

___ 1 - Hydrogen Peroxide Bottle
___ 4 - Sets Boot Covers
___ 1 - Regular Protective Eyewear
___ 1 - Over Glasses Protective Eyewear
___ 3 - HEPA Masks
___ 2 - Face Masks/Gowns
___ 1 - Set Soft Restraints (ankle & wrist)
___ 2 - Ear Pluggs

## Cabinet F

___ 2 - Pediatric NRB
___ 2 - Pediatric Nasal Cannula
___ 2 - Pediatric ETCO2 Cannula
___ 1 - Inhalation H2O
___ 4 - Adult NRB
___ 4 - Adult Nasal Cannula
___ 2 - Adult ETCO2 Cannula
___ 1-Standard/Eclips Nebulizer
___ 1-Inline Neb Kit

## Cabinet G - Shelf 1

___ 3 - Kerlex Roll
___ 1 - SAM Splint
___ 2 - Triangle Bandage
___ 2 - Coban Roll
___ 1 ea - 4" & 6" Ace Wrap
___ 1 ea - 1" & 2" Tape
___ 4 - Vaseline Gauze Dressing
___ 4 - Wet Dressing
___ 2 - Sterile 4x4 Tub
___ 20 - Sterile 4x4
___ 20 - Sterile 2x2
___ 1 - Non-sterile 4x4 Package
___ 6 - ABD Pads
___ 1 - Bandaid Box
___ 2 - Hot Pack
___ 2 - Cold Pack
___ 1 - Ring Cutter
___ 1 - Extrications Collar

## Cabinet G - Shelf 2

___ 2 - Denture Cups
___ 4 - Emesis Cup
___ 2 - Urinal
___ 2 - FX Bed Pan
___ 2 - Convenience Bag
___ 1 - Gait Belt
___ 10 - Emergency Blankets

## Cabinet H

___ 1 ea - Adult / Child / Infant BVM
___ 1 - Large Bulb Syringe
___ 1 - V-Vac Container
___ IV Supplies
___ 1 - Sharps Shuttle
___ 4 - Maxi Drip Tubing
___ 2 - LR 1,000 ml
___ 2 - NS 1,000 ml
___ 2 - Yankauers/Suction Tubing

## Cabinet I

___ BP Monitor w/ 1 ea cuff size

## Squad Bench Storage

___ Flannel and Thermal Blankets
___ Pillow
___ Traction Splint
___ 10 - Sheets
___ 5 - Pillow Cases
___ 2 - Gowns
___ PediMate
___ HazMat Kit
___
___ 2 - Waterproof Sheets

## End Of Cabinets

___ Purple Top SaniCloth
___ Orange Top SaniCloth
___ KED
___ LSB
___ C-Collar Bag
___ Whisk Broom

## Jump Bag

Outside Top Pouch

___ BP Cuff
___ Stethoscope
___ Glucometer
___ Pulse Oximeter

Side Top Pouch

___ 1 - Adult Nasal Cannula
___ 1 - Adult NRB
___ 1 - Adult ETCO2 Cannula

Inside Back Pouch

___ 1ea King Airways; LMA Size 1, 1.5, 2
___ 1 - Manual Suction
___ 1 - Adult BVM

Inside Front Center

___ 2 ea - 22ga - 14 ga IV Catheter
___ 1 - Tourniquets
___ 1 - Pressure Extension Set
___ 1 - Blood Draw Kit
___ 2 - Chloraprep Wipe
___ 1 - Povidone-Iodine Swabsticks
___ 2 - Alcohol Wipe
___ Sharps Shuttle

Inside Front Right Long Pouch Bottom

___ 1 - NS 1,000 ml
___ 1 - Maxi Drip Tubing
___ 2 - Veniguards

Inside Top Pouch

___ 1 - Coban Roll
___ 1 ea - 2" & 3" & 4" ACE Wrap
___ 2 - Triangle Bandage
___ 10 - Sterile 4x4
___ 1 - Kerlex Roll
___ 4 - ABD Pad
___ 1 ea - 1" & 2" Tape
___ Bandaids
___ 1 C.A.T. & 1 SWAT-T
___ 5 - Triage Tags
___ 6-2x2s

Inside Front Left

___ 1 - Hot Pack
___ 1 - Cold Pack
___ 1 - SAM Splint
___ Various Sizes of OPA
___ Various Sizes of NPA

On Top

___ 1 - Trauma Dressing

Inside Front Right

___ 2-Oral Glucose
3 ___ 1-EpiPen
___ 1-Morgan Lens

___ Organizer Box / Maps Etc.

Revised 12/13/2016

# Mercy EMS ALS Ambulance Inventory

2/11/2017

**Oxygen Compartment**

| | |
|---|---|
| 1 | - M Tank |
| 1 | - Broom |
| 1 | - Linen Bags |
| 1 | - Re-Juv-Nal |

**LSB Compartment**

| | |
|---|---|
| 2 | - KED / Speed Board |
| 2 | - SMR Bags |
| 1 | - Scoop Stretcher |
| 2 | - LSB |
| 1 | - Stair Chair (opt) |
| 2 | - Cot Straps (opt) |

**Wheelwell Compartment**

| | |
|---|---|
| 2 | - Helmets |
| 1 | - Hazmat Kit |
| 2 | - PFD's (Opt) |
| 1 | - Pry Axe |
| 1 | - Throw Rope (Opt) |
| 2 | - Sets Leather Gloves |
| 1 | - Man S.A.C. (Opt) |

## Cabinet A

Shelf 1

| | |
|---|---|
| 1 | - IVAC Pump Charger |
| 2 | - Trauma Dressings |
| 1 | - OB Kit, Infant Warmer |
| 1 | - Trauma Scissors |
| 1 | - Ring Cutter |
| 1 | - 1 Gallon Freezer Bags |
| 1 | - Plastic Wrap |

Shelf 2

| | |
|---|---|
| 20 | - Sterile 4x4's |
| 20 | - Sterile 2x2's |
| 4 | - Tubs Sterile 4x4's |
| 6 | - Rolls Kerlex |
| 1 | - Box Flexible Bandages |
| 10 | - ABD Pads |
| 3 | - Cold Packs |
| 3 | - Hot Packs |
| 1 | - Hydrogen Peroxide |

Shelf 2

| | |
|---|---|
| 6 | - Triangle Bandages |
| 2 | - Coban Rolls |
| 2 | - 4" Ace Wrap |
| 2 | - 6" Ace Wrap |
| 1 | - 1" Tape |
| 1 | - 2" Tape |
| 4 | - Vaseline Gauze |
| 1 | - SAM Splint |
| 8 | - N95 Masks (4 ea. Size) |
| 1 | - Protective Eyewear |
| 1 | - Over Glasses Eyewear |
| 8 | - Disposable Gowns |
| 3 | - Head Set Ear Muffs |
| 4 | - Boot Covers |
| 1 | - Extrication Collar |
| 1 | - C.A.T. |
| 1 | - SWAT-T |

## Cabinet B

Shelf 1

| | |
|---|---|
| 1 | - ea - BVM (adult, ch, inf) |
| 1 | - Lg Bulb Syringe |
| 1 | - Set OPA |
| 1 | - Set NPA |
| 2 | - O2 Humidifiers |
| 1 | - CPR Mask w/ O2 port |
| 1 | - V-vac Spare |
| 1 | - ENK Flow Modulator Set |
| 1 | - 4.0 Shiley |

Shelf 2

| | |
|---|---|
| 2 | - Ped NRB |
| 2 | - Ped Cannula |
| 2 | - Aero Eclipse Nebulizer |
| 2 | - Nebulizer Mask w/ Elbow |
| 4 | - Adult Cannula |
| 4 | - Adult NRB |
| 1 | - In-line Neb Kit |

Shelf 3

| | |
|---|---|
| 4 | - Capnoline Plus |
| 2 | - Capnoline Pediatric |
| 4 | - Adult/Ped Filter Line |
| 1 | - Adult ETT Holder |
| 1 | - Pediatric ETT Holder |
| 2 | - BAAM |
| 2 | - ET Swivels |
| 2 | - 30 mm Connectors |
| 1 | - ea - Salem Sump tubing Sizes 8, 12, 14 |
| 4 | - Packages Surgilube |
| 2 | - Packages Lidocaine Jelly |
| 2 | - 12 cc Syringes |
| 2 | - ea - Suction Catheters Sizes 8, 12, 14 |
| 2 | - Yankauer Suction Cath |
| 2 | - 60 cc Syringes |
| 2 | - ea - Mallinckrodt ETT |
| 1 | - Spare Laryngo./blades (Opt) |
| 1 | - ea (2-5.5) uncuffed ET Tubes |
| 2 | - ea 6, 7, 8 ET Tubes |
| 1 | - ea - Slylets (adult & ped) |
| 1 | - Turkel Needle |
| 2 | - 6mm Endotrol |

## Cabinet C

| | |
|---|---|
| 1 | - Pkg Electrodes |
| 1 | - Pkg Pedi Electrodes |
| 2 | - Adult Quick Combo Pads |
| 1 | - Ped Quick Combo Pads |
| 1 | - Thigh BP Cuff |
| 1 | - Pedi BP Cuff |
| 1 | - Stethoscope |

Spare Meds

| | |
|---|---|
| 8 | - MGs Levophed |
| 2 | - Dopamine Premix drip |
| 2 | - Heparin Premix drip |
| 2 | - D5W 100 ml |
| 2 | - Saline Flush |
| 6 | - Epi 1:10,000 |
| 200 | - MGs Lidocaine Bolus |
| 6 | - MGs Atropine |
| 200 | - mEq s Sodium Bicarb |
| 4 | - Grams Magnesium Sulfate |
| 1 | - Nitro Spray |
| 1 | - Bottle 81 mg ASA |
| 1,000 | - MGs Calcium Chloride |
| 50 | - MGs Captopril |
| 450 | - MGs Amiodarone |
| 2 | - NTG Paste/Paper |
| 36 | - MGs Adenocard |
| 8,000 | - Units Heparin Vial |
| 45 | - MGs Cardizem |
| 1 | - Sleeve 5 Advantage Bag |
| 2 | - 250 ml bag NS |
| 3 | - Duoneb |
| 6 | - Albuterol |
| 2,000 | - MGs Tranexamic Acid |
| 40 | - Units Pitocin |
| 2 | - MGs Epi 1:1,000 |
| 125 | - MGs Solu-Medrol |
| 1 | - LTA |
| 160 | - MGs Lasix |
| 2 | - Racemic Epi |
| 1 | - Neo Synephrine |
| 2 | - Oral Glucose |
| 200 | - MGs Thiamine (2 vials) |
| 50 | - GM Dextrose D50 |
| 1 | - MGs Glucagon |
| 2 | - MGs Narcan |
| 20 | - MGs Labetalol |
| 8 | - MGs Zofran |
| 8 | - MGs Zofran ODT |
| 75 | - MGs Phenergan |
| 50 | - MGs Benadryl |
| 10 | - MGs Haldol |
| 1 | - Act. Charcoal |
| 3,776 | - MGs Children's Tylenol |
| 200 | - MGs Pediaprofen |
| 16 | - MGs Decadron |
| 1 | - Tetracaine |
| 2 | - Morgan Lens |
| 1 | - Vicks |
| 2 | - Lovenox Tags |
| 5 | - Med. Add Labels |

## Cabinet D

Shelf 1

| | |
|---|---|
| 1 | - Suction Canister |
| 1 | - Suction Tubing |
| 3 | - Emesis Cup |
| 2 | - Convenience Bags |
| 2 | - Urinals |
| 2 | - Bedpans |
| 2 | - Denture Cup |
| 10 | - Emergency Blankets |

Shelf 2

| | |
|---|---|
| 8 | - Green Sheets |
| 4 | - Pillow Cases |
| 8 | - Towels |
| 8 | - Washcloths |
| 2 | - Pt Gowns |
| 4 | - Soft Restraints |
| 1 | - Orange Top SaniCloth |
| 1 | - Purple Top SaniCloth |
| 2 | - Waterproof Sheets |

## Cabinet E

Shelf 1

| | |
|---|---|
| 2 | - Sterile H2O 1,000 ml |
| 1 | - IV Start Tray |
| 1 | - ea Box Gloves |

Shelf 2

| | |
|---|---|
| 4 | - Maxi Drip Tubing |
| 3 | - Alaris Pump Tubing |
| 3 | - IVac Pump Tubing |
| 2 | - Blood Tubing |
| 5 | - LR 1,000 ml |
| 5 | - NS 1,000 ml |
| 1 | - Peds Arms Board |

**Cabinet F**

1 - BP Monitor w/ 1 ea. Cuff (optional)
1 - Fastpack Battery
1 - Various Chargers
1 - LP AC Power Supply (Opt)
LVAD Book

**Cabinet G**

1 - Pneupac Ventilator (Opt)
1 - CPAP w/ spare kit

**Cabinet I**

1 - Narcotic Box
1 - RSI Kit

**Walkway**

Personal Hazmat Kits
O2 Stand (Spare D Tank)
D Tank w/ Regluator

**Squad Bench Storage**

1 - Adult BP Cuff
1 - Pedimate
10 - Flannel & Thermal Blanket
1 - Pillow

1 - D/E Tank (Opt)
1 - Traction Splint
1 - Sharps Cont. (End Bench)

**ALS Compartment**

1 - Portable Suction
1 - Airway Bag (if not on cot)
1 - Pediatric Bag
1 - Razor Charger
1 - ALS Bag (if not on cot)
2 - Biological Hazmat Bags
1 - Impact Ventilator (Opt)

**Action Area**

1 - LP12/Zoll X (if not on cot)
1 - Suction with Yankauer
1 - Box Kleenex

**Left Wall**

1 - Sharps Container (Opt)
1 - Hand Sanitizer Foam
1 - IVAC Pump

# Mercy EMS M37 Inventory

## Oxygen Compartment
- ___ M Tank
- ___ Broom
- ___ Sm Red Bags
- ___ Lg Red Bags
- ___ Linen Bags
- Re-Juv-Nal

## Driver Side Compartment A
- ___ 2 - Helmets
- ___ 1 - Hazmat Kit
- ___ Triage Kit
- ___ 1 - Pry Axe
- ___ 2 - Sets Leather Gloves
- ___ Man S.A.C. (Opt)
- ___ Pedi Vacuum Splint (Opt)

## Driver Side Compartment B
- ___ Personal Hazmat Kits

## LSB Compartment
- ___ 2 - KED / Speed Board
- ___ 2 - SMR Bags
- ___ Scoop Stretcher
- ___ 2 - LSB
- ___ Pedi Board

## Passenger Side Comp. A
- ___ HeadBeds & C-Collars

## ALS Compartment
- ___
- ___
- ___
- ___
- ___

## LT Wall
- ___ IVAC Med System III

Top Shelf

Bottom Shelf

## Walkway
- ___ Flash Light
- ___ Thermometer

O2 Stand
- ___ Spare D Cylinder
- ___ D Tank w/ Regulator

## Cabinet A
Shelf 1
- ___ #REF!
- ___ #REF!
- ___ 3 ea Hot & Cold packs
- ___ #REF!
- ___ #REF!
- ___ #REF!
- ___ 1-Box Flexible Bandages

Shelf 2
- ___ 10-ABD pads
- ___ #REF!
- ___ Ring Cutter
- ___ 2-Sam Splints
- ___ 6-Triangular Bandages
- ___ Tape
- ___ Ace Wraps
- ___ Coban
- ___ 5-3x8 non adherent dressing
- ___ Petrolatum Gauze
- ___ Peroxide
- ___ Nose Clamps

## Cabinet B
Shelf 1 (spare medications)
- ___ 1 - Nitro Drip 250 ml
- ___ 1 - Dopamine Premix
- ___ 2 - Heparin Premix
- ___ 2 - D5W 100 ml
- ___ 2 - NS for Injection
- ___ 12 - Epi 1:10,000
- ___ 2 - Lidocaine Bolus
- ___ 4 - Atropine
- ___ 2 - Sodium Bicarb
- ___ 1 - Nitro Spray
- ___ 1 - Bottle 81 mg ASA
- ___ 1 - Sleeve 5 Advantage Bag
- ___ 1 - Epi Pen
- ___ 1 - LTA
- ___ 1 - Neo Synephrine
- ___ 2- Oral Glucose
- ___ 2 - D50 50 ml
- ___ 1 - Act. Charcoal Sorbitol
- ___ 2 - Pediaprofen/Child Tyl
- ___ 1 - Calcium Chloride
- ___ Tetracaine w/ Morgan Lens
- ___ Vicks
- ___ 2 - Labatalol
- Med. Add Labels

Shelf 2
- ___ 3 - IVAC Pump Tubing
- ___ 3 - Alaris Pump Tubing
- ___ 3-1000ml LR
- ___ 5-1000ml NS
- ___ 4-Primary Tubing
- ___ 6-Extension Sets

## Cabinet C
- ___ TransWarmer
- ___ OB Kit
- ___ Teddy Bear

## Cabinet D
- ___ Suction Canister
- ___ Yanker
- ___ Suction Tubing

## Cabinet E
Shelf 1
- ___ 1 - Pkg Electrodes
- ___ 1 - Pkg Pedi Electrodes
- ___ 2 - Adult Quick Combo Pads
- ___ 1 - Ped Quick Combo Pads
- ___ Monitor Paper
- ___ Thermometer Probes
- ___ 4 - Adult NRB
- ___ 4 - Adult Nasal Canula
- ___ 2-Inhalation Sterile Water
- ___ Razor Heads

## Cabinet E
Shelf 2
- ___ 4-Smart Capnoline Plus
- ___ 4-Smart Capnoline Plus Ped
- ___ 4-Smart Capnoline Plus ET
- ___ #REF!
- ___ 2-Nebulizers
- ___ #REF!
- ___ #REF!
- ___ #REF!
- ___ BVM Neb. setup

## Cabinet F
Shelf 1
- ___ 2-Adult BVM
- ___ Child BVM
- ___ Infant BVM
- ___ 1-each LMA 1 1/2 to 5
- ___ V-VAC Spare
- ___ 4-Surgilube
- ___ Lidocaine Jelly
- ___ #REF!
- ___ #REF!

Shelf 2
- ___ 1-Child ET tube holder
- ___ 2-ET tube swivel
- ___ 1-Adult ET tube holder
- ___ 2-60cc syringe
- ___ 2-12 cc Syringe
- ___ 1-Bulb Syringe
- ___ Laryngoscope / Blades
- ___ Turkel Needle
- ___ 2 each suction catheters
- ___ 2 ea Mallinckroct ETT
- ___ 1 ea 2 through 5.5 ET Tubes
- ___ 2-BAAM
- ___ 1 ea Stylets (adult & pedi)
- ___ 2-30mm Connectors
- ___ 1 ea - Salem Pump tubing
- Sizes 8, 12, 14
- ___ ENK Flow Modulator Set
- ___ 1 - 4.0 Shiley
- ___ Bougie
- ___ Spare Laryngoscope Blades
- ___ 2-6.0 Endotrol

## Cabinet G
Shelf 1
- ___ 8-Green/Blue Sheets
- ___ 2-Pt. Gowns

Shelf 2
- ___ 8-Washcloths
- ___ 8-Towels
- ___ 4-Pillowcases

Shelf 3
- ___ Restraints
- ___ Cling Wrap
- ___ Ziploc Bags
- ___ PPE (mask, gown, goggles)
- ___ 3-Head Set Ear Muffs
- ___ Personal Belongings Bags
- ___ Trauma Scissors

## Cabinet H
- ___ IV Tray -see check list
- ___ 2-Blood Tubing

Medication Box
- ___ 4 - Magnesium Sulfate
- ___ 4- Captopril
- ___ 3 - Amiodarone
- ___ 3 - Procainamide
- ___ 5- Adenocard
- ___ 2 - Heparin Vial
- ___ 2 - Cardizem
- ___ 4- Duoneb
- ___ 7- Albuterol
- ___ 2 - Epi 1:1,000
- ___ 1 - Solu-Medrol
- ___ 3 - Lasix
- ___ 2 - Racemic Epi
- ___ 2 - Thiamine
- ___ 2 - Glucagon
- ___ 1 - Narcan
- ___ 2 - Zofran
- ___ 2 - Compazine
- ___ 2- Benadryl
- ___ 2 - Pitocin
- ___ 2 - Haldol
- ___ 2 - Decadron

## Cabinet I
- ___ Suction Canister
- ___ Yanker
- ___ Suction Tubing

## Cabinet J
- ___ 1 ea Spare auto BP cuff
- ___ Thigh BP cuff
- ___ Large Adult BP cuff
- ___ Pedi BP cuff
- ___ Stethoscope

## Cabinet K
- ___ Narcotic Box
- ___ RSI Kit

## Cabinet M
- ___ 1 ea size box of gloves

## Cabinet N
- ___ 2-Bed Pan
- ___ 10 Emise Bags
- ___ 2-Urinal
- ___ 1-Box Kleenex

## Cabinet O
- ___ Re-Juv-Nal
- ___ #REF!
- ___ Purple Top SaniCloths

## Squad Bench Storage
- ___ PediMate
- ___ Flannel & Thermal Blanket
- ___ Pillow
- ___ MAST Pants
- ___ D Tank Spare
- ___ Traction Splint
- ___ Sharps Cont.

Minimum Stock Levels - Please Do Not Be Excessive

2/11/2017

# Mercy EMS Squad2 Inventory

## Oxygen Compartment
- ___ M Tank
- ___ Broom
- ___ Sm Red Bags
- ___ Lg Red Bags
- ___ Linen Bags
- ___ Re-Juv-Nal
- ___ Decon litter
- ___ SKED

## Driver Side Compartment A
- ___ 2 - Helmets
- ___ 1 - Hazmat Kit
- ___ Triage Kit
- ___ 1 - Pry Axe
- ___ 2 - Sets Leather Gloves
- ___ Man S.A.C. (Opt)

## Driver Side Compartment B
- ___ Stair Chair

## LSB Compartment
- ___ 2 - KED / Speed Board
- ___ 2 - SMR Bags
- ___ Scoop Stretcher
- ___ 2 - LSB
- ___ Pedi Board

## Passenger Side Comp. A
- ___ Scale
- ___ HeadBeds & C-Collars

## SRT Compartment
- ___ M7 Bag
- ___ Stomp Bag

## ALS Compartment
- ___ Portable Suction
- ___ Trauma Bag
- ___ Pediatric Bag

## LT Wall
- ___ IVAC Med System III

Top Shelf

Bottom Shelf
- ___ WMD Kit

## Walkway
- ___ Personal Hazmat Kits
- ___ Flash Light
- ___ Thermometer

O2 Stand
- ___ Spare D Cylinder
- ___ D Tank w/ Regulator

## Cabinet A
Shelf 1
- ___ 2-Sterile H2O 1000ml
- ___ 4x4s
- ___ 4 ea Hot & Cold packs
- ___ 6-Kerlex rolls
- ___ Sterile 4x4s
- ___ Trauma Dressing

Shelf 2
- ___ 10-ABD pads
- ___ 2x2's
- ___ Ring Cutter
- ___ 2-Sam Splints
- ___ 6-Triangular Bandages
- ___ Tape
- ___ Ace Wraps
- ___ Coban
- ___ 5-3x8 non adherent dressing
- ___ Petrolatum Gauze
- ___ Peroxide
- ___ Nose Clamps

## Cabinet B
Shelf 1 (spare medications
- ___ 1 - Nitro Drip 250 ml
- ___ 1 - Dopamine Premix
- ___ 2 - Heparin Premix
- ___ 2 - D5W 100 ml
- ___ 2 - NS for Injection
- ___ 12 - Epi 1:10,000
- ___ 2 - Lidocaine Bolus
- ___ 8 - Atropine
- ___ 2 - Sodium Bicarb
- ___ 1 - Nitro Spray
- ___ 1 - Bottle 81 mg ASA
- ___ 1 - Sleeve 5 Advantage Bag
- ___ 1 - Epi Pen
- ___ 1 - LTA
- ___ 1 - Neo Synephrine
- ___ 2- Oral Glucose
- ___ 2 - D50 50 ml
- ___ 1 - Act. Charcoal Sorbitol
- ___ 2 - Pediaprofen
- ___ Tetracaine w/ Morgan Lens
- ___ Vicks
- ___ Lovenox Tags
- ___ Med. Add Labels

Shelf 2
- ___ 3 - IVAC Pump Tubing
- ___ 3 - Alaris Pump Tubing
- ___ Blood Draws
- ___ Saline Flushes

Medication Box
- ___ 4 - Magnesium Sulfate
- ___ 4- Captopril
- ___ 3 - Amiodarone
- ___ 3 - Procainamide
- ___ 6- Adenocard
- ___ 2 - Heparin Vial
- ___ 2 - Cardizem
- ___ 4- Duoneb
- ___ 7- Albuterol
- ___ 2 - Epi 1:1,000
- ___ 3 - Solu-Medrol
- ___ 3 - Lasix
- ___ 2 - Racemic Epi
- ___ 2 - Thiamine
- ___ 2 - Glucagon
- ___ 2 - Narcan
- ___ 4 - Zofran
- ___ 3 - Compazine
- ___ 3- Benadryl
- ___ 2 - Pitocin
- ___ 2 - Haldol
- ___ 2 - Decadron

## Cabinet C
- ___ TransWarmer
- ___ OB Kit

## Cabinet D
- ___ Suction Canister
- ___ Yanker
- ___ Suction Tubing

## Cabinet E
Shelf 1
- ___ 1 - Pkg Electrodes
- ___ 1 - Pkg Pedi Electrodes
- ___ 2 - Adult Quick Combo Pads
- ___ 1 - Ped Quick Combo Pads
- ___ Monitor Paper
- ___ Thermometer Probes
- ___ 5-Adult NRB
- ___ 5-Adult Nasal Canula
- ___ 2-Inhalation Sterile Water

Shelf 2
- ___ 5-Smart Capnoline Plus
- ___ 5-Smart Capnoline Plus Ped
- ___ 5-Smart Capnoline Plus ET
- ___ 2-Eclipse Nebulizers
- ___ 2-Nebulizers
- ___ 2-Neb. Mask
- ___ 4-Pedi NC
- ___ 4-Pedi NRB
- ___ BVM Neb. setup

## Cabinet F
Shelf 1
- ___ 2-Adult BVM
- ___ Child BVM
- ___ Infant BVM
- ___ 1-each LMA 1 1/2 to 5
- ___ V-VAC Spare
- ___ 4-Surgilube
- ___ Combi Tube
- ___ Oral Airways
- ___ Nasal Airways

Shelf 2
- ___ 2-Child ET tube holder
- ___ ET tube swivel
- ___ 2-Adult ET tube holder
- ___ 2-60cc syringe
- ___ 2-12 cc Syringe
- ___ 2-Bulb Syringe
- ___ Laryngoscope / Blades
- ___ Turkel Needle
- ___ 2 each suction catheters
- ___ 2 ea 6,7,8 ET Tubes(Endotrol)
- ___ 1 ea 2 through 5.5 ET Tubes
- ___ BAAM
- ___ 1 ea Stylets (adult & pedi)
- ___ 2-30mm Connectors
- ___ 1 ea - Salem Sump tubing
- Sizes 8, 12, 14
- ___ ENK Flow Modulator Set
- ___ 1 - 4.0 Shiley

## Cabinet G
Shelf 1
- ___ 8-Green/Blue Sheets
- ___ 2-Pt. Gowns

Shelf 2
- ___ 8-Washcloths
- ___ 8-Towels
- ___ 4-Pillowcases

Shelf 3
- ___ Restraints
- ___ Cling Wrap
- ___ Ziploc Bags
- ___ PPE (mask, gown, goggles)
- ___ 3-Head Set Ear Muffs
- ___ Personal Belongings Bags

## Cabinet H
- ___ IV Tray -see check list
- ___ 3-Blood Tubing

## Cabinet I
- ___ Suction Canister
- ___ Yanker
- ___ Suction Tubing

## Cabinet J
- ___ 1 ea Spare auto BP cuff
- ___ Thigh BP cuff
- ___ Large Adult BP cuff
- ___ Pedi BP cuff
- ___ CPAP bag
- ___ CPAP spare

## Cabinet K
- ___ Narcotic Box
- ___ RSI Kit

## Cabinet L
- ___ 4-1000ml LR
- ___ 6-1000ml NS
- ___ 15 Primary Tubing
- ___ 6-Extension Sets

## Cabinet M
- ___ 1 ea size box of gloves

## Cabinet N
- ___ Bed Pan
- ___ 10 Emise Bags
- ___ Urinal
- ___ 2 - Denture Cups

## Cabinet O
- ___ Re-Juv-Nal
- ___ Amphyl Spray
- ___ Teddy Bear
- ___ Purple Top SaniCloth

## Squad Bench Storage
- ___ PediMate
- ___ Flannel & Thermal Blanket
- ___ Pillow
- ___ MAST Pants
- ___ E Tank Spare
- ___ Traction Splint
- ___ Sharps Cont. (End of Bench)

Minimum Stock Levels - Please Do Not Be Excessive

2/11/2017

# Mercy EMS ALS Stat Pack

## Top Compartment

Stethoscope
EZIO & Needles 15mm, 25mm & 45mm
EZ stabilizer
Red bags
pressure infuser bag
Adult Blood Pressure Cuff

## Upper Zipper Compartment

Medication Boxes (see separate inventory list)
1 single Advantage Bag - replace every month
1-Tranexamic Acid in Medication Box (Ops)
1-bag 100ml D5W (Ops)
Glucometer

## Left Side

1 - Hot Pack (Ops)
1 - Cold Pack (Ops)
1 - Silk Tape
1 - Ring Cutter (Ops)
2 - Triangle Bandages
1 - convenience bags
1 - Coban
2 - 4" ace wrap
1 - pt belonging bags

## Lower Zipper Top Compartment

6 - MG Epi 1:10,000
1 - MG Atropine
100 - MEQ Sodium Bicarb
2 - Morgan Lenses (Ops)
2 - Tetracaine (Ops)
1 - Activated Charcoal (Ops)
1 - Tylenol (Ops)
1 - IBU Syringe (Ops)
1 - GM Calcium Chloride
1 - D50 50mL
1 - Insta glucose
20 - MGs Labetalol
400 - MGs Lidocaine

## Right Side

1 - C.A.T.
1 - SWAT - T
2 - Abd Pads
1 - Trauma Sheet
1 - Thermometer (Ops)
1 - Silk Tape
1 - SAM Splint
1 Nose Clip
1 - Tub of 4x4s
2 - 4x4s
2 - vaseline gauze
1 - trauma shears
1 - Kerlex
1 - QuickClot TraumPad
1 - QuickClot Z-fold

## Lower Zipper Bottom Compartment

IV Start Bag (See separate inventory list)
1 IV Tubing
1 NS 1000mL Bag

Lower Zipper Pouch

1 pkg. Triage Tags (Min. 5 Tags)

Items with (Ops) next to them are to only be placed in StatPacks for the Ops vehicles.

# ALS BAG

## Top

Medication Box (see second sheet)

Blood Pressure Cuff / Stethascope

## Center Left to Right

6 - MGs Epi 1:10,000
1 - MG Atropine
1 - Oral Glucose
2 - Red Bags ( Front Zipper )
20 - MGs Labetalol
1 - NS with High Pressure Extension tubing and Maxi Drip
25 - GM Dextrose D50
400 - MGs Lidocaine
100 - MEQ Sodium BiCarb
1 - GM Calcium Chloride

## SHARPS Pouch

GLUCOMETER

## Front Pouch

2 - ABD Pads ( Elastic Loop )
1 - Unsterile 4 x 4 with 10 - Sterile 4 x 4 ( Pouch )
1 - Tub 4 x 4 ( Pockets )
1 - 2" tape
2 - Triangle Bandage ( Elastic Loop )
1 - Sam Splint ( Pockets )
1 - 4" Ace Wrap ( Elastic Loop )
2 - 6" Kerlix ( Pockets )
1 - Coban ( Elastic Loop )
1 - Vaseline Gauze ( Pouch )
1 - Wet Dressing ( Pouch )
2 - Convenience Bag ( Pouch )
1 - Trauma Shears ( Elastic Loop)
1 - C.A.T
1 - SWAT-T
1 - Nose Clip
5 - Triage Tags
1 - QuickClot Trauma Pad
1 - QuickClot Z-fold

## Side Pouch / Right

EZ IO drill in case/ containing 1 needle- 15mm, 25,mm and 45mm, 1 arm band, 1 EZ connecting tube

EZ-Stabilizer

## Back

1 - Pressure Infuser Bag
1 - Trauma Sheet
1 - pt belonging bag
1 - signle advantage bag - Replace every month

11/21/2016

# ALS Bag and StatPack

## Medication Box

### Inside A

25 - MG Captopril
450 - MG Amiodarone
100 - MG Thiamine
8 - MG Zofran
50 - MG Diltiazem
125 - MG SoluMedrol
2 - MG Narcan
2 - Albuterol TX
1 - Duoneb TX
16 - MG Decadron

### Inside B

8 - MG Zofran ODT
12.5 - MG Phenergan
1 - MG Glucagon
4 - MG Magnesium Sulfate
1 - Racemic Epinephrine TX
10 - Haldol
3 - Filter Needles
18 - MG Adenocard
2 - MG Epinephrine 1:1,000
50 - MG Benadryl

## IV Bag

### A

2 - 1 cc TB Syringe
2 - 3 cc Syringe
2 - 6 cc Syringe
2 - 12 cc Syringe
1 - Blood Draws
2 - Non-Sterile 4X4's
1 - 1" Tape
1 - 20 cc Syringe

### Inside

2 - Tourniquet
2 - Saline Flushes
2 - Needleless Med. Draw Catheter
2 - Veni-Gards
1 - Extension Tubing
1 - Povidone-Iodine Swabsticks
1 - Female Luer Adapter Vacutainers
1 - Turkel Needle

### Center

1 - 20 cc Syringe

### B

2 - 22 ga. IV Catheters
2 - 24 ga. IV Catheters
2 - 20 ga. IV Catheters
2 - 18 ga. IV Catheters
2 - 16 ga. IV Catheters

2 - 25 ga. Needles
2 - 22 ga. Needles
2 - Filter Needles
4 - Chloraprep
1 - Sharps Shuttle
2 - Bandages
1 - Pediatric Arm Board

2 - Rapid Infuser

8/22/2017

# Ferno O2 Bag

## Top Pouch

**Removeable Bag**

1 - Surgical Cric Kit
1 - PPE
1 - each. NG Tubes / Lubricant
1 - 60 cc Cath Tip Syringe
1 - In Line Nebulizatoin Kit

**Mesh Pouch**

1 - each. King LTSD size 4 & 5 (or CombiTube equivalent)
1 - King LTD size 2
1 - King LTSD Size 3

**Zippered Pocket**

1 - Adult Nasal Cannula
1 - Adult NRB

1 - Pedi Nasal Cannula
1 - Pedi NRB

## Top Inside

| | |
|---|---|
| Intubation Kit | |

## Bottom Inside

| D Tank | | |
|---|---|---|
| **Blue Insert Bag**<br>1 - OPA / NPA<br>2 - Lubricants<br>1 - Bougie | **Blue Insert Bag**<br>1 - ETCO2 ET Tube<br>1 - AeroEclipse w/ Mask<br>Racemic Epi | Adult BVM |
| V-Vac | | |

## Intubation Kit

Inside

| | | |
|---|---|---|
| Lubricant<br>Spare Blades | Laryngoscope<br>2 - 12 cc Syringe | 2 - ea - ET Tubes 6, 7, 8<br>2 - 6 Endotrol Tubes<br>2 - Adult Stylets<br>1 - Magill Forceps<br>1 - 1" Tape<br>2 - BAAM<br>1 - Set of Batteries for Laryngoscope |

Pockets

| | |
|---|---|
| 1 - Neosynephrine<br>1 - LTA | 1 - Adult Tube Holder<br>1 - ETCO2 ETT Connector<br>1 - BVM-ETT Swivel Connector |

4/25/2016

# Pacific O2 Bag

## Top Pouch

| Teal Bag | Zippered Pocket |
|---|---|
| ETCO2 ET Tube Set | Turkel Needle |
| | Surgical Cric Kit |
| 1 - Pedi Nasal Cannula | PPE |
| 1 - Pedi NRB | |
| NG Tubes / Lubricant | |
| 60 cc Cath Tip Syringe | |
| Nebulizer Mask w/ Elbow | |
| AeroEclipse Nebulizer | |
| InLine Neb. Kit | |
| Racemic Epi | |

## Top Inside

| | |
|---|---|
| Intubation Kit | Nasal Cannula<br>NRB |

## Bottom Inside

| | | |
|---|---|---|
| D Tank<br>Combi-Tube (1 each. King LTSD size 4 & 5)<br>1 - King LTD size 2 & 1 - King LTSD size 3 | | |
| Adult BVM | V-Vac | **Blue Insert Bag**<br>OPA / NPA<br>Lubricants |

## Intubation Kit

Inside

| | | |
|---|---|---|
| Lubricant | Laryngoscope | 2 ea - ET Tubes 6 Fr - 8 Fr<br>2 - 6 Fr Endotrol Tubes<br>2 - Stylets |
| Spare Blades | 2 - 12 cc Syringe | Magill Forceps<br>1 - 1" Tape<br>2 - BAAM<br>1 - Set of Batteries for Laryngoscope |

Pockets

| | | |
|---|---|---|
| Neosynephrine | | Adult Tube Holder |
| LTA | | ETCO2 ETT Connector |
| Bougie | | BVM-ETT Swivel Connector |

12/22/2011

# LA Rescue Pedi Bag

8/22/2017

| Top |
|---|
| 1 - Intubation Kit |
| 1 - OB Kit |
| 1 - Infant Warmer |
| 1 - Pedi Stocking Cap |
| 1 - ea LMA 1, 2 |

| Left Side |
|---|
| 1 - Broselow Tape |
| 1 - B/P Cuff |
| 1 - Stehescope |

| Main Compartment |
|---|
| Color Sets |
| 1 - Infant BVM |
| 1 - Child BVM |

| Front |
|---|
| 1 - Arm Board |
| 1 - IV Line |
| 1 - Sharp Shuttle |
| 2 - 12cc Syringes |
| 1 - Jamshidi 15g IO |
| 2 - Rapid Infuser |

| Right Side 1 |
|---|
| 1 - NRB |
| 1 - NC |
| 1 - ETCO2 NC |
| 1 - Pulse OX Probe |

| Right Side 2 |
|---|
| 2 - Abd Pad |
| 2 - Kerlix |
| 2 - 2x2s |
| 1 - 2" Tape |

| Intubation Kit | | |
|---|---|---|
| 1 - Laryngoscope | 1 - Spare Batteries | 1 - ETCO2 ET |
| 2 - Stylets | 2 - KY Jely | 1 - BVM-ETT Swivel |
| 1 - Magills | 1 - each. Miller 0, 1, & 2 | 2 - Meconium Aspirators |
| 1 - 1" Tape | 1 - each. Mac 2 & 3 | 2 - Tube Ties |

**Note about Color Sets:**

White, Pink, and Red have all been combined to the Pink and Red Bags

# Allmed Pedi Bag

**Top Compartment**
**(black zipper)**

1 - ea LMA 1, 1.5, 2
1 - Infant BVM
1 - Child BVM
1 - NRB
1 - Nasal Cannula
1 - ETCO2 Nasal Cannula

**Left Side**
**(blue zipper)**

2 - Abd. Pads
2 - 2 Kerlix
2 - 2x2's
1 - Tape

**Main Compartment**
**(black zipper)**

{zip pockets}
1 - Broselow tape
1 - 12 cc syringe
2 - tube ties
1 - Jamshidi 15g IO

{open}
- Gray bag (Intubation Kit)-
  1 - Laryngoscope
  2 - Stylets
  1 - Magills
  1 - 1" Tape
  1 - Set of batteries for Laryngoscope
  2 - Lubricant
  1 - Miller 0,1, & 2
  1 - Mac 2 & 3
  1 - ETCO2 ETT Connector
  1 - BVM-ETT Swivel Connector
- Color sets
- OB kit
- Pedi stocking cap
- Infant warmer
- NG tubes
- Meconium aspirators

**Right Side**
**(red zipper)**

1 - B/P cuff
1 - Stethoscope
1 - Bulb syringe
1 - Pulse Ox probe

**Color Sets**
**(Sizes determined by BroslowTape)**

2 - E.T. tubes
1 - IV start kit
1 - extension set
1 - venigard
2 - I.V. catheters
1 - Oral airway

**Front Compartment**
**(yellow zipper)**

1 - Arm board
1 - Maxi Drip Set
1 - Sharps shuttle
1 - Stop cock
2 - 12cc syringes
2 - Rapid Infuser

8/22/2017

# MCI Kit

Contents to be placed in a see-thru plastic box (similar to Haz-Mat Kit)

| |
|---|
| 5 - Clipboards (with task sheets attached) |
| 1 ea - Green, Red, Yellow Surveyor Tape |
| 1 ea - Green, Red, Yellow Light Sticks |
| Permanent Markers |
| Ball Point Pens |
| 2 - Legal Sized Note Pads |
| Command Vests |

9/26/2002

# Hazmat Kit

**Contents**

| |
|---|
| 4 - Towels |
| 2 - Patient gowns |
| 2 - Sheets |
| 2 - Cadaver bags |
| 1 - Small Roll of Duct Tape |
| 2 - Blue Linen Bags |

**Instructions**

1. The patient will undergo gross decon as determined by level of contamination.
2. Patient will remove clothing and place clothing in blue linen bag.
3. Patient will undergo technical decon as determined by level of contamination.
4. Patient will dry off with towels and place towels in blue linen bag.
5. Blue linen bag will be sealed and secured.
6. Triage Tag will be placed on patient with the matching number secured to blue linen bag containing patient's belongings.
7. Patient will don gown.
8. Cadaver bag will be opened and sheet placed inside.
9. Patient will be placed on sheet inside of cadaver bag.
10. Cadaver bag will be zipped to allow only patients face to be visible.
11. Cadaver bag maybe unzipped to allow appropriate patient care and assessment then re-zipped.

# Cardiac Monitor

| | | | |
|---|---|---|---|
| Monitor # | _____ | Pulse Ox Cable | _____ |
| Electrodes | _____ | Ped Disposable Sensor | _____ |
| Adult Defib Pads | _____ | Paper | _____ |
| Pedi Defib Pads | _____ | ETCO2 Supplies | _____ |
| Monitoring Cables | _____ | Accessory Bag | _____ |
| Data Cable | _____ | Date & Time | _____ |
| NTG | _____ | User Test | _____ |
| ASA | _____ | Quick Combo Cable Test | _____ |

LP 12/15 Time/Date Setting Instructions:

1) Turn LP on
2) Push the 'Option' button
3) Select 'Date/Time'
4) Use scroll knob to change time
5) Set to match time on cell phone

5/10/2012

# Cric Kits

**Surgical Cric Kit**

| | | |
|---|---|---|
| 1 | - | Medi-Plus self seal pouch |
| 1 | - | 15 blade scalpel |
| 1 | - | 10 blade scalpel |
| 1 | - | 6.0 cuffed Shiley Tube |
| 1 | - | Commercial trach tube holder |
| 5 | - | drain sponges |
| 2 | - | Povidone-Iodine Swab sticks |
| 1 | - | 12cc syringe |
| 1 | - | Small curved Kelly clamps |
| 1 | - | Nasal speculum |

11/4/2011

# IV Start Tray

| | | |
|---|---|---|
| 4 | - | 18g IV caths |
| 2 | - | 20g IV caths |
| 2 | - | 22g IV caths |
| 2 | - | 24g IV caths |
| 2 | - | 16g IV caths |
| 2 | - | Assorted 18-25g needles |
| 4 | - | Needleless Medication Draw Catheter |
| 2 | - | Filter needles |
| 10 | - | Veni-Gards |
| 10 | - | Tourniquets |
| 1 | - | Sharps shuttle |
| 1 | - | Flexible Bandages |
| 10 | - | Saline Flushes |
| 2 | - | 4x4's or 2x2's |
| 1 | - | Povidone-Iodine Swab sticks |
| 2 | - | Chloraprep Swabs |
| 2 | - | blood draw kits |
| 1 | - | 20ml syringe |
| 1 | - | 3cc syringe |
| 1 | - | 1cc TB syringe |
| 1 | - | 12cc syringe |
| 1 | - | Tubex injector |
| 2 | - | Safe T Stix's |
| 2 | - | Rapid Infuser |
| 2 | - | Female Lure Adapter Vacutainers |
| 10 | - | Extension Tubing |

8/22/2017

# In-Line Nebulization Kit

*To be kept in a zip lock bag with the Nebulizers*

Connector Flex Elbow
Adapter Valve (T Piece)
22x15mm Adapter

11/14/2012

# Cot Sto-Net

1 - Blue Tube
1 - Pt Gowns
2 - Emesis Bags

1/24/2016

# Narcotic and RSI Inventory

| NARC BOX | Min |
|---|---|
| Morphine | 30mg |
| Valium | 20mg |
| Versed 5mg/5ml | 30mg |
| Fentanyl | 600mcg |
| Dilaudid 1mg/ml | 4mg |
| Versed 10mg/2ml (keep separate) | 20mg |
| Ketamine 100mg/ml in 5ml Vials | 1000mg |
| 3 - MADDs (near kit if no room inside) | |

| RSI KIT | Min |
|---|---|
| Lidocaine | 100mg |
| Atropine | 1mg |
| Etomidate | 80mg |
| Fentanyl | 400mcg |
| Rocc. | 300mg |
| Versed 5mg/5ml | 10mg |
| Ketamine 100mg/ml in 5ml Vials | 1000mg |

1/19/2017

# LP Event List

| | |
|---|---|
| Event 1 | IV/Generic |
| Event 2 | ASA |
| Event 3 | NTG |
| Event 4 | Epi |
| Event 5 | Atropine |
| Event 6 | Amiodarone |
| Event 7 | Lasix |
| Event 8 | Captopril |
| Event 9 | Zof/Comp |
| Event 10 | MS/Fent |
| Event 11 | Nebulizer |
| Event 12 | Adenocard |
| Event 13 | Cardizem |
| Event 14 | Valuim |
| Event 15 | Norcuron |
| Event 16 | Versed |
| Event 17 | Narcan |
| Event 18 | RSI |

| | **LEADS** |
|---|---|
| Default | II,III,ETC02 |
| 2 | Paddles, ETCO2 |
| 3 | I,II,III |
| 4 | II,III,V1 |
| 5 | II,V1,V6 |

Revised 9/7/2007

# Triage Bag

## Top Outside Pockets

1 - ea size OPA & Npa
2 - Surgilube

Adult BVM

## Inside

1 - One Pack Triage Tags
-
-
-

-
-
-
-
-
-

Scissors

2 - Triangle Band.
1 - 4" Ace Wrap
1 - Coban
1 - 1" & 2" Tape

Sharps Shuttle

2 - Kerlex Rolls
Red Bags

Hot Pack
Cold Pack

SAM Splint

B/P Cuff
Stethoscope

## Inside Top Pocket

1 - Tub Sterile 4x4
1 - Multi Trauma Dressing
2 - Petroleum Gauze
2 - Abd Pads

1/23/2015

# Old Pediatric Bag

**11/212016**

## Outside

| | 1 | 2 | 3 | | |
|---|---|---|---|---|---|
| Pedi Magills<br>1 - 1" Tape<br>2 - 22 ga IV Cath<br>2 - 24 ga IV Cath | 15 ga IO | | Arm Board | | Sharps Container |

## Inside

| | | | |
|---|---|---|---|
| 2.5 mm ETT<br>3.0 mm ETT | Pediatric Stethoscope | Infant BP cuff | Child BP cuff |

## Color Coded Kits

| |
|---|
| 2 - ETT |
| 1 ea - IV Catheter |
| 1 - IV Start Kit |
| 1 - Veni-Gard |
| 1 - OPA |
| 1 - Stylet |
| 4 - Chloraprep Wipes |
| Pink Bag Meconium Aspirator |

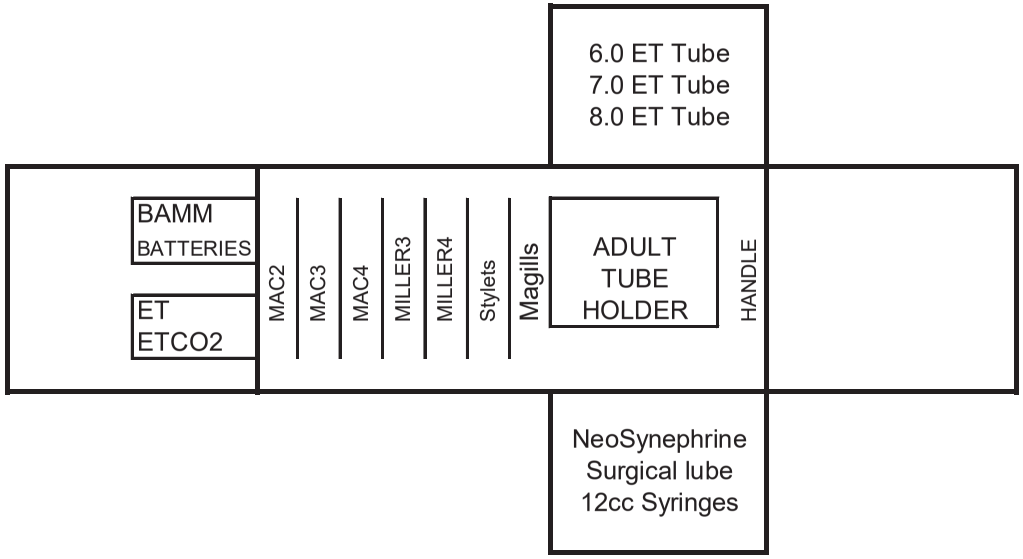
## Bottom of Bag

| | |
|---|---|
| Infant BVM | 2 - Three Way Stopcock |
| Child BVM | 2 - Child ETT Holders |
| Large Bulb Syringe | Pediatric Laryngoscope Kit |
| IO Start Kit | OB Kit |
| 3 - 12 cc Syringes | Trans Warmer |
| Pediatric NG Tubes | 2 - Kerlex |
| Pedi stocking cap | 10 - 4x4 |

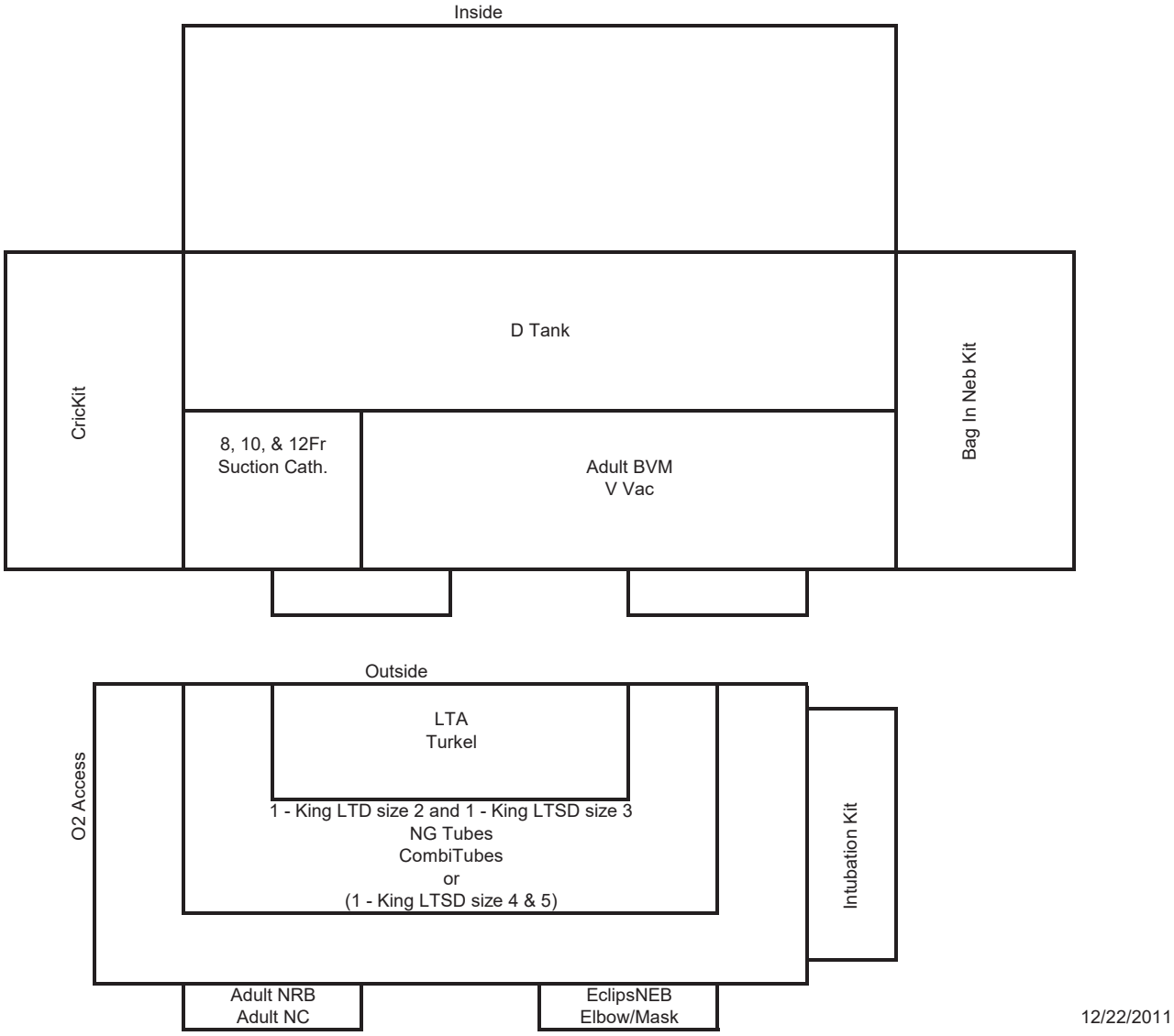
**Broselow Tape in outside pocket**

| |
|---|
| I. O. Kit: betadine, 1 15g Jamshidi needle, 10 cc syringe, N.S. bottle (10 cc), 18 g. needle, xtn-tubing, 3 way stopcock, 30 cc syringe, 15 gtts tubing |

3/2/2009


6.0 ET Tube
7.0 ET Tube
8.0 ET Tube
BAMM
BATTERIES
ET
ETCO2
MAC2
MAC3
MAC4
MILLER3
MILLER4
Stylets
Magills
ADULT
TUBE
HOLDER
HANDLE
NeoSynephrine
Surgical lube
12cc Syringes

12/22/2011


Inside
D Tank
CricKit
8, 10, & 12Fr
Suction Cath.
Adult BVM
V Vac
Bag In Neb Kit
Outside
LTA
Turkel
1 - King LTD size 2 and 1 - King LTSD size 3
NG Tubes
CombiTubes
or
(1 - King LTSD size 4 & 5)
O2 Access
Intubation Kit
Adult NRB
Adult NC
EclipsNEB
Elbow/Mask

12/22/2011

## CONTROLLED MEDICATION HANDLING PROCEDURE

PURPOSE: To provide Mercy Emergency Medical Services co-workers with specific direction in the handling of controlled medications.

PROCEDURE:

1. Registration
   - A. Each Mercy Ambulance service will be registered with the DEA and state oversight agency where required. For services where we operate on a contractual basis with an Ambulance District, the registration(s) will be maintained in the name of the District.
2. Record Keeping
   - A. All records will be kept in black ink and will be maintained at the registered address for two years. These records will document current inventory at all times, receipt and disposition of all controlled medications. All records will be maintained in a secure file and will be readily available for inspection at all times.
3. Acquisition of Controlled Medications
   - A. All ambulance service controlled medication orders will be placed with a Mercy Hospital Pharmacy and must utilize the Controlled Substance Order and Transfer Record. Schedule II orders must also have the federally required DEA 222 form. All controlled medications will be ordered and received by an EMS Supervisor. The EMS Director will provide a list of currently approved EMS Supervisors to the Pharmacy Director at the beginning of each month. Controlled medications include Morphine, Diazepam (Valium), Midazolam (Versed), Ketamine, Dilaudid and Fentanyl.
   - B. Records must be maintained and must include the date, name, address and registration number of the supplier. A constant inventory will be maintained on the Mercy EMS Controlled Substance Record which documents each receipt and disposition transaction for each controlled medication. Copies of DEA-222 forms sent to EMS Headquarters will be retained in the event the form is lost in transit to aid in tracking.
   - C. A Physician prescription cannot be used to obtain stock supplies of controlled drugs for an ambulance service.

ORDERING SCHEDULE III-V DRUGS (Valium, Versed, Ketamine)

1. The ambulance service must complete, in full, the Requesting/Receiving Registrant information on the Controlled Substance Order and Transfer Form.
2. The ambulance service lists the items needed in the Items Requested field of the order form.
3. The order/transfer form is then e-mailed to pharmacy at: SPRG_Pharmacy_Order_Desk@Mercy.Net
4. Pharmacy will order the medication and let the requester know when to pick up the order. AT NO TIME SHOULD AN ORDER BE SHIPPED via the ROi courier system.
5. The Ambulance service EMS Supervisor will present the original order form to the Pharmacy.
6. The Pharmacy will fill the items, and attach the computer receipt indicating name, strength of quantity of the item(s) received.

7. The filling Pharmacy personnel will sign the Signature of Supplier line and complete the date filled line of the transfer form.
8. EMS Supervisors will check the package for accuracy and then sign on the Signature of Receiver line of the transfer form.
9. The form is then copied for the Pharmacy's controlled substance records.
10. The original record is kept at the ambulance service for the ambulance service's controlled substance records, for a minimum of 2 years.

ORDERING SCHEDULE II ITEMS (Morphine, Fenanyl, Dilaudid)

1. The ambulance service must complete, in full, the Requesting/Receiving Registrant information on the Controlled Substance Order and Transfer Form.
2. The ambulance service lists the items needed in the Items Requested field of the order form.
3. The order/transfer form is then e-mailed to pharmacy at: SPRG_Pharmacy_Order_Desk@Mercy.Net
4. Pharmacy will order the medication and let the requester know when to pick up the order.
   AT NO TIME SHOULD AN ORDER BE SHIPPED
5. The Ambulance service EMS Supervisor will present the original order form to the Pharmacy and a signed DEA 222 form. DEA-222 order forms will be used according to their **sequential numbers**. Purchasers copy (blue – number 3), must be maintained with other secure records. The completed DEA-222 must be completed without errors (see appendix A) and must be signed by the EMS Medical Director prior to presentation to the Pharmacy.
6. The Pharmacy will fill the items, and attach the computer receipt indicating name, strength of quantity of the item(s) received.
7. The filling Pharmacy personnel will sign the Signature of Supplier line and complete the date filled line of the transfer form.
8. EMS Supervisors will check the package for accuracy and then sign on the Signature of Receiver line of the transfer form.
9. The form is then copied for the Pharmacy's controlled substance records.
   The original record is kept at the ambulance service for the ambulance service's controlled substance records, for a minimum of 2 years.
10. Pharmacy personnel will complete their section on the DEA 222 form(see appendix A). The ambulance service's copy of the DEA 222 form (blue) is provided the ambulance service EMS Supervisor at the time the order is filled.

Out-of-date Controlled Medications

1. All controlled medications will be checked for expiration date on or before the first of each month.
2. EMS Departments will isolate their expired drugs for disposal at EMS Headquarters located at 1407 St. Louis Street, Springfield, Missouri using the Cactus Smart Device which destroys the medication beyond reclamation rendering the medication unable to be diverted.
3. Expired controlled medications pending disposal shall be kept secured in the tamper-proof locked box. The locked box shall be further secured in a locking file cabinet in the ambulance service office pending proper disposal.
4. When the expired medications are removed for disposal, the quantities of each medication will be deducted from the total count and documented on the on the log "Removed for disposal, Cactus Smart Sink".

5. Medications will be secured for transport to Cactus Smart Sink and will be destroyed the same day as removal.

Disposition

1. When controlled drugs are transferred to or from the base supply and the ambulance, or between ambulances in the same service, proper documentation should be made on the controlled record for each location. If Schedule II medications are transferred to another service or base within Mercy EMS System which has its own registration, the transaction must be recorded on the appropriate DEA-222 form.
2. Damaged scheduled medications shall be wasted and destroyed. The waste must be visually witnessed by a paramedic, nurse, physician or EMT. The date, time, drug, amount, reason for damage and two signatures must be recorded on the Controlled Substance Record. A Narcotics Loss Inventory form must also be completed and copies routed accordingly.

Administration/Waste

1. Controlled drugs can only be administered on a physician's order or by guideline as authorized by the Medical Director.
2. When a controlled drug is administered, the following information must appear on the Controlled Substance Record: Date, time, patient's name, run number, ordering physician's name or if administered by guideline, Paramedic's signature and second signature.
3. When a partial dose of a controlled drug must be wasted, the waste must be visually witnessed by a paramedic, nurse, physician or EMT. The reason for waste much be documented on the Controlled Substance Record

Storage/Security

1. Medication Kept in the Ambulance:
   a. Controlled drugs are kept in a tamper-proof pelican case that is locked in an unmarked cabinet in the ambulance. The Controlled Substance Record **is kept in the locked cabinet but outside of the tamper-proof pelican case**. The pelican case has two numbered tamper-proof seals, one on each corner of the non-hinged side of the case, which is to be compared to the seal numbers on Controlled Substance Record and recorded on the ambulance shift "daily inspection" sheet at the beginning of each Paramedic's tour of duty. If any of the seals are found to be broken, the appropriate EMS Supervisor shall be notified and a complete inventory and inspection of the drugs is to be taken. The EMS Manager or Operations Supervisor will report discrepancies to the Director of EMS. If a loss has occurred the Director of EMS who will report the incident to the Bureau of EMS (Missouri), Department of EMS (Arkansas), DEA, BNDD (Missouri), appropriate law enforcement authorities, Director of Pharmacy and Public Safety.
   2. At the start of each shift the Paramedic will inspect the controlled substance records for any errors, inspect all seals for tampering and inspect all pelican cases for tampering. If any errors or suspected tampering appear to have occurred, the Paramedic will report to the appropriate EMS Supervisor.

Key Security – One of the methods listed can be used to address key security at Mercy EMS facilities

1. Two locking key boxes affixed to the wall of the facility. One contains the Paramedic key ring(s); the other contains the EMT key ring(s). The appropriate key for either the Paramedic or EMT shall be issued to each co-worker in the home department.
2. Key pass. The EMT and Paramedic going off-duty pass keys to the Paramedic and EMT coming on-duty. Both key rings have a key to the locking cabinet.
3. If equipped with a coded safe in the ambulance, only the paramedics and EMS leaders will be given access to the code. The code will be changed as required to maintain security of the safe.

Medications kept at the ambulance office (if applicable)

1. Controlled drugs are kept in a tamper-proof locked box that is locked in a permanently mounted locked cabinet in the ambulance office. A Controlled Substance Record is kept in the locked cabinet but outside of the tamper-proof locked box. The locked box has a numbered tamper-proof seal. Keys for the locks are carried by the EMS Supervisors at each service.
2. If any of these medications are used to replace medication used from the ambulance supplies, the transfer is documented on the office Controlled Substance Record located in the office medication cabinet.

Inspections

1. EMS Supervisors shall cooperate with requests from the State EMS authority, DEA, and BNDD (Missouri) to inspect records security and procedures for controlled substances. The EMS Director shall be notified of all requested inspections.
2. Original BNDD (Missouri) and DEA licenses shall be displayed in a prominent location

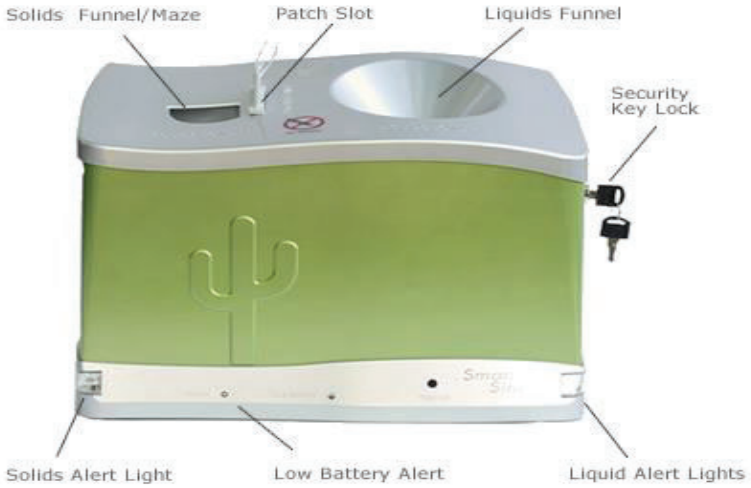
Inventory/Audits

1. **Each ambulance service location will inventory all controlled substances on an "Annual Inventory Controlled Substances Inventory Sheet" and maintained on file for a period of two years. This audit shall occur on the first day of the calendar year.** The inventory will separate schedule II drugs from schedule III-V drugs. A separate inventory of each ambulance and office stock shall be documented. The inventory will be performed and signed by the EMS Supervisor performing the inventory and witnessed by a second EMS co-worker.

2. All ambulances assigned to the ambulance service shall rotate through the primary location licensed by BNDD and/or DEA at least every thirty days with controlled substances inventoried by an EMS Supervisor. The EMS Supervisor conducting the inventory and inspection will remove the seal and perform a visual count monthly in all locations where controlled drugs are stored in addition to all ambulances assigned to the service. The audit shall be documented on Mercy EMS Controlled Substance Record indicating the date, time, amount of each drug with the Signature of the EMS Supervisor performing the inspection with another EMS co-worker witnessing the inspection.

Disposal of Expired Controlled Medications using the Cactus Smart Sink

1. The Cactus Smart Sink® is designed to safely and easily dispose of expired controlled pharmaceuticals. It renders drugs acutely “unrecoverable and unusable". The device is located at the Mercy EMS Administrative Office, 1407 St. Louis Street, Springfield, Missouri. The EMS Administrative Offices are locked when not attended and only accessible by EMS Supervisors, the EMS Office Coordinator, EMS Billing/QI Coordinator and the EMS Office Assistant.
2. An intake log will be maintained in a locked cabinet below the Cactus Smart sink device. The Cactus Smart Sink Device is located in the EMS Administration Office 1407 St. Louis Street, Springfield, Missouri. The EMS Administrative Offices are locked when not attended and only accessible by EMS Supervisors, EMS Office Coordinator, EMS Office Assistant and EMS Billing/QI Coordinator.
3. All controlled medication disposed of using the Cactus Smart Sink device will be documented on the log and must be witnessed by a Supervisor from the Department disposing of the controlled medication and witnessed by another EMS Supervisor at the time of disposal. The waste will be documented by quantity of vials, ampoules or syringes and shall include the concentration of the medication being rendered ineffective .
4. When the Cactus Smart Sink alarms that the cartridge is full, the cartridge will be removed from the Cactus Smart Sink and shipped to EXP Pharmaceutical Corporation for disposal by the EMS Office Coordinator.
5. A new log will be started for the new Cactus Smart Sink cartridge and the old log will be filed and be kept for a period no less than two years.
6. EXP will mail a certificate of disposal for each cartridge and it will be attached to the corresponding Cactus Smart Sink Log.




*US and International Patents Pending*

**SECTIONS TO BE COMPLETED BY THE PHARMACY. *__Exception__ – **only** area with blue triangles can be corrected by pharmacy.*
After completion we retain the brown and green copies, the requesting party takes the blue. Leave form in wall pocket in Inventory Area by Drug Shortage wipe board labeled DEA 222.

Appendix A

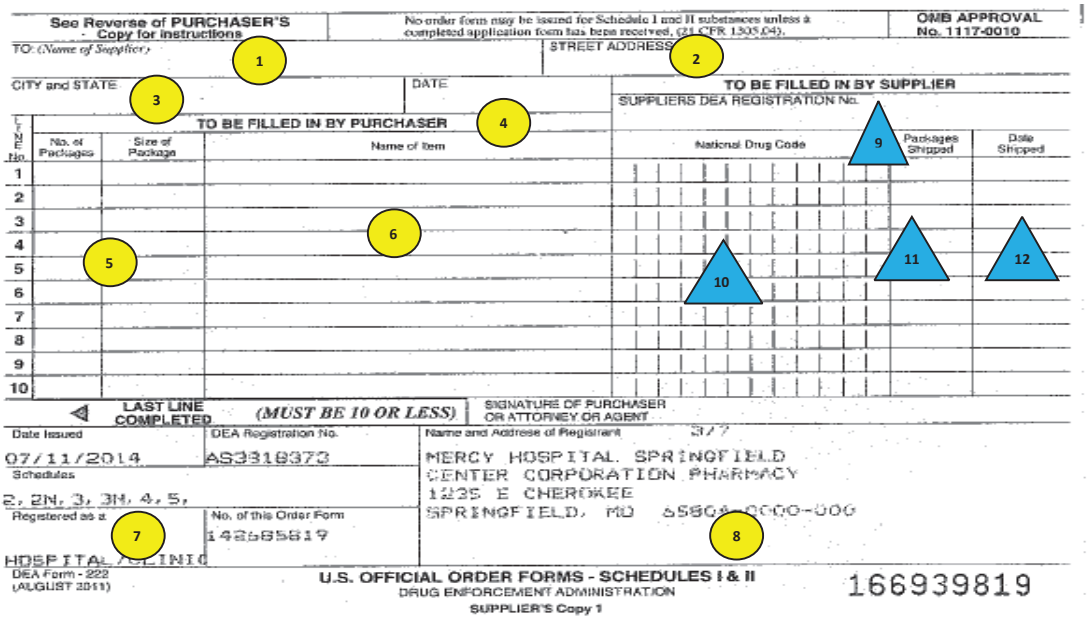
Filling DEA 222 Forms

**SECTION TO BE COMPLETED BY EMS IN SECTIONS** 1-4 There can be no Errors, misspelling, crossouts, deletions or alternations. Forms that are incorrect cannot be filled. Form must be intact – 3 duplicate pages..

**SECTIONS TO BE COMPLETED BY THE PHARMACY**. ***Exception* – only** *area with blue triangles can be corrected by pharmacy.** After completion we retain the brown and green copies, the requesting party takes the blue. Leave form in wall pocket in Inventory Area by Drug Shortage wipe board labeled DEA 222.

Pharmacy can complete any of these sections EXCEPT #8, the signature.

1. Mercy Hospital Springfield
2. 1235 E. Cherokee
3. Springfield, MO or Missouri
4. Example of acceptable date format – December, Dec or 12, day, and year as 2015 or 15
5. Examples - if they want 10 morphine 4mg. # of pkg – 1, size 10
6. If trade name is requested – generic can NOT be used, if generic is requested you can fill with trade or generic. A line can be voided by the requestor if they make an error.
7. Total of all lines that have been used, including voided lines.
8. Must be signed by the requesting physician or person with power of attorney.
9. AS381818373
10. NDC on the product needs to be written in 10 digits plus dashes, example 1111-1111-11 or 11111-111-11
11. Should be same number as the Number of packages requested or how many you filled.
12. Date you are filling order.




**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

Mercy Hospital
Emergency Medical Services

## Cactus SMART SINK Disposal Record

Location of Unit: _____ Cartridge #: _____

| | | | | | Be Specific as to # of Units (i.e. "3 vials"). Indicate concentration of each mediciation. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Time | Service | First Signature | Second Signature | Fentanyl | Morphine | Versed | Valium | Ketamine | Dilaudid | | | | Comments: |
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Infection Control Guidelines for Ambulance

A. PERSONNEL

- Personnel shall follow Standard Precautions when handling all blood or body fluids and for contact with mucous membranes and non-intact skin.
- Personnel shall adhere to the Infection Control Guidelines for Disease-specific isolation requirements as listed on Baggot street under the Infection Control section.
- Personnel who have active infections may have no patient contact. Refer to Employee Health return to work guidelines.
- Employees with draining oral herpes simplex lesions will not be assigned care of critically ill patients or neonates and should be instructed on good handwashing. Refer to Employee Health return to work guidelines.
- Personnel shall wear approved uniforms. If the approved uniform is soiled, employees will remove soiled items and change into scrubs. Soiled uniform items will be bagged appropriately and transported to the station for cleaning.
- Personnel shall perform hand hygiene before and after patient contact.
- Personnel shall notify the Infection Prevetion department of a patient with a communicable disease and the Employee Health department of any direct exposures to communicable disease.
- Hepatitis B vaccine is free to all employees.
- All employees will be screened for Rubella. If the titer is negative, the employee will be required to receive the Rubella vaccine.

B. Infection Control Procedures:

- Venipuncture site is to be prepped with Chlorhexadine before the insertion of the needle.
- I.V.'s inserted by Mercy EMS personnel in the field will be covered with a sterile veni-gard dressings over the venipuncture site.
- Date, type and size of needle and name of individual starting the I.V. are to be documented on the Mercy EMS patient care report.

C. Patients

- Gloves shall be worn when handling blood or body fluids. Gowns, face shield or goggles, mask, shall be worn when the risk of areosolization or splashes of blood or body fluid exists.
- Isolation supplies, which consist of impermeable gown, gloves, mask, goggles, clear and red plastic bags will be kept in each ambulance.
- Appropriate PPE will be worn when a patient is known or suspected of having a communicable disease or infectious illness.

D. Isolation Procedures:

- Perform hand hygiene with a waterless germicidal agent before and after patient contact and after contact with blood or body fluids.
- After arrival at destination, personnel shall thoroughly wash hands with an antiseptic soap and running water.
- Place trash and disposable supplies in a clear plastic bag and blood soaked trash in a red plastic bag in the ambulance . Place trash in the appropriate containers at the destination/or at the EMS facility.
- Place linens in a soiled linen container at the receiving facility if Mercy or Cox operated facility. If soiled linen cannot be left at the receiving facility, place linen in a blue plastic bag and deposit it in an appropriate container upon return to the EMS facility.
- Flush excretions carefully down the commode according to "Handling Infectious Waste" policy.
- Clean the stretcher, mattress, monitor cables, etc. that has come in contact with an isolation patient with hospital approved disinfectant . Follow the manufacturers guidelines on contact time.
- When transporting an isolation patient, perform hand hygiene (soap and water for C. diff) and put on gown and gloves. Transfer the patient to the cart and cover the patient with a clean blanket or sheet. After the patient is ready for transport, remove gown and gloves and perform hand hygiene (soap and water for C. diff). Then, put on a clean isolation gown and gloves for transport.
- In cases of known or suspected high consequence pathogen, approved and fit tested HEPA filtered masks shall be worn by personnel providing direct patient care. Drivers shall close the walk-through door for transport and shall wear a surgical mask.

E. EQUIPMENT

Oxygen Therapy:

- Discard oxygen delivery devices after each use.

Suction Equipment:

- Dispose of suction catheters, connecting tubing and suction canisters after each use.

Ventilatory Equipment:

- All airway adjuncts and bag valve resuscitators are disposable . Store these items in a clean bag to prevent contamination
- Clean the laryngoscope handle with hospital approved wipes after each use.

Linen

- Change linens after each patient.

Multi dose vials

- Multi-dose vials are discarded after each use.

Needles and Sharps

- Safety needles are used in the Ambulance, and all needles and sharps should be disposed of properly in the red sharps container immediately after use.

F. CLEANING

- Clean the transport mattress with hospital approved disinfectant solution after each patient contact. Follow the manufacturers recommendation for contact time.
- The Ambulance's stationary equipment is cleaned with hospital approved disinfectant solution on a weekly basis.
- Before putting recovered equipment back in service , clean with hospital approved disinfectant wipes upon removal from the hospital storage area. Follow the manufacturers guidelines on contact time.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## Orientation for New Hires

**PURPOSE:** To ensure appropriate and consistent education and orientation to new hire co-workers for Mercy EMS.

**PROCEDURE:** The Mercy EMS New Hire Orientation Policy will be overseen and enforced with cooperation between each new hire's respective Mercy EMS Field Training Officer, EMS Supervisor, Manager and/or Deputy Director, EMS Clinical Educator, Executive Director of Emergency Medical Services, and EMS Medical Director.

**RETURNING CO-WORKERS:** It is sometimes the case that a co-worker will leave the employ of Mercy and return after a short period of time. To guide the onboarding of a returning co-worker, the following steps have been outlined:

**1) The employee has been gone less than 6 months:**
- a. Complete the competencies they have missed
- b. Fill out new hire evaluation after every call for the first 14 shifts.

**2)The employee has been gone between 6 months to one year**:
- a. Attend Academy skills day
- b. Attend RSI Skills day
- c. Complete the pharmacology and guideline tests on career cert
- d. Complete the previous 2 competencies on career cert
- e. Fill out new hire evaluation after every call for the first 14 shifts.
- f. Complete 5 scenarios prior to being cleared.

**3)The employee has been gone longer than 1 year:**
- a. Must complete the academy and new hire requirements. (Can be a combination of career cert and in person)
- B. Complete all career cert assessments
- c. Complete New Hire field guide

**PROMOTION FROM EMT TO PARAMEDIC:** For EMTs promoting to Paramedic, the following steps should be taken prior to being credentialed to practice as a Paramedic:

1) Complete all tests on Career Cert (A & P, Pharmacology, Guideline)
2) Complete New Hire Evaluation for each call during their training period.
3) Complete ALS Field Guide for Current Employees
4) Complete skills check offs and scenarios
5) 12 Lead training from Steve Harkness. (Career Cert or in Person)
6) RSI training with Eric Howard (Career Cert or in Person)
7) Attend RSI skills day / Cadaver Lab as available
8) Interview with Medical Director

## NEW-HIRE CO-WORKERS

**Courtesy Van Driver:**

As determined by the Operations Supervisor responsible for that program to include, but not limited to: orientation to the operation of all the vehicles/equipment used for non-ambulance transport and review of the Non-Ambulance Transport policy.

**Ground EMS Providers:**

The follow steps should be followed with all new hires to the system to ensure a consistent orientation and credentialing process for all providers:

1. Attend academy – within the academy the new hires will have the RSI / Difficult Airway lecture, ESO / Documentation Lecture, Communications lecture, 12 Lead ECG lecture, Ambulance Orientation, Skills days with introduction to equipment and a few guidelines, VFIS / TIMS, Resiliency and DT4EMS. This process may be accomplished via either a standard seated academy, or a hybrid model.
2. They must complete the new hire field guide / check off during their ride time with their assigned FTO. Ideally, this should be a single FTO that can track progress and provide consistent feedback. This can be done as quickly as the new hire co-worker is able and shows competence.
3. The new hires are required to take 3 quizzes on Career Cert.
    a. Anatomy and Physiology Quiz within the 1st week of academy
    b. Pharmacology quiz with meds that Mercy carries within 60 days of hire
    c. Final Guideline Test within 90 days of hire
4. After the new employees have completed the tests on Career Cert and completed / emailed their field guides to education team, they will come in for 5 final check off scenarios. These scenarios are designed to test their skills, knowledge of Mercy's Guidelines and credential them as new employees. They must pass these scenarios.
5. After they have completed all the quizzes on Career Cert, completed their field guides, and passed the scenarios they will meet with Dr. Lewis. He will sign them off at that time as an EMT 2 or Paramedic 2.
6. During their first 90 days or prior to completing all of the above requirements these new hires will be considered EMT 1 and Paramedic 1. Listed below is what they will / will not be able to do:
    **a. EMT 1**
        i. Must work with another EMT 2 or Paramedic 2
        ii. May not work a standby by themselves
        iii. May not do a transfer by themselves
    **b. Paramedic 1**
        i. Must work with another Paramedic 2
        ii. May not work with an EMT on their own
        iii. May not do a standby by themselves
        iv. May not take a transfer by themselves
        v. May not perform RSI/Cric/ Push Dose Nitro / Push Dose Pressors without a Paramedic 2 with them.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## COMPETENCY/CREDENTIALING POLICY

**PURPOSE**: To assure EMS co-workers remain current in evidence-based medicine as it pertains to the emergency medical services and are properly credentialed to practice by the Medical Director. To establish minimum competency standards for EMS skills and procedures and to define time intervals for renewal of required competencies.

**PROCEDURE**: Each co-worker coming to work, or back to work, with Mercy EMS will be educated and credentialed to practice via the academy and orientation process outlined in the orientation policy. It is the responsibility of each employee to maintain current competency in all skills within their scope of practice and level of credentialing. This includes the scheduling and attendance of necessary or required classes to achieve competency.

A two-year schedule will be continually maintained that will ensure all didactic areas and skills are covered and credentialled on within the two-year period. Ongoing competency and credentialing will take place as follows:

1. Didactic:
    a. Each co-worker will be given an account to an online learning management system that will be used by Mercy EMS to assign education created or approved by the Medical Director.
    b. Co-workers will be assigned education on a quarterly basis that will take approximately 2-3 hours to complete.
    c. The Clinical Operations and Education team will ensure assignments are created and assigned by the beginning of each quarter.
    d. Co-workers will have until the end of the quarter to successfully complete each assignment. Assignments will have minimum cut scores as decided by the Medical Director. Should the provider fail to meet the minimum the minimum cut scores, they will have to retake the exam, and may have to receive additional training/education by the Regional Educator, Education team, and/or the Medical Director.
    e. It is expected that within the quarter the co-worker will have an appropriate amount of time to complete the education while on duty. Should the co-worker choose to complete the education while off-duty, they will not be reimbursed for the time spent. The Clinical Operations and Education team will work to ensure all quarterly assignments are of length and format to make it as easy as possible to complete on duty.
2. Psychomotor skills
    a. Each co-worker must be credentialed at the time hire/orientation, and on a two-year rotation, to perform the skills available to them within the Mercy EMS Guidelines.
    b. Multiple opportunities will be scheduled in each region per quarter in sufficient quantity to ensure all co-workers have the opportunity to schedule a time off-duty to come in and credential on skills.
    c. The Clinical Operations and Education team will set a rotating schedule of skills that will be made available well in advance of evaluation of those skills.
    d. Each quarterly credentialing session will contain two aspects: a teaching section for the skills that will be credentialed on the next quarter, and a credentialing section.

a. Each skill will be evaluated based off an objective checklist approved by the Medical Director.
b. If a provider is unable at first to successfully credential on a skill, they will be provided with an opportunity for additional education and practice, and to retry the station. If they remain unsuccessful, they will be encouraged to leave, take time to practice and study the skill, and return at a later date to successfully complete. Should they be scheduled to work a shift between those times, they should not perform that skill, and should make sure their Regional Manager and Supervisors are aware that they must practice with a limited scope. When the provider successfully completes the credentialing session, their scope of practice will be restored. If the provider is unable to successfully complete the credentialing when they return, a plan of education and performance improvement will be developed with the cooperation of the co-worker, department Leadership, Education team, and Medical Director. This plan will be specific, measurable, and time-based. During this time and until the successful completion of credentialing, the co-worker will be credentialled to practice at a lower level. This process should always be viewed as education and not punitive, with the intention of the process always being the restoration of full scope of practice as soon as the provider meets the standard.

2. Failure to attend required skills credentialing sessions or complete online didactic requirements is unacceptable. These requirements are set forth by the Medical Director as the path to the co-worker being credentialed to practice. Without being credentialed by the Medical Director, no EMS provider is legally allowed to work. To that end, failure to timely complete mandatory education assignments and/or credentialing sessions will subject co-workers to formal corrective action up to and including termination of employment. Mercy EMS will utilize a progressive discipline approach for noncompliance:
   a. Co-workers who do not complete the online, didactic training by communicated deadline will be immediately suspended and issued a Written Warning upon validation of non-compliance. Co-workers will then be re-assigned the education, and given seven (7) days to comply.
   b. Co-workers who are not compliant by the 7th day will be issued a Final Written Warning, and given an additional seven (7) days to comply.
   c. Co-workers who are not compliant by the 7th day (at this point—14 days past original due date) will be terminated (absent any extenuating circumstances such as medical leave, jury duty, military leave, etc.).
   d. Co-workers who do not complete the skills credentialling sessions by the final date will be issued a Written Warning. A make-up date will be set, and co-workers who did not complete initially will be expected to attend.
   e. Co-workers who do not attend the make-up skills session on the date communicated will be suspended, receive a Final Written Warning, and will be required to contact the Medical Director within 7 days to set up a time to make up the skills session individually with the Medical Director or designee.
   f. Co-workers who are not compliant with this process, and have no extenuating circumstances will be terminated 14 days after the posted make-up skills session date.

f. If a co-worker is already on corrective action for a different infraction (e.g., performance), the co-worker will be issued the separate corrective action as listed above (i.e., Mercy will not comingle the corrective actions or issue the next higher-level corrective action). However, corrective action may be accelerated for co-workers who have previously received corrective action for similar negligence in timely completing mandatory compliance training.

**DE-CREDENTIALING:** The Medical Director can temporarily or permanently de-credential a provider if they are found to be practicing in an unsafe manner, or at a level that does not meet standard. The concern can be brought to the Medical Director's attention any number of ways, but a co-worker will always be given the benefit of receiving a full, consistent, and fair review of their practice. This will include the normal Clinical Practice Review process but will also include an evaluation of the provider's ability to perform to the appropriate level by completing simulation scenarios approved and evaluated by the Medical Director. When the co-worker successfully completes the simulation scenarios, they will be restored to their level of credentialing. If the co-worker is unable to complete the simulation scenarios successfully as determined by the Medical Director, a plan of education and performance improvement will be developed with the cooperation of the co-worker, department Leadership, Education team, and Medical Director. This plan will be specific, measurable, and time-based. During this time and until the successful completion of credentialing, the co-worker will be credentialled to practice at a lower level. This process should always be viewed as education and not punitive, with the intention of the process always being the restoration of full scope of practice as soon as the provider meets the standard. If at the end of the plan of education and performance improvement the provider is still unable to credential at the desired level, department Leadership will work with the co-worker to develop a path forward that may include credentialing the provider to work at a lower level within another department approved job role, another role within the health system, or potentially separation of employment as a last resort.

**Dress Code at Competency Training:**
Employees attending staff meetings are expected to dress in good taste. Employees may be recognized by patients and visitors even though they are not working. Such things as bare feet, swim wear, short shorts, jeans with frayed material or holes, tight clothes, tops without appropriate undergarments, and clothing with off-color wording or graphics are inappropriate.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

## MEDIA GUIDELINES

**PURPOSE:** Occasionally EMS Co-workers will be approached by the news media for information regarding news worthy events occurring in your service area. The following guidelines were produced to assist you in determining appropriate responses to news journalists.

**PROCEDURE:**

1. At emergency scenes, EMS personnel's first responsibility is to render care to patients. Do not allow reporters to interfere with the performance of your duties. Patients' rights and confidentiality should be protected at all times.

2. All media requests should be directed to the Director of EMS (or delegate) or on-call Mercy Public Information Officer for comment. The EMS Manager or Operations Supervisor for involved area shall also be notified of the request.

3. Special features are stories the media may do from time to time on the growth of EMS, ambulance service in rural Missouri or other related public interests. These special features are not usually related to emergency scene reporting, but are more informative and are planned events. Reporters wishing to do features should be directed to contact Mercy Media Relations Office for coordination of the feature.

**Final Review and approval by:** Robert Patterson - Executive Director, Mercy EMS

| | | |
|---|---|---|
| Facility Name(s): | Mercy Clinic | |
| Policy / Procedure: | MCSC Preventive Maintenance of Patient Care Equipment Policy | |
| Approved by: | Gregory Ledger (Physician) | Date: 03/19/2024 |

## PURPOSE:

This policy will include, but not be limited to: EKG, Treadmills, Pulmonary Function, Autoclave Equipment, IV Pumps, Thermometers, etc.

## POLICY:

Documentation of equipment maintenance will be maintained at each clinic practice location.

## PROCEDURE:

To ensure that equipment is maintained in a safe operating condition for quality care:

1. All equipment will be checked yearly by appropriate biomedical personnel to insure proper performance.
2. All electrical cords will be checked by maintenance quarterly for frayed or broken wires or plugs.
3. All gaskets on the autoclave will be checked quarterly.
4. Any malfunction or problem of equipment will be reported immediately to maintenance.



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| | | |
|---|---|---|
| Facility Name(s): | Mercy Health | |
| Policy / Procedure: | MW IP Contact Precautions Policy | |
| Approved by: | Mercy Infectious Disease Specialty Council, Kathleen McMullen (ED-Infection Prevention Sterile Processing) | Date: 12/02/2025 |

## I. Policy:
In addition to Standard Precautions, use Contact Precautions for patients:

a. known or suspected to be infected or colonized (no active symptoms of infection) with infectious agents transmitted by direct patient contact or by contact with items in the patient's environment (e.g. Methicillin-resistant staph aureus (MRSA), Vancomycin resistant enterococcus (VRE), ESBL, or other multidrug resistant organisms).

b. with excessive wound drainage, fecal incontinence, or other discharges that increase extensive environmental contamination due to uncontained drainage.

## II. Purpose:
Contact Precautions is one category of transmission-based precautions that is designed to prevent the transmission of infectious organisms by direct contact with the patient or the patient's environment.

## III. Scope:
Policy applies to all Mercy Communities, credentialed providers, and co-workers who enter a contact isolation room or provide direct patient care for a patient on Contact Precautions.

## IV. Definition:
Contact Transmission occurs when microorganisms are transferred from one person to another person either by direct contact or indirect contact.

- Direct contact: Occurs when microorganisms are transferred from an infected or colonized person without a contaminated intermediate object or person.
- Indirect contact: transfer of an organism through a contaminated intermediate object or person (e.g. hands of co-worker after touching infected or colonized body site of patient without hand hygiene before touching another patient, shared patient-care devices between patients without cleaning device).

## V. Procedures for Implementation

1. Patient placement

   - Place patient in a private room. When a private room is not available, may cohort patient with another patient who has the same pathogen only after consulting infection prevention.

2. Initiation of Isolation

   - Place Contact Precautions sign on the door.
   - Nurse or credentialed provider to initiate isolation and place order in electronic health record.

- Provide patient and family/visitors with education to explain precautions and document in electronic health record.
- Place isolation organizer outside the patient room.
- Dedicate equipment such as:
  - Disposable stethoscope
  - Disposable blood pressure cuff
  - Gait belt
  - Thermometer (ie. single use clinical thermometer,Tempa-dots)
  - Disposable pulse oximeter
- When the use of reusable equipment is necessary, disinfect between patient use with a hospital-approved disinfectant.

3. Gloves and Gown

- Don isolation gown and gloves before entering the patient room (see CDC sequence poster below).
- Perform hand hygiene before donning PPE.

4. Mask/Eye Protection

- Adhere to Standard Precautions (e.g. splashing/splattering of body fluids) MW IP Standard Precautions and Use of Protective Barriers Policy

5. PPE Removal

- Remove gown and gloves and perform hand hygiene before exiting the patient room (see CDC sequence poster below).

6. Hand Hygiene

- Perform hand hygiene:
  - before touching a patient
  - after touching a patient
  - before a clean/aseptic procedure
  - after body fluid exposure risk
  - after touching patient surroundings

7. Patient transport

- Limit transport of patient from room for essential medical purposes only.
- Prior to entering the patient room, co-workers are to perform hand hygiene and don the appropriate PPE.

- Prior to transporting an isolation patient in their bed, the transporter wipes bed side rails, headboard, and footboard with a hospital approved disinfectant and allows the surfaces to air dry.
- If an isolation patient is not transported in his/her own bed, the chair or stretcher used for transport is covered with a clean blanket or sheet prior to entering the patient's room.
- Place a clean hospital gown on the patient and have the patient perform hand hygiene prior to transport and cover with a clean sheet.
- Immediately before leaving room the transporter;
    1. removes any gown and gloves worn
    2. places gown/gloves in appropriate receptacle within the room;
    3. performs hand hygiene
- Co-worker's PPE is not worn during transport unless it is anticipated that they will be providing direct patient care during the transport (i.e. providing ventilatory assistance). Bring extra gloves for use, as appropriate, during transport.
- Whenever possible: only the patient, transporter and caregivers enter the elevator during transport due to unknown immune status of the general public.
- Prior to re-entering the patient's room, co-worker performs hand hygiene and dons the appropriate PPE.
- Once the transport is complete, the transporter is responsible for cleaning and disinfecting <u>all</u> equipment – (i.e. bed, wheelchair, stretcher) using hospital approved disinfectant.

8. <u>Patient Ambulation</u>

Ambulation within patient room is preferred. If ambulating outside of room is necessary for therapy or discharge, caregiver must be with patient following these steps:

- Perform hand hygiene, don gown and gloves upon entering the Contact Precautions room.
- Assist the patient out of bed.
- Give patient a clean hospital gown to cover clothes worn in bed. Assist as necessary.
- Ensure that any wound is covered and will not seep during ambulation in the hall.
- If the patient is incontinent, ensure patient is wearing adult brief that can contain any incontinent episodes prior to ambulation.
- Ask patient to sanitize or wash their hands before leaving the room.
- Caregiver then removes their gown and gloves and sanitizes hands before ambulating the patient in the hall.
- If a walker/cane is used in ambulating in the hall, wipe off with hospital approved disinfectant before removing item from room and upon return to room.

- After ambulation, caregiver to perform hand hygiene, don gloves and gown before re-entering patient room.
- Assist patient to remove the gown worn in the hall, and assist to bed/chair, give call light and activate bed alarm, if applicable.
- Caregiver removes gown, gloves, and performs hand hygiene upon exiting room.

9. Visitors

- Visitors report to nurse before entering the room. Nurse educates visitors about wearing appropriate PPE while visiting patient, removal of PPE, and to perform hand hygiene prior to leaving room. Education is documented in the Patient Education Record.

10. Patient Discharge/Transfer

- At patient discharge or transfer, continue to post the isolation sign until after the room is cleaned by Environmental Services. The EVS co-worker removes the sign from the door when he/she has completed cleaning of the room.
- Inform receiving nursing unit/facility/agency about the type of precautions and reason for precautions.

11. Discontinuation of Isolation

- Discontinue after resolution of symptoms or according to pathogen-specific recommendations in Type of Precautions & Duration for Infectious Diseases
- Contact Infection Prevention prior to discontinuation of isolation.
  – Room must be cleaned prior to discontinuing isolation precautions per IP recommendation

12. Cleaning Patient Room

- Use hospital approved disinfectant to thoroughly clean all environmental surfaces
- Wipe down equipment in room with a hospital approved disinfectant before it is removed from the room. (See Hospital Policy on Equipment Cleaning).
- See recommendations for changing cubicle curtain: MW IP Recommendations for Privacy Curtain Changes in Patient Care Areas Policy

## Related Policies and References

Center for Disease Control and Prevention, Hospital Infection Control Practices Advisory Committee. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007.

Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

World Health Organization, WHO Guidelines on Hand Hygiene in Health Care (Five Moments for Hand Hygiene), 2009. Five moments for hand hygiene

Association for Professionals in Infection Control and Epidemiology, APIC Text; www.text.apic.org

**MW Contact Precautions Door sign – see below**

**CDC Sequence for Donning & Doffing Personal Protective Equipment (PPE) – see below**


STOP
Contact Precautions
Please see the nurse before visiting
Family, visitors and health care providers must:
Clean hands with sanitizer or soap and water when entering room and upon leaving the room
Gown and glove at door
No personal electronic devices
Use patient dedicated or disposable equipment. Clean and disinfect shared equipment with hospital approved disinfectant wipe
This sign to be removed by Environmental Services after room cleaned

# Contact Precautions

Display sign outside the door. Remove sign after room is cleaned.

**Common Conditions:**

- Multidrug resistant organisms
  - Methicillin-resistant Staphylococcus aureus (MRSA)
  - Vancomycin-resistant Enterococcus (VRE)
  - ESBL
- Excessive wound drainage, fecal incontinence, or other discharges that increase extensive environmental contamination due to uncontained drainage
- Refer to "Type and duration of precautions for selected infections/conditions" policy

**Dishes/Utensils:**
No special precautions. Kitchenware sanitized in dishwasher.

**Equipment and Supplies:**

- Use dedicated or disposable equipment when available.
- Clean and disinfect reusable equipment with a hospital approved disinfectant wipe including IV pumps, cell phone or pagers (if used in room), and other electronics, supplies, and equipment prior to removing from patient's room.
- Only essential supplies in room.

**Linen Management:**
Bag linen in the patient's room.

**Personal Protective Equipment:**

| Put **ON** in this order | Take **OFF** and dispose in this order: (Option 1) | Take **OFF** and dispose in this order: (Option 2) |
|---|---|---|
| 1. Wash or foam hands<br>2. Gown<br>3. Mask (if needed)<br>4. Eye cover (if needed)<br>5. Gloves | 1. Gloves<br>2. Eye cover (if used)<br>3. Gown<br>4. Mask (if used)<br>5. Wash or foam hands (even if gloves used) | 1. Gown and gloves together<br>2. Eye cover (if used)<br>3. Mask (if used)<br>4. Wash or foam hands (even if gloves used) |

**Room Cleaning:**

- **Housekeeping:** Routine cleaning procedures with the addition of curtain changes per hospital procedure.

**Transport:**
Essential transport only. Place patient in clean gown. Have patient perform hand hygiene if able. Clean and disinfect transport vehicle. Alert receiving department regarding patient's isolation precaution status prior to transport.

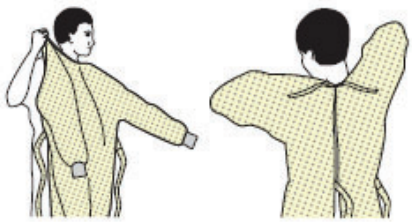
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## SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

### 1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



### 2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



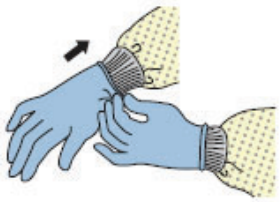
### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



### 4. GLOVES

- Extend to cover wrist of isolation gown



## USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

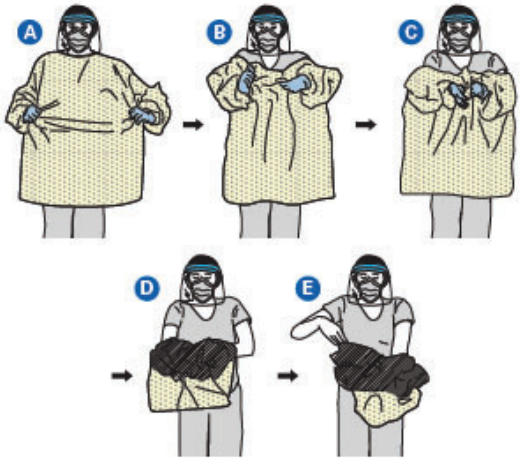
- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

# HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

## 1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



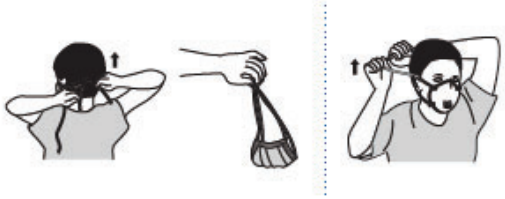

## 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

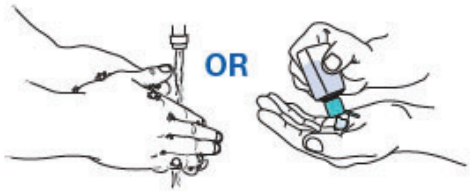


## 3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



## 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE




**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**

CDC

| | | |
|---|---|---|
| Facility Name(s): | Mercy Health | |
| Policy / Procedure: | MW IP Disinfection and Management of Shared Patient Equipment | |
| Approved by: | Mercy Infectious Disease Specialty Council, Kathleen McMullen (ED-Infection Prevention Sterile Processing) | Date: 07/01/2024 |

**SCOPE:**

This policy applies to all Mercy Communities, providers, and coworkers.

**PURPOSE:**

To prevent the spread of infection to patients and coworkers through safe and consistent processing, disinfection, and storage of non-critical shared patient equipment per CDC (Centers for Disease Control) guidelines.

**DEFINITIONS:**

A. **Cleaning**: the removal of organic and inorganic material from objects and surfaces. Thorough cleaning is necessary before disinfection because organic and inorganic materials that remain on the surface of items interfere with the effectiveness of the disinfection process.
B. **Decontamination**: the use of physical or chemical means to remove, inactivate or destroy microorganisms on a surface or item so there are no infectious organisms, and the surface or item is rendered safe for handling, use or disposal.
C. **Disinfection**: a process that kills or destroys nearly all disease-producing microorganisms on the surface of an object, apart from bacterial spores. Disinfectants are used on inanimate objects.
    a. High level disinfection includes pasteurization or chemical. All microbes, except spores, are destroyed. Items that touch mucous membranes should receive high level disinfection.
    b. Intermediate level of disinfection utilizes hospital-grade disinfectant with an EPA (Environmental Protection Agency) approved tuberculocidal kill claim. It is used for non-invasive items with visible blood contamination that touch intact skin.
    c. Low level disinfection inactivates most vegetative bacteria, some fungi, and some viruses, but not resistant microorganisms or spores. It is used for non-invasive items with no visible blood contamination that touch intact skin.
D. **Sterilization**: destroys all microorganisms on the surface of an article or in fluid to prevent transmission associated with the use of that item. Multiple methods of sterilization exist, including steam, hydrogen peroxide gas plasma, ethylene oxide, peracetic acid, etc. Method of sterilization should be chosen according to manufacturer's IFU of article/fluid to be sterilized.
E. **Equipment Classification (according to Spaulding Classification)**:
    a. Non-critical – contact with intact skin, but not mucous membranes, require low level or intermediate level disinfection as defined above. Some examples are stethoscopes, bladder scanners, scales, lifts, wheelchairs, walkers, etc.
    b. Semi-critical – contact with mucous membranes or non-intact skin. Minimally requires high level disinfection, optimally sterilization if available and compatible with manufacturer's IFU. Follow the department specific policy for reprocessing/IFU.



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c. Critical – enters sterile tissue or vascular system. Requires sterilization. Follow the department specific policy for reprocessing/IFU.

F. **Dwell time**: the contact time the disinfectant is required to remain wet on the surface to effectively kill the microorganisms. Refer to the manufacturer's IFU for the appropriate dwell time for the product being used. Ensure that disinfection products are not used beyond the expiration date.

**POLICY:**

Equipment used in the care of patients must be cleaned and disinfected per manufacturer's instructions for use (IFU) to render it safe for handling and to prevent transmission of microorganisms. Departmental policies for processing equipment are in the respective departments. For items not covered by Environmental Services cleaning routine or by a specific departmental policy, these general guidelines should be followed. If it unclear whether patient care equipment has been cleaned, it must be cleaned prior to patient use.

**PROCEDURE:**

A. Whenever possible, use of disposable or single-patient use products should be considered. Patients in isolation shave have disposable products or dedicated equipment that is left in the room until the patient is discharged and then cleaned per facility policy for items in isolation rooms. If equipment cannot be left in the patient room, the equipment should be cleaned and disinfected before use on another patient using an approved disinfectant.

B. At a minimum, the standard of cleanliness is that all patient care equipment should be visibly clean without evidence of blood, body substances, dirt, debris, dust, adhesive tape, tears in covers, stains, or spillages present. Equipment surfaces that are worn, cracked, peeling (exposed wood, foam, etc.), rusted or do not have an un-interrupted nonporous surface for disinfection should be replaced or repaired/recovered.

C. All equipment that may contact patients (or the patient's immediate environment) must be cleaned/disinfected between each patient use. Consider the use of disposable or single patient use product when available.

   a. Items marked as disposable or single use may not be disinfected and reused.

   b. Single use items designated as part of a "recycling" program are placed in a designated recycling container and sent to an FDA (Food and Drug Administration) approved third party reprocessing facility.

D. Equipment moved from room to room and used between patients must be cleaned and disinfected immediately upon exiting the room or per facility process, i.e., placed directly into a designated soiled equipment area.

   a. Durable medical equipment brought into the patient room for a brief single use, which is promptly removed (i.e., portable x-ray, EKG machines), will be at least minimally cleaned/disinfected on those parts having direct contact with the patient or the patient's environment.

b. Items left in the patient room for lengthy procedures/tasks or that remain in the patient room shift to shift (i.e., IV pumps, SCD pumps) will be completely cleaned/disinfected prior to use on another patient.

c. For general cleaning of non-blood contaminated items, use hospital approved disinfectant wipes. Refer to product label for designated product contact time.

d. Perform hand hygiene and don gloves before the cleaning and disinfection process. Additional PPE may be required if splashing or contamination of the clothing/uniform is likely or if required by the disinfectant product label or device IFU.

e. Prior to disinfection of an item, mechanical removal of any visible soilage must occur. This may be achieved by first utilizing one or multiple disinfecting wipes to remove visible soilage prior to the final disinfection step with new/fresh wipe(s).

f. If blood contamination is noted, remove visible blood prior to disinfection. Disinfect using a product with a tuberculocidal claim, HBV and HIV claim, or a bleach product.

g. Items that are removed from an enteric contact precaution or enhanced contact precaution room must be cleaned with an approved bleach wipe(s) prior to removing from the room (even if taking the item to the soiled utility room).

h. Equipment with rolling casters should be kept free of debris (lint, hair, etc.) accumulating around the wheel.

E. Disinfected equipment that is ready for patient use must be stored separately from used equipment that has not been cleaned and disinfected. Only disinfected items can be placed into the clean storage area. If unable to verify that an item has been disinfected, personnel must perform disinfection prior to placement in the clean storage area.

a. There must be separation of clean and dirty equipment (which cannot be stored in the same location/room).

b. Hand hygiene must be performed when obtaining supplies from the designated clean areas to avoid contaminating equipment and supplies.

c. Equipment in the designated clean storage area or clean and ready patient room is considered clean and ready for use.

d. Clean equipment stored outside of the designated clean area must be designated as clean, i.e., clean tag/sign, clean plastic bag, etc. *Cannot use plastic bags on Alaris pumps per IFU.

e. Items stored in the designated clean area must be stored off the floor unless the item is designed to sit on the floor (IV pole, patient lifts, etc.).

f. Equipment must not be stored under sinks or within the splash zone of the sink to avoid contamination.

g. Equipment stored on shelving should be at least 8 inches off the ground. The bottom shelf should have a solid surface to prevent splashing from floor mopping.



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h. External cardboard shipping boxes and wooden pallets must not be kept in the clean storage area.

i. Designated clean areas should be kept clean, free of dust accumulation, and orderly.

j. Holiday/unit decorations (i.e., Christmas trees) should not be stored with patient supplies/equipment.

F. All equipment that contains a soft or porous surface should be disinfected per manufacturer's IFU. In the absence of instructions, items should be laundered per facility linen guidelines or sprayed with a hospital approved disinfectant with a soft surface claim per the disinfectant manufacturer's instructions.

G. Shared toys and play therapy equipment should be disinfected per MW IP Toy Cleaning Policy

H. Shared electronic equipment should be disinfected between patient use per MW IP Cleaning Electronic Devices Policy Computers, mouse, and scanners that are dedicated to a patient room should be disinfected once a shift at a minimum or more frequently when contaminated with appropriate facility approved disinfectant.

I. Semi-critical equipment, those touching mucous membranes, such as laryngoscopes, endoscopes, respiratory care and anesthesia equipment require high level disinfection (or sterilization) per manufacturer's IFU and should be sent to be processed.

J. Responsibility for cleaning and disinfection of reusable noncritical patient-care equipment and devices should be clearly designated by the department or according to hospital policy/procedures.

**References**

Center for Disease Control and Prevention (CDC). Guidelines for Environmental Infection Control in Health-Care Facilities. (Recommendations of CDC and HIC PAC), June 6, 2003

Association for Professionals in Infection Control (APIC), APIC Text Online Ed 2023, Chapter 31: Cleaning, Disinfection & Sterilization and Chapter 107: Environmental Services.

CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008.

| | | |
|---|---|---|
| Facility Name(s): | Mercy Health | |
| Policy / Procedure: | MW IP Droplet Precautions Policy | |
| Approved by: | Mercy Infectious Disease Specialty Council, Kathleen McMullen (ED-Infection Prevention Sterile Processing) | Date: 12/02/2025 |

**I. Policy:** In addition to Standard precautions, use Droplet precautions for a patient known or suspected to have a pathogen transmitted by large-particle droplets that can be generated by the patient during coughing, sneezing, talking. Use respirators for aerosol-generating procedures . Some examples are: seasonal Influenza, Meningitis (e.g. Neisseria meningitidis and Haemophilus influenzae type b) and Diphtheria.

**II. Purpose:** Droplet Precautions is one category of transmission-based precautions that is designed to prevent the transmission of large particle droplets/infections among patients, healthcare workers, and visitors.

**III. Scope:** Policy applies to all Mercy Communities, credentialed providers, and co-workers who enter a droplet isolation room or provide direct patient care for a patient on droplet precautions.

## IV. Definition:

Droplet Transmission: Respiratory droplets carrying infectious pathogens transmit infection when droplets travel directly from the respiratory tract of the infectious individual to susceptible mucosal surfaces of the recipient, generally over short distances or when a susceptible person picks up the organism from environmental surfaces and then rubs their eyes or nose. Special room ventilation is not required.

Aerosol generating procedure: procedure that can generate much higher concentrations of airborne particles as compared to coughing, sneezing, or speaking. Examples include:

- Endotracheal intubation
- Open respiratory and airway suctioning
- Tracheostomy care
- Cardiopulmonary resuscitation
- Sputum induction
- Bronchoscopy
- Aerosolized administration of pentamidine or other medications
- Pulmonary function testing
- Autopsy, clinical, surgical, and laboratory procedures that may aerosolize pathogens, such as operating bone saws, centrifuges, blenders, and aspiration equipment

## V. Procedures for Implementation

1. Patient Placement

   - Place patient in a private room. When a private room is not available, may cohort patient with another patient who has the same pathogen only after consulting infection prevention.

2. Initiation of Isolation

   - Place droplet isolation sign on the door.
   - Nurse or credentialed provider to initiate isolation and place an order in the electronic health record.
   - Provide patient and family/visitors with education to explain precautions and document in the electronic health record.
   - Place isolation organizer outside the patient room.
   - Utilize dedicated equipment such as:
     - Disposable stethoscope
     - Disposable blood pressure cuff
     - Gait belt
     - Thermometer (e.g., single-patient use clinical thermometer,Tempa-dots)
     - Disposable pulse oximeter

   - When the use of reusable equipment is necessary, disinfect between patient use with a hospital-approved disinfectant.

3. Gloves and Gown

   - Adhere to Standard Precautions MW IP Standard Precautions and Use of Protective Barriers Policy
   - Pediatric patients: co-workers need to don gloves and a gown prior to providing care for pediatric patients.

4. Mask

   - Put on hospital provided mask upon entry into the patient room.
   - If patient is coughing, co-worker needs to don a mask with faceshield/eye protection according to Standard Precautions.
   - Use an N-95 mask for aerosol generating procedures.

5. PPE Removal

   - Remove mask (gloves and gown, if required) and perform hand hygiene before exiting the patient room. (Refer to CDC sequence poster below)

6. Hand Hygiene

   - Perform hand hygiene:
     - before touching a patient
     - after touching a patient
     - before a clean/aseptic procedure
     - after body fluid exposure risk
     - after touching patient surroundings

7. Patient transport

   - Limit transport of patient from room for essential medical purposes only. Place surgical mask on patient during transport when possible.

8. Patient Ambulation

   Ambulation within the patient room is preferred. If ambulating outside of room is necessary for therapy or discharge, follow these steps-caregiver must be with patient when ambulating outside of room:

   - Perform hand hygiene and don a hospital approved mask upon entering the room
   - Assist patient out of bed.
   - Any equipment used during ambulation should be disinfected when leaving and upon re-entering patient room.
   - Give patient a hospital approved mask to wear in the hall during ambulation.
   - Caregiver removes their mask and performs hand hygiene upon leaving the patient room.
   - Ask the patient to perform hand hygiene before ambulating into the hall.
   - After ambulation, caregiver performs hand hygiene and dons hospital approved mask upon re-entering patient room.
   - Remove patient's mask and discard into trash. Assist patient to bed/chair, give call light and activate bed alarm, if applicable.
   - Caregiver removes mask and performs hand hygiene upon exiting patient room.

9. Visitors

   - Visitors report to nurse before entering patient room.

- Nurse educates visitor(s) about wearing mask while visiting patient and to perform hand hygiene prior to leaving room. Document education in Patient Education Record.

10. Patient Discharge/Transfer
    - At patient discharge or transfer, the isolation sign posted on the patient door needs to remain on the door until after the room is cleaned by Environmental Services. The EVS co-worker removes the sign from the door when he/she has completed cleaning the room.
    - Inform receiving nursing unit/facility/agency about the type of precautions and reason for precautions.

11. Discontinuation of Isolation
    - Discontine after resolution of symptoms or according to pathogen-specific recommendations in Type of Precautions & Duration for Infectious Diseases
    - Contact Infection Prevention prior to discontinuaqtion of isolation
        - Room must be cleaned prior to discontinuing isolation precautions per Infection Prevention recommendations

12. Cleaning Patient Room
    - Use hospital approved disinfectant, thoroughly clean all surfaces.
    - Wipe down equipment with a hospital approved disinfectant before it is removed from the room. (See Hospital Policy on Equipment Cleaning)
    - See recommendations for changing cubicle curtain: MW IP Recommendations for Privacy Curtain Changes in Patient Care Areas Policy

## VI. Related Policies and References

Center for Disease Control and Prevention, Hospital Infection Control Practices Advisory Committee. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007.
Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

World Health Organization, WHO Guidelines on Hand Hygiene in Health Care (Five Moments for Hand Hygiene), 2009.
Five moments for hand hygiene

Association for Professionals in Infection Control and Epidemiology, APIC Text online; www.text.apic.org

**MW Droplet Precautions Door sign – see below**

**CDC Sequence for Donning & Doffing Personal Protective Equipment (PPE) – see below**


STOP
Droplet Precautions
Please see the nurse before visiting
Family, visitors and health care providers must:
Clean hands with sanitizer or soap and water when entering room and upon leaving the room
Mask at door
• If contact with secretions likely, use gown, glove and eye protection
• If respiratory secretions will be aerosolized, ie suctioning etc., add N95 mask and eye protection.
Use patient dedicated or disposable equipment. Clean and disinfect shared equipment with hospital approved disinfectant wipe
This sign to be removed by Environmental Services after room cleaned

# Droplet Precautions

Display sign outside the door. Remove sign after room is cleaned.

**Common Conditions:**

- Influenza
- Meningitis - Neisseria meningitidis (meningococcal), Haemophilus Influenzae, type b
- Select respiratory viruses
- Pertussis
- Refer to "Type and duration of precautions for selected infections/conditions" policy

**Dishes/Utensils:**
No special precautions. Kitchenware sanitized in dishwasher.

**Equipment and Supplies:**

- Use dedicated or disposable equipment when available.
- Clean and disinfect reusable equipment with a hospital approved disinfectant wipe including IV pumps, cell phone or pagers (if used in room), and other electronics, supplies, and equipment prior to removing from patient's room.
- Only essential supplies in room.

**Linen Management:**
Bag linen in the patient's room.

**Personal Protective Equipment:**

| Put **ON** in this order | Take **OFF** and dispose in this order: (Option 1) | Take **OFF** and dispose in this order: (Option 2) |
|---|---|---|
| 1. Wash or foam hands<br>2. Gown (if needed)<br>3. Mask (Use an N-95 mask for aerosol generating procedure)<br>4. Eye cover (if needed)<br>5. Gloves (if needed) | 1. Gloves (if used)<br>2. Eye cover (if used)<br>3. Gown (if used)<br>4. Mask<br>5. Wash or foam hands (even if gloves used) | 1. Gown and gloves together (if used)<br>2. Eye cover (if used)<br>3. Mask<br>4. Wash or foam hands (even if gloves used) |

**Room Cleaning:**

- **Housekeeping:** Routine cleaning procedures.

**Transport:**
Essential transport only. Place surgical mask on patient. Clean and disinfect transport vehicle. Alert receiving department regarding patient's isolation precaution status prior to transport.

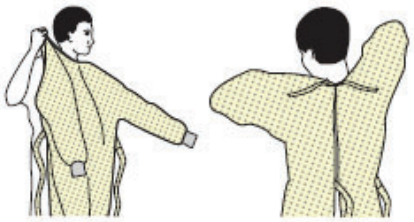
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## SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

### 1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



### 2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



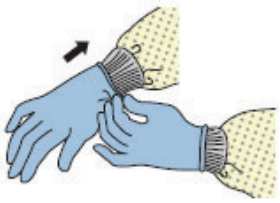
### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



### 4. GLOVES

- Extend to cover wrist of isolation gown



## USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

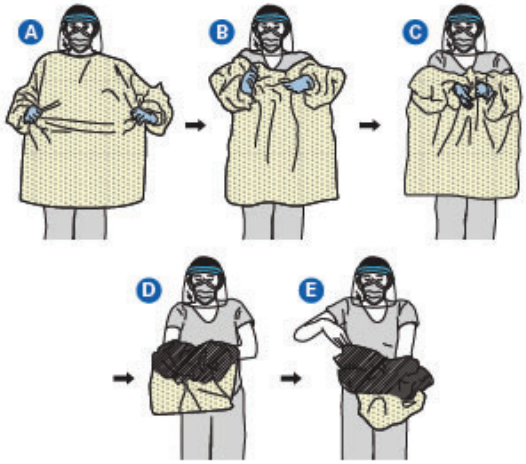
- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

# HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

## 1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



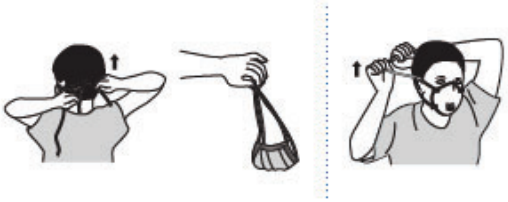

## 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

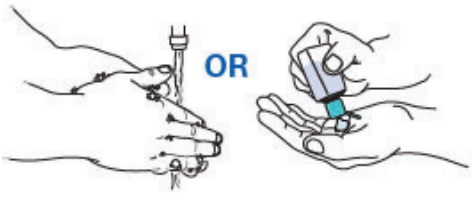


## 3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



## 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE




**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**

CDC

| | | |
|---|---|---|
| Facility Name(s): | Mercy Health | |
| Policy / Procedure: | MW IP Enhanced Contact Precautions Policy | |
| Approved by: | Mercy Infectious Disease Specialty Council, Kathleen McMullen (ED-Infection Prevention Sterile Processing) | Date: 12/02/2025 |

## I. Policy:
In addition to Standard Precautions, use Enhanced Contact Precautions for patients known or suspected to be infected with MDR (Multidrug-Resistant) Acinetobacter, Carbapenem-Resistant organisms that are a carbapenamase-producer (CRO-CP), Colistin Resistant bacteria, Candida auris or other resistant microorganisms defined by infectious disease.

## II. Purpose:
Enhanced Contact Precautions is one category of transmission-based precautions that is designed to prevent the transmission of MDR Acinetobacter, CRO-CP, Colistin-resistant bacteria, Candida auris or other resistant microorganisms defined by infectious disease by direct contact with the patient or the patient's environment.

## III. Scope:
Policy applies to all Mercy Communities, credentialed providers, and co-workers who enter an Enhanced Contact isolation room or provide direct patient care for a patient on Enhanced Contact Precautions.

## IV. Definition:
Transmission occurs when microorganisms are transferred from one person to another person either by direct contact or indirect contact.

- Direct contact: Occurs when microorganisms are transferred from an infected person without a contaminated intermediate object or person.
- Indirect contact: transfer of an organism through a contaminated intermediate object or person (e.g. hands of co-worker after touching infected or colonized body site of patient without hand hygiene before touching another patient, shared patient-care devices between patients without cleaning device).
- Detailed information on these high risk organisms can be found on Baggot Street Infection Prevention page
    - Candida auris is a fungus (yeast), often multi-drug resistant, causing severe invasive infections and illness in at-risk hospitalized immunocompromised patients (patients with frequent hospitalizations, invasive medical devices). Spread by person to person, or contact with contaminated environmental surfaces (persistent in the environment).
    - Carbapenem-resistant organisms that are a carbapenemase-producer (CRO-CP): A family of bacteria that have become resistant to a group of antibiotics known as Carbapenems by production of an enzyme called carbapenemase. Klebsiella species and Escherichia coli (Ecoli) are examples of orgnaisms that can become resistant to carbapenems. Some CRO-CP have become resistant to most available antibiotics which makes infections difficult to treat.



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- Multi-drug Resistant Acinetobacter is a group of gram-negative bacteria commonly found in soil and water and can cause a variety of diseases, ranging from pneumonia to serious blood or wound infections. Those with indwelling devices or weakened immune systems are at increased risk. Some people may be colonized with the bacteria.

## V. Procedures for Implementation

1. Notification
   - Microbiology/Laboratory notifies the nursing unit about a positive culture/screen for CRO-CP, MDR Acinetobacter, Colistin-resistant bacteria or Candida auris
   - Microbiology/Laboratory notifies Infection Prevention about initial patient isolate of CRO, MDR Acinetobacter, and Candida auris. Infection Prevention is also notified via infection prevention surveillance system. Infection Prevention enters the specific organism result into the electronic health record for historical reference and performs transmission investigation as applicable.
   - Environmental Services (EVS) is notified by the electronic health record or the Infection Prevention department or nursing.

2. Patient placement
   - Place patient in a private room.
   - For nursing coworkers that provide care to other patients in addition to caring for patients with CRO-CP or MDR Acinetobacter or Colistin-resistant bacteria or Candida auris:
     - Consult unit leadership to make decision for appropriate assignment
     - When possible: Nurse should be assigned to low risk patients (i.e. not immunocompromised or post-op patients, or those with invasive devices such as endotracheal tubes, central lines, or open wounds).
   - During an outbreak, consider dedicating coworkers to patients on enhanced.

3. Initiation of Isolation
   - Place Enhanced Contact Precautions sign on the door or designated facility location
   - Nurse or credentialed provider to initiate isolation and place order in electronic health record.
   - Provide patient and family/visitors with education to explain precautions and document in electronic health record
   - Place isolation supplies or organizer outside the patient room
   - Dedicate equipment such as:
     - Disposable stethoscope
     - Disposable blood pressure cuff
     - Gait belt

  - Thermometer (i.e. single use clinical thermometer,Tempa-dots)
  - Disposable pulse oximeter probe
- When the use of reusable equipment is necessary, disinfect between patient use with a hospital-approved bleach disinfectant or facility approved product that has an EPA claim to kill CRE-CP and/or MDR Acinetobacter using strict adherence to required wet time.
- In facilities with no computers in patient room, consider dedicating a computer on wheels for that patient stay.
- Do not take portable vital sign machine into the room if other means of obtaining vital signs is available.
  - If portable vital sign machine must be taken into the room, wipe down with hospital-approved bleach disinfectant or facility approved product that has an EPA claim to kill CRO-CP and/or MDR Acinetobacter with strict adherence to required wet times before device is removed from the room
- Keep par level of supplies and linens in the room to a minimum.

4. Hand Hygiene
   - Perform hand hygiene: before donning gloves and between all glove changes
   - Perform hand hygiene:
     - before touching a patient
     - after touching a patient
     - before a clean/aseptic procedure
     - after body fluid exposure risk
     - after touching patient surroundings
   - Hand hygiene should be performed **upon leaving** patient's room.

5. Gloves and Gown
   - After performing hand hygiene, don isolation gown and gloves before entering the patient room (refer to CDC sequence poster below).
   - Gloves to be worn at all times

6. Mask
   - Adhere to Standard Precautions (e.g., splashing/splattering of body fluids) MW IP Standard Precautions and Use of Protective Barriers Policy
     - Wear face protection (mask and eye protections) when performing procedures that generate splash (i.e. wound manipulation, suctioning) of contaminated material (i.e. blood, secretions, excretions).
   - If CRO-CP or MDR Acinetobacter or Colistin-resistant bacteria or Candida auris is isolated from sputum or respiratory specimens, place the patient in Droplet Precautions in addition to Enhanced Contact Precautions.

7. PPE Removal

- Remove gown and gloves and perform hand hygiene before exiting the patient room. (Refer to CDC sequence poster below.)

8. Patient Transport
   - Inform receiving nursing unit/facility/agency of current precautions and reason for them.
   - Limit transport of patient out of room for essential medical purposes only.
   - Patients leaving room for procedures/tests must have drainage, excretions and secretions contained.
   - Prior to entering the patient room, co-workers are to perform hand hygiene, don the appropriate PPE
     - Prior to transporting an isolation patient in his/her bed, the transporter wipes bed side rails, headboard, and footboard with a hospital-approved bleach product with strict adherence to required wet times before bed is removed from the room
   - If an isolation patient is not transported in his/her own bed, the chair or stretcher used for transport is covered with a clean blanket or sheet prior to entering the patient's room.
   - Place a clean hospital gown on the patient and have the patient perform hand hygiene prior to transport and cover with a clean sheet.
   - Immediately before leaving room the transporter:
     1. removes any gown and gloves worn
     2. places gown/gloves in appropriate receptacle within the room
     3. performs hand hygiene
   - Co-worker's PPE is not worn during transport unless it is anticipated that they will be providing direct patient care during the transport (i.e. providing ventilatory assistance). Bring extra gloves for use, as appropriate, during transport
   - Whenever possible: only the patient, transporter and caregivers enter the elevator due to unknown immune status of the general public.
   - Prior to re-entering the patient's room, co-worker performs hand hygiene then dons the appropriate isolation attire.
   - Once the transport is complete, the transporter is responsible for cleaning and disinfecting all equipment –(i.e. bed, wheelchair, stretcher) using a hospital-approved bleach product.
   - Patient transported to another department:
     - Notify receiving department that patient is in isolation for CRO-CP or MDR Acinetobacter or Colistin-resistant bacteria or Candida auris. Isolation should be maintained in the receiving department
       - The patient should be taken directly to and from room for testing or treatment and not allowed to be held in a waiting area.
       - After the patient leaves the department all surfaces are to be cleaned and disinfected with a hospital-approved bleach product.

- If patient is scheduled for an ERCP or EUS (endoscopic ultrasound), notify Infection Prevention prior to patient's procedure to discuss scope reprocessing.
- Schedule Physical Therapy at the end of the day if possible.

9. Patient Ambulation
   Ambulation within the patient room is preferred. -Ambulation outside of room only with Physical Therapy when ordered or needed for discharge criteria:
   - Perform hand hygiene, then don gown and gloves upon entering the Enhanced Contact Precautions room.
   - Assist the patient out of bed.
   - Give patient a clean hospital gown to cover clothes worn in bed. Assist as necessary.
   - Ensure that any wound is covered and will not seep during ambulation in the hall.
   - If the patient is incontinent, ensure patient is wearing adult brief that can contain any incontinent episodes prior to ambulation.
   - Ask patient to sanitize or wash hands before leaving the room. Any equipment, including walker/can being used during ambulation in the hall, disinfect with hospital approved bleach wipes upon leaving room (consider use of dedicated equipment for patients on Enhanced Contact Precautions).
   - Caregiver then removes gown and gloves and sanitizes hands before ambulating the patient in the hall.
   - After ambulation, caregiver to perform hand hygiene, don gloves and gown upon re-entering patient room.
   - Assist patient to remove patient gown worn in the hall, and assist to bed/chair, give call light and activate bed alarm, if applicable.
   - Disinfect any equipment being removed from room with hospital approved beach wipes.
   - Remove gown, gloves and perform hand hygiene upon exiting room.

10. Visitors
    - Visitors report to nurse before entering the room.
    - Nurse educates visitors about wearing appropriate PPE while visiting patient, removal of PPE, and to wash hands prior to leaving room.
    - Education is documented in the Patient Education Record.

11. Discontinuation of Isolation
    - Isolation will continue for duration of hospital stay.
    - Refer to Type of Precautions & Duration for Infectious Diseases for organism specific information
    - Contact Infection Prevention prior to discontinuation of isolation.

12. Cleaning Patient Room – Daily and at Patient Discharge/Transfer

- Room is cleaned TWICE DAILY and at DISCHARGE with a hospital-approved bleach product. All horizontal surfaces, including computer keyboards, are thoroughly cleaned and disinfected using appropriate contact times with the approved product.
- At patient discharge or transfer, continue to post the isolation sign until after the room is cleaned by Environmental Services. The EVS co-worker removes the sign from the door when he/she has completed cleaning of the room.
- Discard all non-reusable supplies in trash.
- Privacy curtains are removed for laundering during the terminal cleaning process.
- Before removing from room, equipment in room is thoroughly cleaned with a hospital-approved bleach product.
- Following a terminal clean of the patient room, a disinfection unit that emits ultraviolet-C light, or an aerosolized hydrogen peroxide or other surface disinfection method (as available per facility).
- For units with a high number of patients with CRO-CP or MDR Acinetobacter, consider cleaning other common areas of the unit (i.e., nurses' station, med room, nutrition room) with a hospital-approved bleach product.

## VI. Related Policies and References

Center for Disease Control and Prevention, Hospital Infection Control Practices Advisory Committee. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007 Last update May, 2019. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

Facility Guidance for Control of Carbapenem-resistant Enterobacteriaceae (CRE) November 2015 Update Facility Guidance for Control of Carbapenem-resistant Enterobacteriaceae (CRE)

World Health Organization, WHO Guidelines on Hand Hygiene in Health Care (Five Moments for Hand Hygiene), 2009. https://www.who.int/publications/m/item/five-moments-for-hand-hygiene

Patricia Rosenbaum RNC, CIC, et al. Guide to the Elimination of Multidrug-resistant Acinetobacter baumannii Transmission in Healthcare Settings. Washington, DC: APIC, 2010.

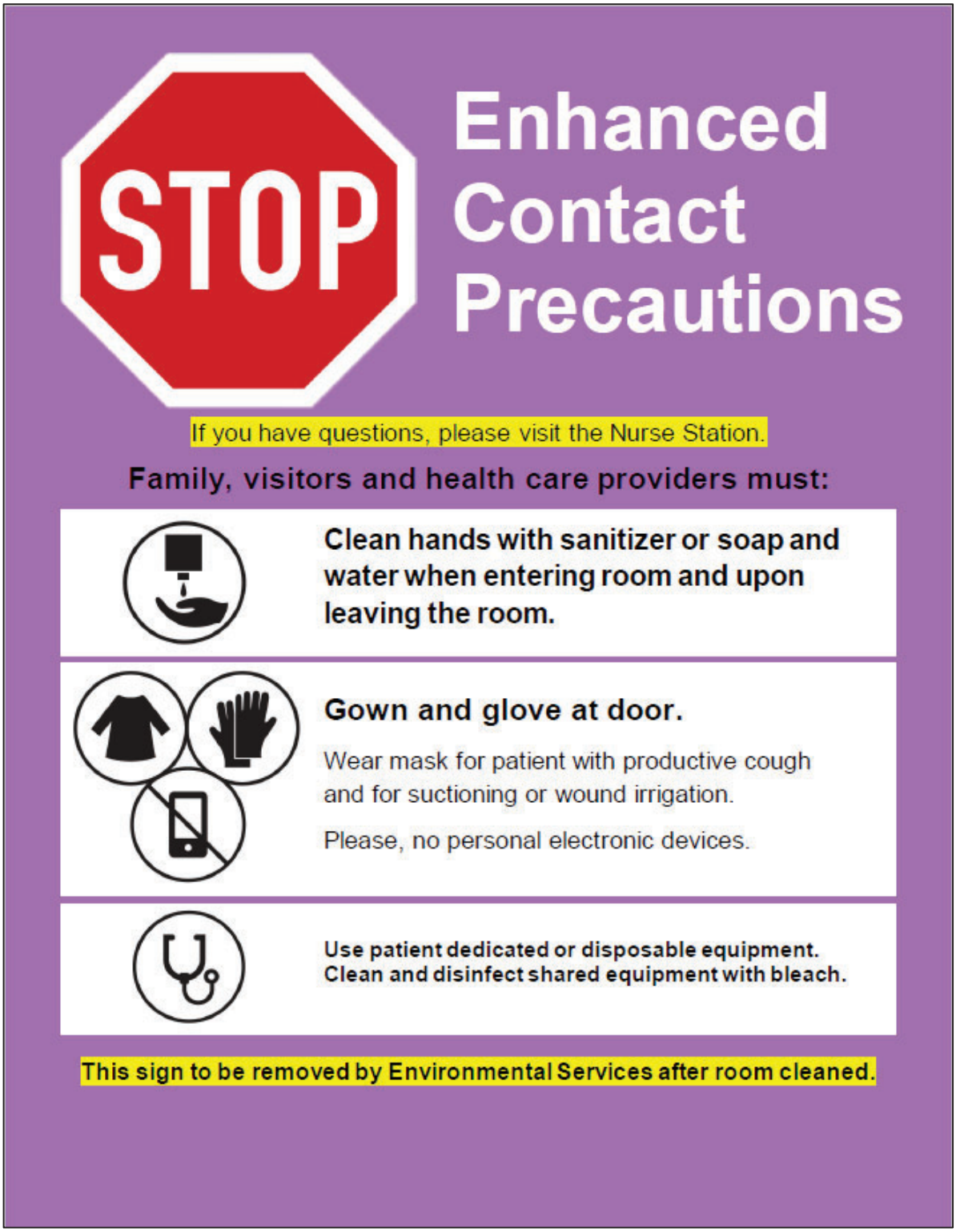
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**MW Enhanced Contact Precautions Door sign – see below**

**CDC Sequence for Donning & Doffing Personal Protective Equipment (PPE) – see below**



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# Enhanced Contact Precautions

***If patient has suspected or confirmed CRE or MDR Acinetobacter use Enhanced Contact Precautions***
Display sign outside the door. Remove sign after room is cleaned.

**Dietary:**
**Family and visitors should not eat in the room.**

**Dishes/Utensils:**
No special precautions. Kitchenware sanitized in dishwasher.

**Equipment and Supplies:**
- Use dedicated or disposable equipment when available.
- Clean and disinfect reusable equipment with Bleach including IV pumps, cell phone or pagers (if used in room), and other electronics, supplies, and equipment prior to removing from patient's room.
- Only essential supplies in room.

**Linen Management:**
Bag linen in the patient's room.

**Personal Protective Equipment:**

| Put ON in this order | Take OFF and dispose in this order: (Option 1) | Take OFF and dispose in this order: (Option 2) |
|---|---|---|
| 1. Wash or foam hands<br>2. Gown<br>3. Mask (if needed)<br>4. Eye cover (if needed)<br>5. Gloves | 1. Gloves<br>2. Eye cover (if used)<br>3. Gown<br>4. Mask (if used)<br>5. Wash or foam hands (even if gloves used) | 1. Gown and gloves together<br>2. Eye cover (if used)<br>3. Mask (if used)<br>4. Wash or foam hands (even if gloves used) |

**Room Cleaning:**
- **Housekeeping:** Room is cleaned **TWICE DAILY** and at **DISCHARGE** with bleach. Privacy curtains are removed for laundering during the terminal cleaning process. If available, use an ultraviolet surface disinfection unit or an aerosolized hydrogen peroxide unit following terminal clean.

**Transport:**
Essential transport only. Place patient in clean gown. Clean and disinfect transport vehicle with bleach. Alert receiving department regarding patient's isolation precaution status prior to transport.



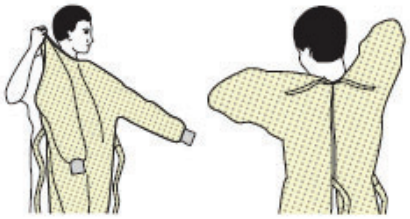
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## SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

### 1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



### 2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



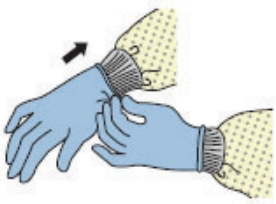
### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



### 4. GLOVES

- Extend to cover wrist of isolation gown



## USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

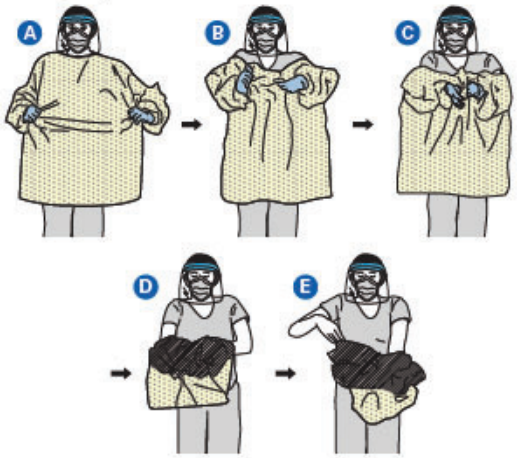
- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

# HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

## 1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container




## 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

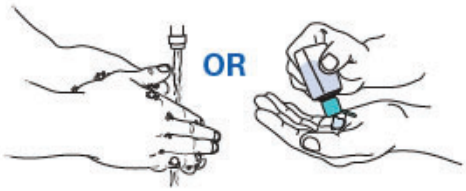


## 3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



## 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE




**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**



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| | | |
|---|---|---|
| Facility Name(s): | Mercy Health | |
| Policy / Procedure: | MW IP Enteric Contact Precautions Policy | |
| Approved by: | Mercy Infectious Disease Specialty Council, Kathleen McMullen (ED-Infection Prevention Sterile Processing) | Date: 12/02/2025 |

**I. Policy:** In addition to Standard Precautions, use Enteric Contact Precautions for patients known or suspected to be infected with *Clostridioides (Clostridium) difficile,* Norovirus, or selected gastrointestinal illnesses, refer to **Type of Precautions & Duration for Infectious Diseases**

**II. Purpose:** Enteric Contact Precautions is one category of transmission-based precautions that is designed to prevent the transmission of enteric pathogens by direct contact with the patient or the patient's environment.

**III. Scope:** Policy applies to all Mercy Communities, credentialed providers, and co-workers who enter an Enteric Contact isolation room or provide direct patient care for a patient on Enteric Contact Precautions.

## IV. Definition:

Contact Transmission occurs when microorganisms are transferred from one person to another person either by direct contact or indirect contact.

- Direct contact: Occurs when microorganisms are transferred from an infected person without a contaminated intermediate object or person.
- Indirect contact: transfer of an organism through a contaminated intermediate object or person (e.g. hands of co-worker after touching infected or colonized body site of patient without hand hygiene before touching another patient, shared patient-care devices between patients without cleaning device).
- *Clostridioides (Clostridium) difficile* is a germ that produces toxins into the gastrointestinal tract causing inflammation and injury. It is the major cause of healthcare-associated diarrhea. The organism forms spores that survive in the environment and are resistant to routine cleaning and disinfection measures.

## V. Procedures for Implementation

1. Patient placement

    - Place patient in a private room. When a private room is not available, may cohort patient with another patient who has the same pathogen only after consulting infection prevention.

2. Initiation of Isolation
    - Place Enteric Contact Precautions sign on the door
    - Nurse or credentialed provider to initiate isolation and place order in electronic health record.

- Provide patient and family/visitors with education to explain precautions and document in electronic health record
- Place isolation organizer outside the patient room
- Dedicate equipment such as:
  - Disposable stethoscope
  - Disposable blood pressure cuff
  - Gait belt
  - Thermometer (ie. single use clinical thermometer,Tempa-dots)
  - Disposable pulse oximeter
- When the use of reusable equipment is necessary, disinfect between patient use with a hospital-approved bleach disinfectant.

3. Gloves and Gown

- Don isolation gown and gloves before entering the patient room (refer to CDC sequence poster below).
- Perform hand hygiene before donning PPE.

4. Mask

- Adhere to Standard Precautions (e.g., splashing/splattering of body fluids) MW IP Standard Precautions and Use of Protective Barriers Policy

5. PPE Removal

- Remove gown and gloves (refer to CDC sequence poster below) then perform hand hygiene before exiting the patient room (preferably using soap and water).

6. Hand Hygiene

- Perform hand hygiene:
  - before touching a patient
  - after touching a patient
  - before a clean/aseptic procedure
  - after body fluid exposure risk
  - after touching patient surroundings

Hand washing with soap and water is preferred on exiting the patient's room

7. Patient Transport

- Limit transport of patient from room for essential medical purposes only.

- Prior to entering the patient room, co-workers are to perform hand hygiene, don the appropriate PPE
- Prior to transporting an isolation patient in his/her bed, the transporter wipes bed side rails, headboard, and footboard with a hospital approved bleach disinfectant and allows the surfaces to air dry.
- If an isolation patient is not transported in his/her own bed, the chair or stretcher used for transport is covered with a clean blanket or sheet prior to entering the patient's room.
- Place a clean hospital gown on the patient and have the patient perform hand hygiene prior to transport and cover with a clean sheet.
- Immediately before leaving room the transporter:
    1. removes any gown and gloves worn
    2. places gown/gloves in appropriate receptacle within the room
    3. performs hand hygiene (preferably using soap and water)
- Co-worker's PPE is not worn during transport unless it is anticipated that they will be providing direct patient care during the transport (i.e. providing ventilatory assistance). Bring extra gloves for use, as appropriate, during transport
- Whenever possible: only the patient, transporter and caregivers enter the elevator due to unknown immune status of the general public.
- Prior to re-entering the patient's room, co-worker performs hand hygiene then dons the appropriate isolation attire.
- Once the transport is complete, the transporter is responsible for cleaning and disinfecting all equipment –(i.e. bed, wheelchair, stretcher) using hospital approved bleach disinfectant.

8. Patient Ambulation

   Ambulation within patient room is preferred.Ensure the patient does not have active incontinent diarrhea. If the patient is experiencing uncontrolled diarrhea, ambulation should not occur until the diarrhea is controlled. If ambulating outside of room is allowed (patient continent), caregiver should be with the patient when ambulating outside of room. Follow these steps:

   - Perform hand hygiene, don gown and gloves upon entering the Enteric Contact Precautions room.
   - If patient's diarrhea is controlled, assist the patient out of bed.
   - Give patient a clean hospital gown. Assist as necessary.
   - Ask the patient to wash hands with soap and water before leaving the room.
   - If equipment, including walker/can being used for ambulation, disinfect with hospital approved bleach wipes before leaving the room. Consider dedicated equipment to be left in patient room during their hospitalization.
   - Caregiver then removes gown and gloves, and washes hands with soap and water upon exiting room before ambulating the patient in the hall
   - After ambulation, caregiver washes hands with soap and water, dons gloves

and gown upon re-entering patient room.
- Assist patient to remove patient gown worn in the hall, and assist to bed/chair, give call light, activate bed alarm, if applicable.
- Disinfect any equipment that must be removed from room with hospital approved bleach wipes.
- Remove gown, gloves, wash hands with soap and water upon exiting room.

9. Visitors

- Visitors report to nurse before entering the room.
- Nurse educates visitors about wearing appropriate PPE while visiting patient, removal of PPE, and to wash hands prior to leaving room (preferably with soap and water).
- Education is documented in the Patient Education Record.

10. Patient Discharge/Transfer

- At patient discharge or transfer, continue to post the isolation sign until after the room is cleaned by Environmental Services. The EVS co-worker removes the sign from the door when he/she has completed cleaning of the room.
- Inform receiving nursing unit/facility/agency about the type of precautions and reason for precautions.

11. Discontinuation of Isolation

- Discontinue according to pathogen-specific recommendations in Type of Precautions & Duration for Infectious Diseases
- Contact Infection Prevention prior to discontinuation of isolation.
  - Room must be cleaned prior to discontinuing isolation precautions per Infection Prevention recommendation

12. Cleaning Patient Room

- Room is cleaned DAILY and at DISCHARGE with a 1:10 dilution of hypochlorite solution or facility approved product that has an EPA claim to kill Clostridium difficile spores. All horizontal surfaces, including computer keyboards, are thoroughly cleaned and disinfected using appropriate contact times with the approved product.
- Privacy curtains are removed for laundering during the terminal cleaning process.

- Equipment in room is thoroughly cleaned with a hospital grade disinfectant before it is removed from the room. (See Hospital Policy on Equipment Cleaning).
- After manual cleaning of the room by EVS, a disinfection unit that emits ultraviolet-C light or hydrogen peroxide or other surface disinfection method is placed in the room to disinfect surfaces (as applicable per facility).

## VI. Related Policies and References

Center for Disease Control and Prevention, Hospital Infection Control Practices Advisory Committee. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007.
Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

Carrico, Ruth, et al. 2013. Guide to Preventing *Clostridium difficile* Infections. Association for Professionals in Infection Control and Epidemiology, Inc. (APIC).

Dubberke ER, Gerding, DN. Rationale for Hand Hygiene Recommendations after Caring for a Patient with *Clostridium difficile* Infection. A Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospital, Fall 2011. Update

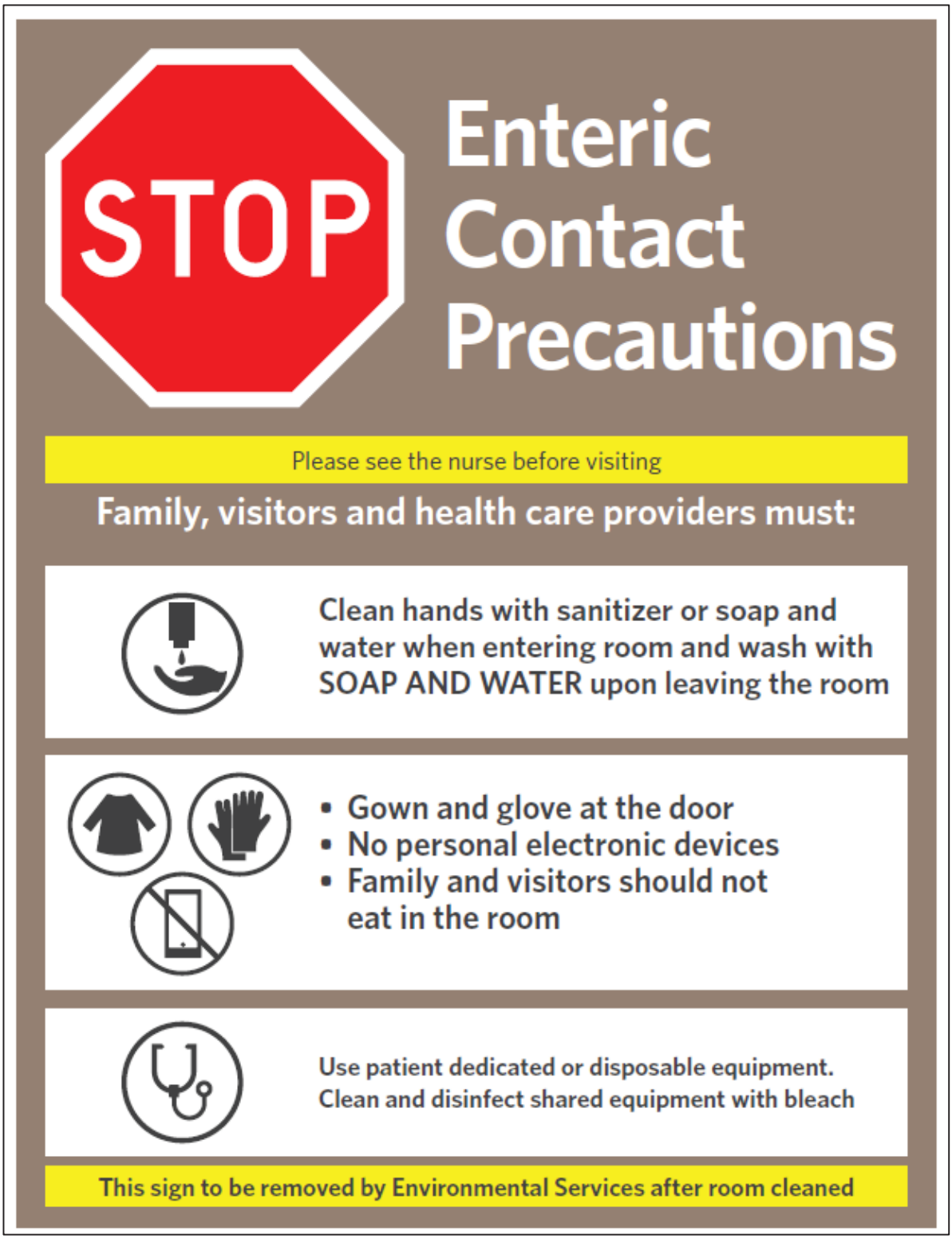
Cohen, Stuart MD, Gerding, Dale N MD et al. Volume 31, No. 5. SHEA-IDSA Guideline. Clinical Practice Guidelines for *Clostridium difficile* Infection in Adults: 2010 Update. Infection Control and Hospital Epidemiology May 2010

World Health Organization, WHO Guidelines on Hand Hygiene in Health Care (Five Moments for Hand Hygiene), 2009. Five moments for hand hygiene

Association for Professionals in Infection Control and Epidemiology, APIC Text-online; www.text.apic.org

**MW Enteric Contact Precautions Door sign – see below**

**CDC Sequence for Donning & Doffing Personal Protective Equipment (PPE) – see below**


STOP
Enteric Contact Precautions
Please see the nurse before visiting
Family, visitors and health care providers must:
Clean hands with sanitizer or soap and water when entering room and wash with SOAP AND WATER upon leaving the room
• Gown and glove at the door
• No personal electronic devices
• Family and visitors should not eat in the room
Use patient dedicated or disposable equipment. Clean and disinfect shared equipment with bleach
This sign to be removed by Environmental Services after room cleaned

# Enteric Contact Precautions

Display sign outside the door. Remove sign after room is cleaned.

**Common Conditions:**
- Suspected or confirmed *Clostridium Difficile* infection
- Norovirus
- Select gastrointestinal illnesses, refer to "Type and Duration of Precautions for Selected Infections/Conditions" policy

**Dietary:**
**Family and visitors should not eat in the room.**

**Dishes/Utensils:**
No special precautions. Kitchenware sanitized in dishwasher.

**Equipment and Supplies:**
- Use dedicated or disposable equipment when available.
- Clean and disinfect reusable equipment with Bleach including IV pumps, cell phone or pagers (if used in room), and other electronics, supplies, and equipment prior to removing from patient's room.
- Only essential supplies in room.

**Linen Management:**
Bag linen in the patient's room.

**Personal Protective Equipment:**

| Put **ON** in this order | Take **OFF** and dispose in this order: (Option 1) | Take **OFF** and dispose in this order: (Option 2) |
|---|---|---|
| 1. Wash or foam hands<br>2. Gown<br>3. Mask (if needed)<br>4. Eye cover (if needed)<br>5. Gloves | 1. Gloves<br>2. Eye cover (if used)<br>3. Gown<br>4. Mask (if used)<br>5. Wash hands with soap and water (even if gloves used) | 1. Gown and gloves together<br>2. Eye cover (if used)<br>3. Mask (if used)<br>4. Wash hands with soap and water (even if gloves used) |

**Room Cleaning:**
- **Housekeeping:** Room is cleaned **DAILY** and at **DISCHARGE** with bleach. Privacy curtains are removed for laundering during the terminal cleaning process. If available, use an ultraviolet surface disinfection unit or an aerosolized hydrogen peroxide unit following terminal clean.

**Transport:**
Essential transport only. Place patient in clean gown. Have patient perform hand hygiene if able. Clean and disinfect transport vehicle with bleach. Alert receiving department regarding patient's isolation precaution status prior to transport.

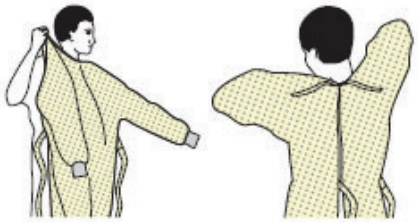
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## SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

### 1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



### 2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



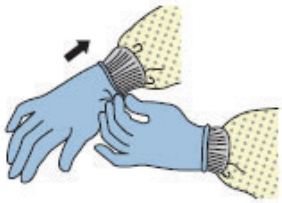
### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



### 4. GLOVES

- Extend to cover wrist of isolation gown



## USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

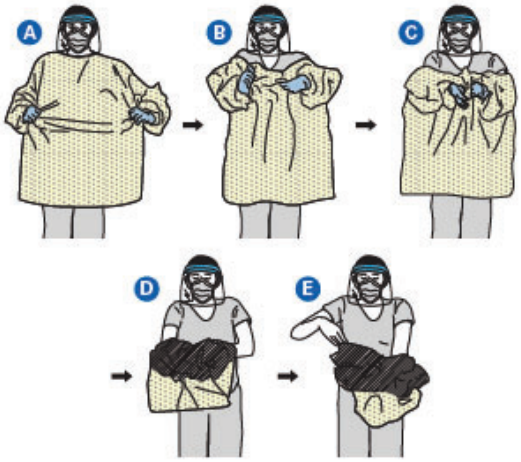
- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

# HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

## 1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



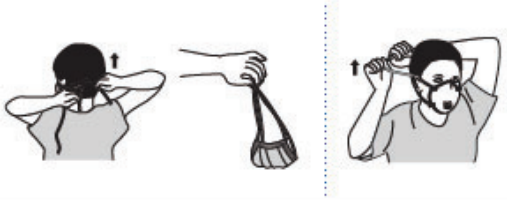

## 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

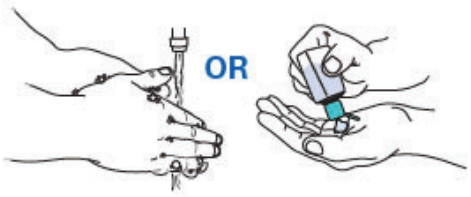


## 3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



## 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE




**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**

CDC

| | | |
|---|---|---|
| Facility Name(s): | Mercy Health | |
| Policy / Procedure: | MW IP Hand Hygiene Policy | |
| Approved by: | Mercy Infectious Disease Specialty Council, Kathleen McMullen (ED-Infection Prevention Sterile Processing), Matthew Meyers (ED-Co-worker Wellness & Workers Compensation) | Date: 12/10/2025 |

**PURPOSE:** Hand hygiene is the act of cleaning hands for the purpose of removing soil, dirt, and microorganisms. Hand Hygiene is considered the single most effective method of infection prevention by reducing the transmission of microorganisms in a healthcare setting. Mercy supports both Centers for Disease Control (CDC) and World Health Organization (WHO) guidelines for appropriate hand hygiene.

**SCOPE:** Hand hygiene is everyone's responsibility. Hand washing facilities and alcohol-based hand rub (ABHR) dispensers are conveniently located for frequent use. Use only hospital approved soap, ABHR, and lotion.

**KEY TERMS:**

A. Alcohol-based hand rub – solution that contains at least 60% alcohol designed to be applied to hands
B. Antiseptic agent – antimicrobial substances applied to skin to reduce the number of organisms (i.e., alcohol)
C. Hand Hygiene – term applied to either handwashing or alcohol-based hand rub (sanitizer)
D. Handwashing – act of cleaning hands using soap and water
E. Resident hand flora – organisms found in the deeper layers of the skin; always present
F. Surgical hand antisepsis – antiseptic handwash or antiseptic hand rub performed preoperatively by surgical personnel to eliminate transient flora and reduce resident hand flora
G. Transient hand flora – organisms that temporarily colonize the skin via objects or direct skin-to-skin contact and is more amenable to removal by hand hygiene
H. Visibly soiled – hands that show visible dirt or are contaminated with blood or other body fluids (e.g., stool, urine, sputum)
I. Patient care setting – areas that provide patient care or are responsible for the preparation of materials for direct patient use or patient consumption. All other areas would be considered non-patient care settings.

**PROCEDURES FOR IMPLEMENTATION:**

1. Indications for Hand Hygiene are based on the World Heath Organization 5 Moments for hand hygiene:
    a. These indications include:
        i. Before touching a patient
        ii. Before clean/aseptic procedure
        iii. After body fluid exposure risk
        iv. After touching a patient
        v. After touching patient surroundings
    b. Movement between the patient and healthcare zones is required for moments 1, 4, and 5.
        i. Patient zone: Includes the patient and area immediately surrounding the patient where care is given. This area is likely to be contaminated with the patient's own germs.
        ii. Healthcare zone: Includes the area outside the patient zone that is likely to be contaminated with germs from many patients, visitors, and coworkers.



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2. Some indications for hand hygiene require the use of soap and water (as opposed to ABHR)
    a. These indications include:
        i. When hands are visibly dirty or contaminated, or visibly soiled with blood or others body fluids.
        ii. After caring for a patient in Enteric Contact Precautions, including those with suspected infectious diarrhea.
        iii. Before eating.
        iv. After using the restroom.
    b. In the event washing with soap and water is indicated but handwashing facilities are not readily available, use an ABHR until able to wash. Washing with soap and water must be completed before starting a patient care task.
3. See facility specific policies regarding specialty care areas with unique hand hygiene requirements, such as operating and procedural rooms, burn units, Neonatal Intensive Care Unit (NICU), compounding pharmacy and interventional radiology.
4. Hand Hygiene Technique:
    a. Hand Washing:
        i. Wet hands with water (Avoid using hot water, because repeated exposure to hot water may increase the risk of dermatitis or skin irritation)
        ii. Apply soap
        iii. Rubs hands together vigorously for at least 15-20 seconds, covering all surfaces of the hands and fingers.
        iv. Rinse thoroughly with water
        v. Dry with paper towels
        vi. Turn off faucet with paper towel and dispose.



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   b. ABHR
      i. Apply one full pump of antiseptic to palm of one hand rubbing hands together
      ii. Cover all surfaces of hands and fingers
      iii. Rub hands together briskly until dry
   c. Always use soaps and ABHR that are facility-approved products
5. Glove Use:
   a. Per Standard Precautions, gloves should be worn when it can be reasonably anticipated that contact with blood or other potentially infectious materials, mucous membranes, non-intact skin, potentially contaminated skin, or contaminated equipment could occur
   b. Gloves are never a substitute for hand hygiene
   c. If your task requires gloves, perform hand hygiene prior to donning gloves, before touching the patient or the patient environment
   d. Perform hand hygiene immediately after removing gloves
   e. Change gloves and perform hand hygiene during patient care if gloves become damaged, gloves become visibly soiled with blood or body fluids following a task, or when moving from work on a contaminated body site to another body site on the same patient (including non0intact skin, mucous membrane, or medical device) or if another clinical indication for hand hygiene occurs
   f. Never wear the same pair of gloves in the care of more than one patient
   g. Do not layer multiple gloves on at the same time, unless in a sterile procedural location as a protection from sharps injuries
   h. Carefully remove gloves to prevent hand contamination
6. Skin Care:
   a. Hand lotion must be a facility-approved product which is compatible with other available hand hygiene products
   b. No touch application should be used to avoid contamination of the lotion
   c. Personal hand lotions are not the used. NOTE: Persons with allergies to the hospital approved hand hygiene products may use other approved products through the direction of Coworker Health
7. Nail Hygiene (refer to MW HR Appearance Policy):
   a. Patient Care Setting: In accordance with the Center for Disease Control recommendations, all co-workers who provide patient care or work in areas responsible for the preparation of materials for direct patient use or patient consumption should have their fingernails kept well-groomed with the length not to extend greater than ¼" beyond the fingertip.
      i. Clear polish is preferable over colored polish. If polish is worn, it cannot be chipped, cracked, or peeling. Nail ornaments are not allowed. Artificial fingernails, acrylic extenders, and nail wrap/stickers, are not permitted.
   b. Non-Patient Care Setting: Fingernails should be trimmed, clean and well groomed.
   c. Rationale: Freshly applied nail polish does not increase the number of bacteria recovered from periungual skin, but chipped nail polish may support the growth of larger numbers of organisms on fingernails.
8. Work Restrictions:
   a. Any healthcare worker not capable of performing hand hygiene due to bulky bandages, wraps, or other orthopedic devices may not be able to provide clinical care. It is the responsibility of the co-worker's direct leader to assess and confirm if proper hand hygiene, as outlined in this policy, can be performed by the coworker. If unsure, the leader should reach out to their local Infection Prevention Team for guidance on appropriateness for coworker to perform direct clinical care or have contact with clean patient items.

   b. If a coworker is not able to perform proper hand hygiene, the leader should reach out to HR Talent Relations for further review of situation.
9. Compliance Monitoring:
   a. Hand hygiene compliance shall be monitored (defined clinical areas per facility) in collaboration with Infection Prevention.
   b. Hand hygiene data will be reported per facility designee at a minimum to the Infection Prevention Committee.
   c. Feedback is provided as defined per facility to include indications for improvement opportunities.

**REFERENCES:**

1. WHO guidelines on hand hygiene in health care, 2009. World Health Organization website. https://www.who.int/publications/i/item/9789241597906. Accessed 8.30.2023
2. Centers for Disease Control and Prevention: Hand Hygiene Guidance | Hand Hygiene | CDC
3. Association of periOperative Registered Nurses. (2023). Guidelines for Perioperative Practice 2023. Retrieved from: https://www.r2library.com/Resource/Title/0939583097
4. Hewlett AL, Hohenberger H, Murphy CN, Helget L, Hausmann H, Lyden E, Fey PD, Hicks R. Evaluation of the bacterial burden of gel nails, standard nail polish, and natural nails on the hands of health care workers. Am J Infect Control. 2018 Dec;46(12):1356-1359. doi: 10.1016/j.ajic.2018.05.022. Epub 2018 Jul 6. PMID: 30509357.
5. Wałaszek M, Kwapniewska W, Jagiencarz-Starzec B, Kołpa M, Wolak Z, Wójkowska-Mach J, Różańska A. Skuteczność dezynfekcji rąk w zależności od rodzaju pokrycia płytki paznokciowej – badanie wśród pielęgniarek szpitala specjalistycznego [Effectiveness of hand disinfection depending on the type of nail plate coating - a study among nurses working in a specialist hospital]. Med Pr. 2021 Feb 3;72(1):29-37. Polish. doi: 10.13075/mp.5893.01019. Epub 2020 Oct 16. PMID: 33063771.
6. Wałaszek MZ, Kołpa M, Różańska A, Jagiencarz-Starzec B, Wolak Z, Wójkowska-Mach J. Nail microbial colonization following hand disinfection: a qualitative pilot study. J Hosp Infect. 2018 Oct;100(2):207-210. doi: 10.1016/j.jhin.2018.06.023. Epub 2018 Jun 30. PMID: 29969690.



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| | | |
|---|---|---|
| Facility Name(s): | Mercy Health | |
| Policy / Procedure: | MW IP Infection Prevention Fundamentals Policy | |
| Approved by: | Mercy Infectious Disease Specialty Council, Kathleen McMullen (ED-Infection Prevention Sterile Processing) | Date: 12/02/2025 |

## I. Policy

Use these guidelines and techniques to avoid transmission of infection within Mercy environments.

## II. Purpose

The purpose of this policy is to provide guidance on a variety of topics specific to the prevention of spread of microorganisms or infections within healthcare environments.

## III. Scope

This policy applies to Mercy hospitals, hospital outpatient departments and clinics.

## IV. Fundamental Items

A. Equipment and Supplies

- Store all clean equipment in a designated clean area. If equipment is not in a clean storage area or tagged as clean per facility guidelines, the item is to be cleaned before patient use.
- Minimize supplies in patient care areas/rooms.
- Do not return supplies to clean or sterile storage area after removing and taking to patient room.
- Commercially prepared items that do not have an expiration date will be considered sterile/usable until opened it package integrity is maintained.
- Label and use a separate collection container for emptying each type of drain a patient may have (i.e., foley, JP, NG, etc.).
- Upholstery, mattresses, stretcher pads, etc., must be without rips/tears or stains.

B. Scissors/Instruments/Tape/Patient Care Supplies

- Carrying scissors/instruments/patient care supplies (i.e., rolls of tape, saline syringes, etc.) in scrub/jacket pockets or fanny packs is highly discouraged.
- Utilize disposable or patient dedicated items when available.
- Avoid using a communal drawer or cabinet for accumulation of patient care supplies to reduce the risk of cross-contamination.
- Do not share equipment//supplies/instruments that cannot be cleaned/disinfected/re-processed between patients.
- Scissors used for noncritical tasks (come in contact with intact skin and do not touch mucous membranes):



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- Should be stored in a designated department location that indicates the item is ready to use.
- Should be visually inspected prior to each use to determine there is no damage, surface pitting, or rust development. If noted, scissors she be discarded.
- After use, disinfect using hospital-approved disinfectant. If scissors have any visible soiling, they must be wiped visibly clean first prior to the disinfection step (use two wipes for this process).

C. Multi-dose Eye Drops

NOTE: for use by ophthalmology clinics (including HOD ophthalmology) and ophthalmology procedural areas only!

- Multi-dose eye drop bottles may be used on more than one patient.
- Multi-dose eye drops bottles do not require an expiration date to be written on a bottle once opened; the manufacturer's expiration date printed on the label should be followed unless the manufacturer specifies a different expiration period once opened.
- The 28-day discard rule does not apply to multi-dose eye drop bottles.
- Multidose eye drop bottles may be stored in the immediate patient care area, including the operating room, anesthesia cart, etc., provided they are protected from contamination.
- Aseptic technique and standard precautions must be followed.
  - Wipe off multi-use bottle with alcohol between each patient.
- Eye medication labeled as single use must be discarded immediately after use on a single patient.

D. Solutions/Pour Bottles such as normal saline, sterile water for irrigation or wound care for example:

- Inspect solution for particulate matter and discoloration prior to use. Do not use unless the fluid is clear.
- Aseptic technique is essential with the use of solutions for irrigation of body cavities, wounds, and urethral catheters or for wetting dressings that come in contact with body tissues.
- Once opened, solution will no longer be sterile after exposed to the environment:
  - Do not open until ready for use.
  - Single patient use only-IF any remaining solution is not disposed of immediately, do not keep more than 24 hours, labeling the opened container with expiration date and time.
  - Do not use it as a multi-dose solution between patients.
  - When poured into a secondary container, the new container must be labeled with the solution type, any hazard precautions, and the expiration date. Discard 24 hours after opening initial solution bottle.

For multi-use solutions/bottles such as betadine, alcohol, hydrogen peroxide for example (be sure bottle is not labelled as single use):

- Do not take to patient location, i.e., bedside, procedure, exam room, etc.



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Unless the solution will remain with the patient, i.e., single patient use only.
- When opening the product, date with expiration/discard date (generally 28 days after opening).

E. Suction Equipment
- Oronasopharyngeal suction catheters are sterile and disposed of after each use.
- Tonsil tip/Yankauers suction devices are changed per packaging instructions
  - For patients on aspiration precautions, best practice is to have equipment available but unopened. If device is open and connected, but unused and in its packaging maintaining clean integrity, change out every 24 hours.
- Suction canisters are changed as needed.
- Suction canister liners and tubing are changed as needed and discarded after each patient.
- Wash soiled Vac Traps with soap and water and disinfect with bleach wipes when visibly soiled.

F. Fans
Patient Use:
- Use individual patient fans available per facility process.
- Any other type of portable fan must be approved for use by GE/FMO, or your facility approval process for electrical items brought into the facility.
- No box fans allowed
- Do not store reusable fans in clean supply locations.
- Determine cleaning process for dust control. Follow your facility approved process for cleaning and storage of reusable fans.
- Operation of a fan under the following conditions must be reviewed with infection prevention to determine if the benefit for the patient outweighs the risk:
  - Near a construction area
  - When the patient is immunocompromised
  - During bedside invasive therapeutic/diagnostic procedures
  - When the patient is in airborne or high droplet/droplet precautions
- Ceiling or wall-mounted fans in patient rooms:
  - Should be turned off when preparing for and completing clean or sterile procedures (i.e., opening trays, during delivery, wound care, etc.).
  - Should be included in discharge/terminal cleaning and as needed for contamination or dust control.

Caregiver Fan Use - discuss with Infection Prevention-must follow same GE/FMO requirements/approval process.

G. Fish Tanks/Aquariums and Bird Aviaries



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- Coworkers involved in direct patient care, including handling of supplies and food, should not:
  - Perform cleaning or maintenance
  - Feed fish or birds, unless performed at the end of their shift

H. Flowers and Plants
- Fresh or dried flowers and potted plants are not allowed in areas caring for at risk patients (i.e., neutropenic, immunocompromised, and critical care).
- Flowers and plants are permitted in areas caring for immunocompetent patients.
- Coworkers involved in direct patient care are discouraged from caring for flowers and potted plants. If unavoidable, wear gloves when handling flowers and plants, then wash with soap and water after glove removal.
- Vase water should be discarded into a sink outside of the immediate patient environment.

I. Pest Control
- Remove corrugated cardboard from storage areas in clinical settings. Food service may maintain clean cardboard for food storage.
- Prevention measures:
  - Eliminating food sources
  - Sealing windows and access sources
  - Applying pesticides, as appropriate
- Refer to MW EVS Management of Bed Bugs Policy and Environmental Precautions Sign

J. Food and Beverages
- Eating and drinking are prohibited in work areas where there is reasonable likelihood of occupational exposure.
- Food and drink will not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious material are present.
- In clinical areas, utilize only designated locations for covered drinks/food per facility specific assessment/approval outside breakrooms.
- If allowed in areas with computers/electronics-only lidded drinks will be permitted to prevent spillage that could cause damage to equipment.
- Food and drinks are not allowed in restricted areas (i.e., OR, invasive procedural areas, sterile processing and decontamination)

K. Linens
- Clean linens:
  - Perform hand hygiene before handling clean linen.
  - Keep all linen carts covered and cabinets closed to prevent inadvertent contamination of unused clean linens, even when the cart



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is stored in a clean supply room.
  - Do not overstock nurse servers, blanket warmers or supply cabinets in rooms.
- Soiled linens:
  - Don gloves and carry away from body to prevent contamination when directly handling soiled linen.
  - Do not shake or toss soiled linen to prevent contamination of air, surfaces, and personnel.
  - Do not sort or rinse soiled linen in patient care areas.
  - Remove any disposable items (i.e., incontinence pads) and discard in trash prior to placing linen in container or bag.
  - Place soiled linen in a covered container or specified colored bag at the point of use.
  - Ensure container or bag is closed securely prior to transporting.
  - Outside of linen bag should be maintained as clean for transport to soiled utility and/or linen chute.
  - Remove gloves and perform hand hygiene prior to transporting linen bag out of patient room.
- Rejected linens:
  - Clean linens that have tears, snags, stains, have stickers/adhesives attached, or gowns missing ties or snaps should be placed in designated bag or cart per facility.
- Healthcare facility laundered linens:
  - Patient use items should be limited to special need items (i.e, from NICU, behavioral health, physical therapy).Consult infection prevention.
  - For non-patient use items (i.e, mop heads and cleaning cloths) follow manufacturer's instructions for required wash and dry temperatures and detergents to be utilized.

L. Waste
- If waste container has a lid, do not overfill as to impede the lid from being able to close.

## V. References

CDC laundry practices guidance:
https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html

HLAC accreditation standards: HLAC_AccreditationStandards_05-31-2023.pdf

https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=3cfdeee0-ff14-4341-8396-b11c2a037c60



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|---|---|---|
| Facility Name(s): | Mercy Health | |
| Policy / Procedure: | MW IP Standard Precautions and Use of Protective Barriers Policy | |
| Approved by: | Mercy Infectious Disease Specialty Council, Kathleen McMullen (ED-Infection Prevention Sterile Processing) | Date: 09/11/2023 |

# I. Policy:

The use of barrier techniques should be utilized when any potential exposure is undertaken. Blood and body fluid precautions shall be consistently used in all settings by all coworkers. This approach, which is recommended by the Centers for Disease Control and Prevention and mandated by OSHA, shall be used in the care of ALL patients. Equipment for barrier protection (gloves, masks, gowns, goggles, etc.) shall be conveniently available in all areas of patient care.

# II. Purpose:

To provide strategies to healthcare personnel for the prevention of healthcare-associated transmission of infectious agents by utilizing appropriate barriers based on anticipated exposure.

# III. Scope:

This policy applies to all Mercy Communities, physicians and co-workers who provide direct patient care.

# IV. Definitions

**Standard precautions** are the minimum infection prevention practices used to prevent transmission of diseases that can be acquired by contact with blood, body fluids, non-intact skin (including rashes), mucous membranes or other potentially infective material (OPIM) that should be used in the care of all patients all of the time. These practices are designed to both protect the healthcare worker and to prevent the healthcare worker from spreading infections among patients.
Standard precautions include:

1. Hand hygiene
2. Use of personal protective equipment (e.g. gloves, gowns, masks)
3. Safe injection practices
4. Safe handling of potentially contaminated equipment, linen or surfaces in the patient environment, and
5. Respiratory hygiene/cough etiquette.

Standard Precautions are based on the principle that all blood, body fluids, secretions, non-intact skin and mucous membranes may contain transmissible infectious agents, and that medical history and physical examination cannot reliably identify all patients infected with these agents.

**Other Potentially Infective Material (OPIM)**: an OSHA term that refers to
(1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids
(2) Any unfixed human tissue or organ from a human.

**Sharps:** Any device that is contaminated with blood and body fluids and that has the potential to pierce the skin of another person is considered a sharp. This includes but is not limited to needles, scalpels, razors, petri dishes, glass items, and staple guns used on the human body.

# V. Procedures for Implementation



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**See Appendix A for PPE Selection for various tasks, minimum requirements**

**Hand Hygiene** is the single most important measure to prevent transmission of pathogens associated with health care. Refer to facility policy on hand hygiene for expectations of when and instruction on how to appropriately perform hand hygiene.

**Gloves:**

Are worn

1. To provide a protective barrier to the coworker to prevent gross contamination from the patient
2. To provide protection to the patient from any microorganisms on the hands of the coworker
3. To reduce the likelihood of transmission of microorganisms from the patient to other patients via the hands of the coworker.
4. Disposable gloves are not washable or disinfected for reuse.
5. Hypoallergenic gloves are available to those with allergies.

They should be worn when touching blood, body fluids, secretions, excretions, mucous membranes, non-intact skin or OPIM; or when there is anticipated or potential for such exposure.

They should be changed

1. Between tasks and procedures on the same patient after contact with potentially infectious material
2. If they become torn, punctured, or when barrier properties are compromised.
3. When moving from a contaminated site to a clean site (example: removing a dressing and placing a new dressing

They should be removed

1. After use, before touching non-contaminated items and surfaces
2. Before going on to another patient.

***Hand hygiene must be performed immediately prior to donning, and immediately after removal of gloves.***

**Facial Protection (eyes, nose, mouth):**

A surgical or procedure mask and eye protection (visor, goggles) or a face shield shall be worn to protect mucous membranes of the eyes, nose and mouth during activities that are likely to generate splashes or sprays of blood, body fluids or OPIM.

- Masks must be fit properly over the bridge of the nose, and if string mask, both sets must be tied. After use, discard in trash prior to exiting patient room.
- Eye protection must be disinfected after use if non-disposable, or discarded if disposable. **NOTE:** personal eyeglasses and contact lenses are **NOT** considered adequate eye protection.

***Hand hygiene must be performed immediately prior to donning, and immediately after removal of mask or eye protection.***

**Gown/Fluid resistant aprons:**

Wear to protect skin and prevent soiling of clothing during activities that are likely to generate splashes or sprays of blood or OPIM.

1. The type and characteristic required will be determined by the task and degree of anticipated exposure. (See Table 1)
   **NOTE** - Clinical and laboratory coats or jackets worn over personal clothing for comfort and/or purposes of identity are not considered PPE.
2. Impervious surgical caps or hoods and shoe covers or boots shall be worn when gross contamination of the head or feet is reasonably anticipated (i.e. morgue, surgery, and trauma)

3. Remove gown and other indicated PPE before leaving patient room
4. Gowns are not reusable when caring for a patient.

| AAMI Level | Gown Characteristics |
|---|---|
| Level 2 | • Used in LOW-risk situations<br>• Provides a barrier to larger amounts of fluid penetration through splatter and some fluid exposure through soaking |
| Level 3 | • Used in MODERATE risk situations<br>• Provides a barrier to larger amounts of fluid penetration through splatter and more fluid exposure through soaking than Level 2 |
| Level 4 | • Used in HIGH risk situations<br>• Prevents all fluid penetration for up to 1 hour<br>• May prevent VIRUS penetration for up to 1 hour |

***Hand hygiene must be performed immediately prior to donning, and immediately after removal of gowns or fluid resistant aprons.***

**Sharps safety:** *All needles/syringes are for **single** use only.*

1. Use care when:
    - Handling needles, scalpels, and other sharp instruments or devices
    - Cleaning used instruments
    - Disposing of used needles and other sharps
    - Needles shall not be recapped, purposely bent/broken or otherwise manipulated by hand
2. All sharps must be placed in a rigid sharps disposal container immediately after use.
3. Sharp containers are closed, secured, and replaced when 3/4 full.
4. Safety devices must be deployed on safer sharps after use, before disposal in a rigid sharps container.
5. Immediately notify Workers Compensation or designee of all needle stick and other sharp object injuries, mucosal splashes, and contamination of open wounds or non-intact skin with blood or OPIM.
6. Do not place any items on top of sharps containers, i.e. box of gloves, etc.
7. Trash cans/bins should not be placed below sharps containers.

***Hand hygiene must be performed immediately after disposal of sharps.***

**Safe Injection Practices**

1. Use aseptic technique to avoid contamination of sterile injection equipment
2. Do not administer medications from a syringe to multiple patients, even if the needle or cannula on the syringe is changed. Needles, cannula and syringes are sterile, single-use items; they should not be reused for another patient nor to access a medication or solution that might be used for a subsequent patient
3. Use fluid infusion and administration sets (i.e., intravenous bags, tubing and connectors) for one patient only and dispose appropriately after use. Consider a syringe or needle/cannula contaminated once it has been used to enter or connect to a patient's intravenous infusion bag or administration set
4. Use single-dose vials for parenteral medications whenever possible

5. Do not administer medications from single-dose vials or ampules to multiple patients or combine leftover contents for later use
6. If multidose vials must be used, both the needle or cannula and syringe used to access the multidose vial must be sterile
7. Do not keep multidose vials in the immediate patient treatment area and store in accordance with the manufacturer's recommendations; discard if sterility is compromised or questionable
8. Do not use bags or bottles of intravenous solution as a common source of supply for multiple patients
9. Disinfect the vial access diaphragm with an approved antiseptic immediately prior to accessing

**Special lumbar puncture procedures**

Wear a surgical mask when placing a catheter or injecting material into the spinal canal or subdural space (i.e., during myelograms, lumbar puncture and spinal or epidural anesthesia)

**Respiratory Hygiene and Cough Etiquette:**

1. Persons with respiratory symptoms should cover their nose and mouth when coughing/sneezing with sleeve or tissue, dispose of tissue after use, and *perform hand hygiene.*
2. Visual alerts will be posted instructing persons with respiratory symptoms to practice respiratory etiquette.
3. Hand hygiene resources, tissues and masks will be placed in common areas and areas used for the evaluation of patients with respiratory symptoms.
4. Patients presenting with acute febrile respiratory symptoms will be masked at presentation to the facility or spatial separation of those persons (>3-6 feet) will be observed in common waiting areas when possible.
5. Instruct coworkers, patients, families, and visitors about respiratory etiquette and hand hygiene.

***Hand hygiene must be performed immediately after disposal of tissue.***

**Lab Specimens:**

All specimens of blood or OPIM must be placed in a container that prevents leakage during collection, handling, processing, storage, transport or shipping and should be labeled with biohazard symbol. If the outside of a specimen container becomes contaminated, it must be placed in a secondary container, preventing leakage.

***Hand hygiene must be performed immediately after removal of gloves following handling of lab specimens.***

**Environmental Considerations and Waste disposal:**

1. Place contaminated items in bags
2. Clean blood and body fluids spills immediately
3. Blood-spill clean-up kit is utilized for large blood and body fluid spills. Gloves are worn when cleaning up the spill. Following this, the area is disinfected with a hospital-approved disinfectant or a 1:10 dilution of sodium hypochlorite (household bleach).
4. Properly clean and disinfect or sterilize reusable equipment before using it for another patient
5. All waste should be separated and discarded at point of use. All waste that is heavily contaminated with blood and body fluids should be discarded as biohazardous (red bag) regulated waste. Regulated waste-contaminated items that would release blood or other potentially infections materials in a liquid or semi-liquid state if compressed.
6. Liquid body fluid waste should be emptied into the sanitary sewer system.
7. Environmental Service personnel transport contaminated trash in a leak proof covered vehicle. Appropriate barriers are worn if contact with blood or body fluids are anticipated.

***Wear appropriate PPE and perform hand hygiene immediately after disposal of waste.***

**Linens:**

1. Handle, transport, and process contaminated linen in a manner that prevents skin and mucous membrane exposure and contamination of clothing, the air, surfaces and persons. All linens are considered contaminated and handled in the same manner to prevent the spread of infection.
2. Linen is bagged/placed into an **impervious** linen bag at point of use
3. Linen bag must be securely tied.

***Hand hygiene must be performed immediately after handling of soiled linens.***

**Resuscitation Equipment -** Resuscitation bags and masks as well as other ventilatory devices are placed in strategic places to minimize the need for emergency mouth to mouth resuscitation.

**In the event of an Inadvertent Exposure to Blood or OPIM-** Contact Workers Compensation or designee ***within the hour,*** complete a Coworker incident report, and follow facility specific process for exposure to blood or body fluids.

## VI. Appendix A

PPE Selection for various tasks, minimum requirements are stated

Legend:

R = Required

S = if soiling likely

* = if splattering likely

| TASK | Gloves | Sterile Gloves | Fluid Resistant Gown | Goggles or Face Shield | N-95 or PAPR | Mask | Fluid Resistant Lab Jacket |
|---|---|---|---|---|---|---|---|
| Airborne Precautions | | | | | R | | |
| Contact Precautions | R | | R | | | | |
| Enteric Contact Precautions | R | | R | | | | |
| Enhanced Contact Precautions | R | | R | * | | | |
| Droplet Precautions | | | | | | R | |
| High Droplet Precautions | R | | R | R | R | | |
| Handling objects contaminated with blood or blood products | R | | | S | | | |
| Flushing blood, body fluids, OPIM down hopper | R | | R | R | | | |
| Emptying Bedpan/Urinal/Foley | R | | | * | | | |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ABG's Accucheck/Blood Draw/ IV med or contrast administration /Start or discontinue IV (may require additional PPE for pediatric, confused or uncooperative patients) | R | | * | * | | | |
| Patient contact that might result in bleeding or exposure to potentially infectious material. All body fluids, secretions and excretions except sweat, including blood, body fluids that contain visible blood, semen, vaginal secretions cerebrospinal, synovial, pleural, peritoneal, pericardial & amniotic fluids.** | R | | * | * | | * | |
| Handling/cleaning contaminated equipment-including mobile equipment | R | | * | * | | * | |
| Point of care-spraying soiled instruments | R | | * | R | | * | |
| Bone Marrow Aspiration | R | | | R | | | |
| Incision & Drainage | R | | * | R | | R | |
| Lumbar Puncture | R | * | | | | R | |
| Biopsy/Joint injection/Sutures | R | * | | | | | |
| Pre and Intraoperative Procedures | R | | R | R | | R | |
| Bedside invasive Procedure (chest tubes, tracheostomy | | R | R | R | | R | |
| Laboratory Testing Personnel | | | | | | | R |
| Cidex OPA (annual competency required) | R | | R | R | | R | |
| Bedside Trach assist | R | | R | R | | R | |
| Bronchoscopy Assist (if rule out TB particulate respirator or PAPR required) | R | | R | | if indicated | R | |
| Intubation/Extubation | R | | S | R | | | |
| NT Suction | | R | S | * | * | * | |
| Invasive & noninvasive vent | R | | | | | | |
| Trach Change out | | R | * | R | | R | |
| PICC line insertion | | R | R | | | R | |
| Wound Irrigation | R | | R | R | | R | |
| Bleach Solution for Cleaning | R | | S | R | | | |
| General Cleaning | R | | | | | | |
| Dispensing/Mixing Chemicals | R | | | R | | | |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Changing Trophon Cartridge | R | | | | | | |
| Chemotherapy | R | | R | R | | R | |

**VII. Related Policies and References**


1. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007). Centers for Disease Control, Hospital Infection Control Practices Advisory Committee

2. Association for Professionals in Infections Control & Epidemiology, Inc. (APIC) Text, 2016. Chapter 28, Standard Precautions

3. United States Department of Labor, OSHA. *Occupational Exposure to Bloodborne Pathogens, Needlestick and Other Sharps Injuries; Final Rule.- 66.5317-5325. January 18, 2001*







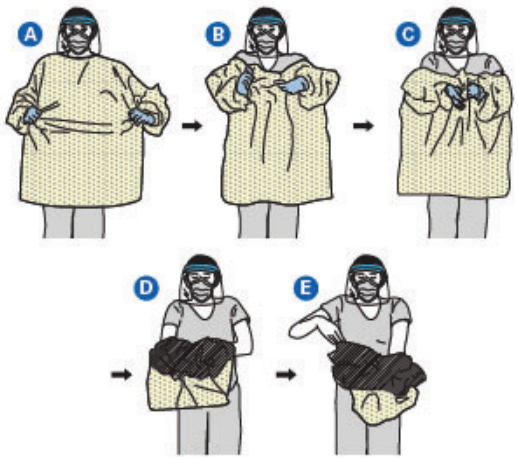
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# HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

## 1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



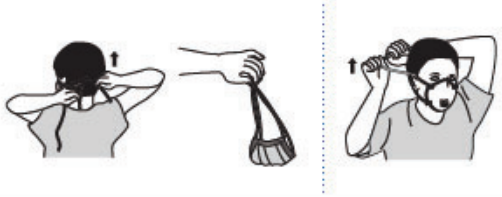

## 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

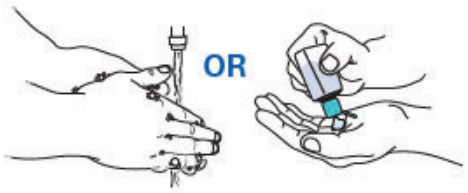


## 3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



## 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE




**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**

CDC



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| | | |
|---|---|---|
| Facility Name(s): | Mercy Hospital Springfield | |
| Policy / Procedure: | SPRG IP Care of Emergency Response Personnel and Good Samaritan Following Possible Exposure to Communicable Disease | |
| Approved by: | Infection Control Committee, Angie Seelye (Senior Quality Data Analyst) | Date: 11/19/2025 |

## Policy

Care of Emergency Response Personnel and Good Samaritan following Possible Exposure to Communicable Diseases.

## Purpose

To provide and inquiry and notifications to emergency response personnel (ERP) and Good Samaritan of possible exposure to communicable diseases or infections.

## Procedure

A. In accordance with Chapter 40 Comprehensive Emergency Medical Services Systems Regulations 19 CSR 30-40.047 Mandatory Notice to Emergency Response Personnel and Good Samaritan, and MO Rev Stat 191.631 (2024) Title XII Public Health and Welfare Chapter 191-Health and Welfare Section 191.631-Testing for disease, consent deemed given, when-hospital to conduct testing, written policies and procedures required-notification for confirmed exposure, by whom-limitations on testing and duties of hospitals, coroners, and medical examiners-rules, the hospital as the receiving medical facility will:
   1. Investigate requests from EPR or Good Samaritan to determine whether a significant exposure to a communicable disease (e.g., pulmonary tuberculosis, measles, Hepatitis B and C, human immunodeficiency virus (HIV) including acquired immunodeficiency syndrome (AIDS), rubella, Corynebacterium diphtheriae, Neisseria meningitides, hemorrhagic fevers including Lassa, Marburg, Ebola, Congo-Crimean, plague (Yersinia pestis)has occurred.
   2. Notify ERP/Good Samaritan as soon as possible within 24 hours of patient's diagnosis if exposure to a communicable disease or infection has occurred.
   3. Inform ambulance personnel in advance of transfer of a patient to another medical facility or to the patient's residence of the existence and nature of any communicable disease(s), and appropriate precautions and procedures to follow.

B. Pre-hospital reporting of exposure: In those situations where the ERP/Good Samaritan has possibly been exposed, the process for reporting that exposure will be as follows:
   1. The individual who has sustained a possible exposure will complete the first page of the Missouri Department of Health Communicable Disease Exposure Report form (CommunicableDiseaseReport.pdf). The request should be made as soon as possible, preferably within twenty-four hours.
   2. Upon arrival to the hospital or hospital outpatient department, the ERP/Good Samaritan is registered, unless they have already been evaluated by a provider, and presents with the outpatient lab orders.
   3. The completed report will be turned into the Emergency Trauma Center (ETC) Charge Nurse. The Charge Nurse will sign the form and provide one copy to the ERP or good Samaritan. The form will be forwarded to the Follow-up Nurse.



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4. The ETC provider will complete the second page of report and determine if an exposure has occurred.
5. If it is determined that there was a significant exposure to a communicable disease or infection the source patient shall be tested for clinically appropriate diseases transmissible in the manner in which the ERP/Good Samaritan was exposed.
6. If determination is made of a possible significant exposure, the ERP/Good Samaritan will be notified as soon as possible within 24 hours after the patient's diagnosis report is received. Notification will include recommendations regarding appropriate follow-up relative to the exposure. All Communications shall be conducted in a manner to protect the confidentiality of the patient and ERP/good Samaritan.
7. If determined that there is not a significant exposure, the ERP, Good Samaritan will be notified within 24 hours.
8. A record of all communicable disease exposure forms received will be maintained by the Follow-up Nurse.

C. Source Patient Following Exposure Confirmation:
1. If an ERP or a Good Samaritan sustains an exposure from a person while rendering emergency health care services, the person to whom the emergency care provider or Good Samarian was exposed is deemed to consent to a test to determine if the person has a communicable disease and is deemed to consent to notification of the emergency care provider or the Good Samarian of the results of the test, upon submission of an exposure report by the emergency care provider or the Good Samaritan to the hospital where the person is delivered by the ERP (MO Rev Stat 191.631.1 (2024).
2. The hospital where the source patient is delivered shall conduct the case. The sample and test results shall only be identified by a number and shall not otherwise identify the person tested.
3. If the source patient is already known to be HIV, HBV, or HCV positive, new testing need not be performed.
4. Lab testing may be performed if the blood is available in the lab.
5. Source patient will be informed of their test results. HIV results are usually reported within one hour. Hepatitis testing requires additional time.
    i. ETC Follow Up Nurse will notify patient of results as soon as reasonably possible if source patient is still at the ETC or discharged from the ETC.
    ii. If source patient is an inpatient or an observation patient Infection Prevention will follow up with appropriate physicians and advise admitting physician to inform patient of lab results.
    iii. If source patient has a positive lab result and need for treatment is indicated: if 18 years old or older, direct them to follow up with their primary care provider or refer them to an Infectious Disease provider, if under 18 years of age, they should be referred to the pediatrician on call.

D. Hospital Reporting of Exposures:
1. If a patient transported to the hospital by ambulance is determined to have a communicable disease transmissible by airborne or droplet spread, Infection



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Prevention shall notify the ETC Charge Nurse and the ETC Follow Up Nurse who will start gathering information regarding possible exposure to ERPs/Good Samaritans.

2. The designated officer from the hospital (e.g., ETC Charge Nurse, Infection Preventionist, or Hospital Administrator) shall notify the appropriate leader for the ambulance service of the nature of the exposure and recommended follow-up.
3. Nursing services will inform ambulance personnel in advance of the transfer of a patient to another medical facility or to the patient's residence of the existence and nature of any communicable diseases(s), and appropriate precautions and procedures to follow.

## REFERENCES

Missouri Revisor of Statutes - Revised Statutes of Missouri, RSMo Section 191.631

Missouri Secretary of State: Code of State Regulations
Code 19 CSR 30-40.047



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| | | |
|---|---|---|
| Facility Name(s): | **Mercy Hospital Springfield** | |
| Policy / Procedure: | SPRG IP Personal Protective Equipment (PPE) | |
| Approved by: | **Infection Control Committee** | Date: **03/11/2024** |

## Policy
Personal Protective Equipment (PPE)

## Purpose
To clearly define proper selection, application (donning) and removal (doffing) of PPE

## Procedure
PPE is used to protect co-workers from transmission of microorganisms. Mercy Springfield follows the guidelines defined by the Centers for Disease Control and Prevention (CDC) for donning and doffing of PPE. The CDC has two recommendations for removing PPE. Mercy Springfield follows "example 2" where gown and gloves are removed as one unit. CDC Sequence for putting on and safely removing PPE includes a detailed step by step process with images of each step.

Select PPE required for type of transmission based precautions (i.e. gown and gloves required for contact precautions) and as needed for anticipated exposure (i.e. face/eye coverage for possible splashes to face)

**Considerations for PPE selection and use**:

- Select PPE that is comfortable and fits well to provide maximal protection
- Ensure gown is secured to provide appropriate coverage
- Change PPE when integrity is compromised (i.e. gloves are torn or gown is cut)
- PPE is not a substitute for hand hygiene (HH). Perform HH before donning and after removing PPE
- Refer to the SPRG MW IP Hand Hygiene Policy for information on glove changes
- Disposable PPE is to be discarded after a single use and not reused. Reusable PPE is to be laundered after a single use
- Remove PPE prior to leaving the patient's room or care area
- PPE is contaminated by the patient and the patient's environment; avoid contaminating scrubs by reaching into pockets or under gown (i.e. do not reach into pockets to obtain scissors or under gown to retrieve name badge/keys)

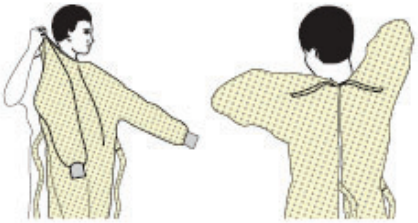
## Resources
Centers for Disease Control and Prevention (CDC) – Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings

## SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

### 1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



### 2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



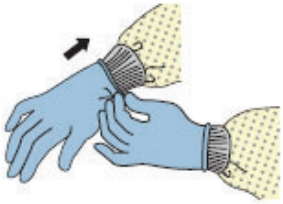
### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



### 4. GLOVES

- Extend to cover wrist of isolation gown



## USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

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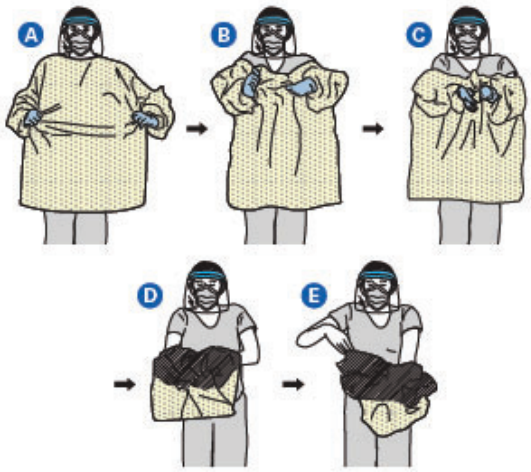
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# HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

## 1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



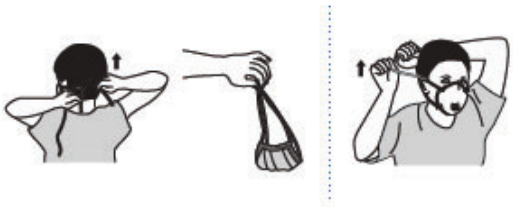

## 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

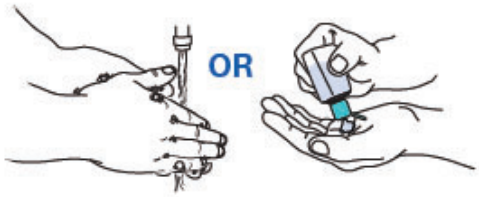


## 3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



## 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE




**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**

CS250673-E



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| | | |
|---|---|---|
| Facility Name(s): | **Mercy Hospital Springfield** | |
| Policy / Procedure: | SPRG IP Regulated Waste | |
| Approved by: | **Infection Control Committee** | Date: **03/11/2024** |

## Policy

Regulated Waste

OSHA Bloodborne Pathogen Standard defines regulated waste as:

1. Liquid or semi-liquid blood or other potentially infectious material
2. Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed
3. Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling
4. Contaminated sharps
5. Pathological and microbiological wastes containing blood or other potentially infectious material

**Reminders**:

- Isolation trash is **not** considered regulated (biohazard) waste unless it meets the criteria above
- Items soiled with urine, stool or sputum are not considered to be regulated waste unless they contain obvious blood
- When pouring blood and/or body fluids from any patient into a commode or hopper, use caution and follow standard precautions with appropriate personal protective equipment (PPE). Perform hand hygiene after removing PPE

**The following are examples of regulated waste:**
**(This list is not intended to be all inclusive)**

1. Dressings soaked with blood or pus
2. Soaked vaginal pads and vaginal packing
3. Collection devices that cannot be emptied of blood
4. Any human tissue not sent to lab for examination
5. Blood or body fluids that cannot be poured down a drain
6. All used needles and sharps
7. Used blood bags and blood administration tubing
8. Blood, body fluids, tissue and glass slides from the laboratory

Place regulated waste in the trash container located in the soiled utility room. The container is labeled “biohazard.” Place used needles and sharps in a puncture resistant sharps container. This waste is picked up by Environmental Services and taken to the sterilizer.

For additional information, refer to Sprg EVS 4100 Infectious Waste Management Plan Revised 9-26-18.

## Resources

The Joint Commission EC.02.02.01
Code of Federal Regulations Title 40 Protection of Environment; Environmental Protection Agency (EPA)


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# Mercy EMS

Monthly Expiration Check Sheet

Unit #:

Employee: _____

Please remove and replace all medications/equipment that ***are*** expired
or ***will expire next Month***

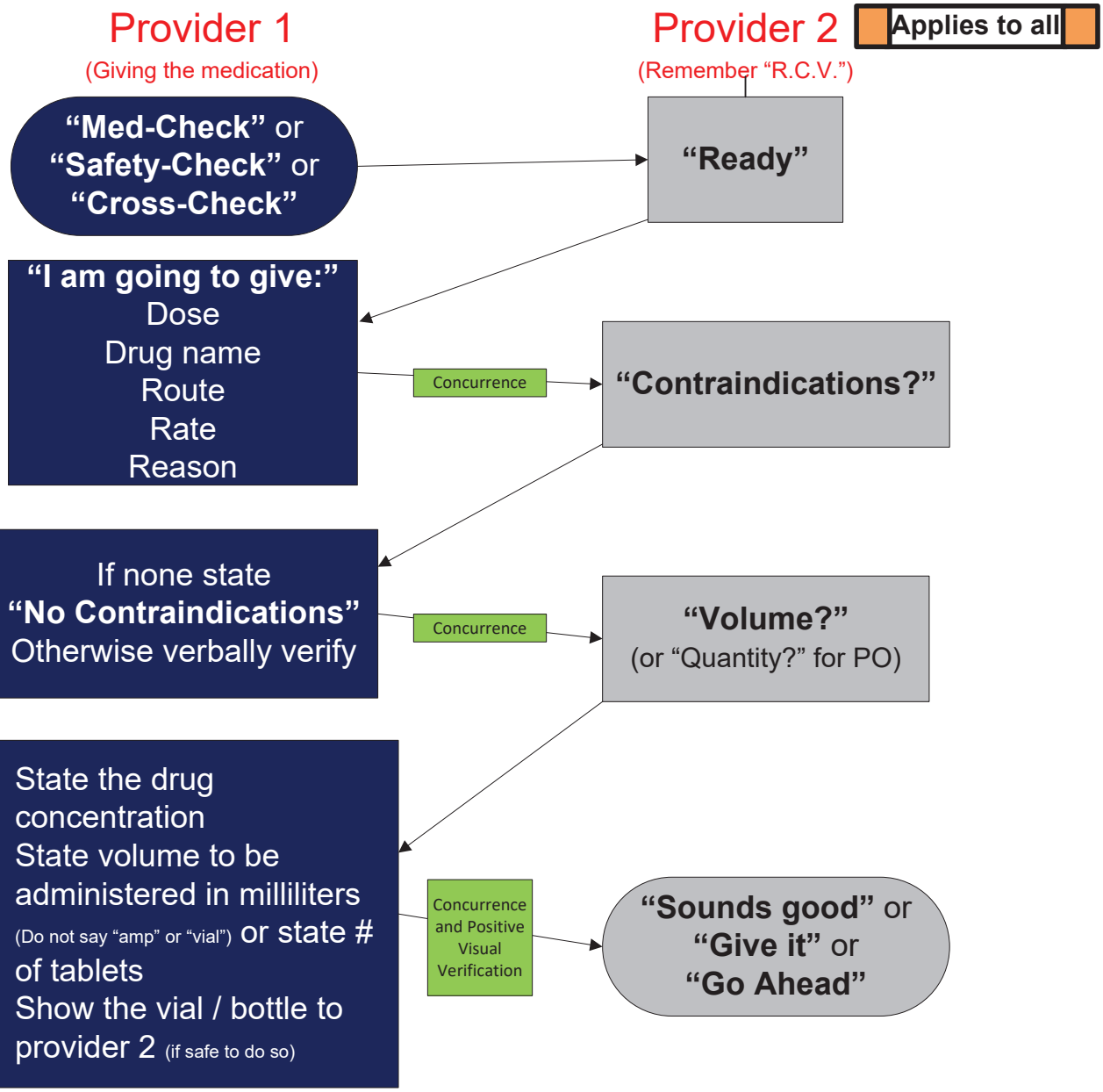
| | Date Checked | Signature |
|---|---|---|
| **Jump Kit** REPLACE ADVANTAGE BAG | _____ | _____ |
| **Narcotics** | _____ | _____ |
| **R.S.I. Kit** | _____ | _____ |
| **Cabinet** | _____ | _____ |
| **Airway Bag** | _____ | _____ |
| **Pedi Bag** | _____ | _____ |
| **Trauma Bag** | _____ | _____ |
| **Multi-Function Pads** | _____ | _____ |
| **Test EZ-IO** | _____ | _____ |

Please return completed form to a Supervisor

**Thank You!**

Comments:

# Medication Administration Cross-Check




- "**Contraindications**" include: 1) verification of appropriate VS, 2) known patient allergies, and 3) expiration date.
- Provider 2, if an EMT, is simply confirming and repeating back to their partners what they are seeing and hearing – there is no advanced level medication knowledge required!
- If a discrepancy, disagreement, or need for clarification is encountered at any step in the process, it must be resolved prior to continuing the cross-check.
- Essentially only Provider 2 can authorize the administration of the medication.
- The MACC must be completed prior to the administration of any medication.
- If there is an interruption or change in patient condition of any kind, the process must be re-initiated by Provider 1.
- Avoid ambiguous statements or confirmations like "okay."

## RED RULE of Medication Administration

(A Duty to Avoid Causing UNJUSTIFIABLE Harm)

NEVER give the contents of a syringe that is not labeled or without visualizing the vial or ampule from which it was immediately drawn.

# RED FLAGS of Lost Situational Awareness and Errors in Production

Situational Awareness is the ability to identify, process, and comprehend the critical elements of your team's actions with regard to achieving your team's goals.

**Red flags are signs that you or someone on your team has lost situational awareness and a verification is needed.**



- Intuition or a "bad gut feeling"
- Rushing
- Poor Communication
- Disagreement
- Task Saturation
- Trying Something New Under Pressure
- Interruptions
- Ambiguity
- Preoccupation
- Confusion






Establish a collective awareness by:

- Review the situation out loud **(SBAR)**
  - **S**ituation
  - **B**ackground
  - **A**ssessment
  - **R**ecommendation
- Defer to expertise
- Look it up (i.e. guidelines, SOP)
- Contact the Supervisor or Medical Director





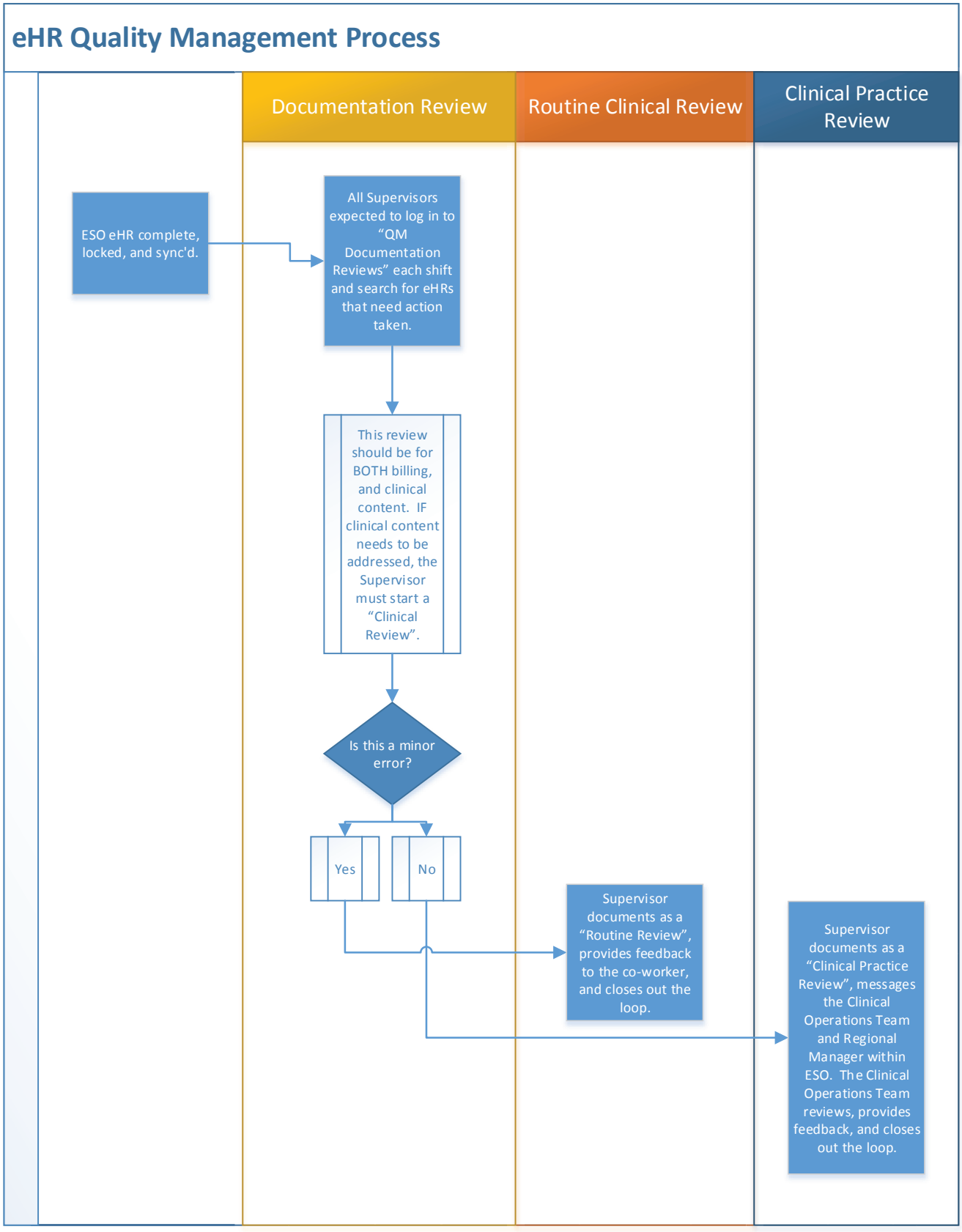


**Be the voice of the patient!**

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Mercy Emergency Medical Services
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# eHR Quality Management Process



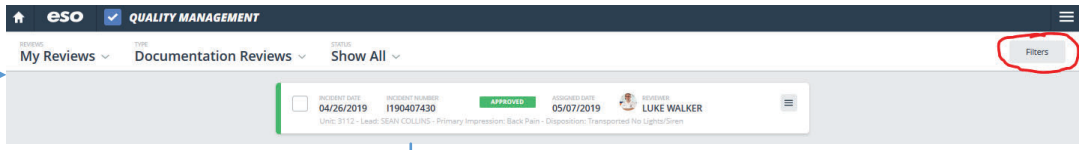
# Documentation Review

- Expected to be completed by every Supervisor, every shift on duty
- All eHRs expected to have been "Approved" within 24 hours of being locked and sync'd, when possible.

ESO eHR complete, locked, and on web.

Enter the QM Module. It will automatically open with filters that will show only documentation reviews assigned to you.

Click the "Filters" button on the far right to refine search.




Filters allow you to search by multiple parameters. Make sure you have an appropriate date range, the review type is "Documentation," the status type is set to search for "Info Needed," and "Not Reviewed," and you have the shift selected for the area you are wanting to review eHRs. If this is not the first time you have done any Documentation Review, you must check on reviews you have that are "In Process" to see if you can take action to move them to an "Approved" status. Do this by selecting your own name in the "Review Assignee" field. Take action on all eHRs that you can.

OR

To find new eHRs for you to take action on, go back to your filters and:

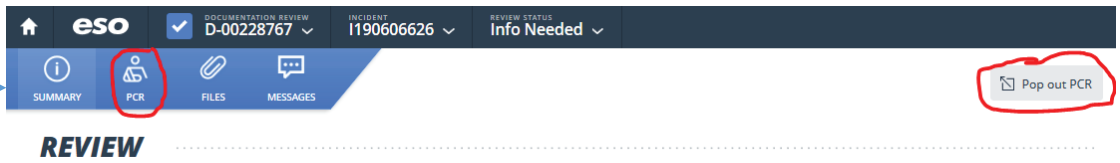
- Adjust date range wide enough to catch all eHRs not yet reviewed, and make sure "Status" is set to "Info Needed," or "Not Reviewed".
- Change "Review Assignee" to "Unassigned"
- Change "Shift" to the ESO defined shift for which you would like to search.
- Click "Apply"

All eHRs for that shift which have not yet been reviewed or have info needed will display

Click anywhere on the individual eHR header to start the review.

Note: once you open the review in the QM module, it will be assigned to you in the system – you or another leader must continue to take action on the review until it is in an "Approved" status.

When the review opens, click on "PCR" in the top left, or "Pop out PCR" in the top right to read the eHR

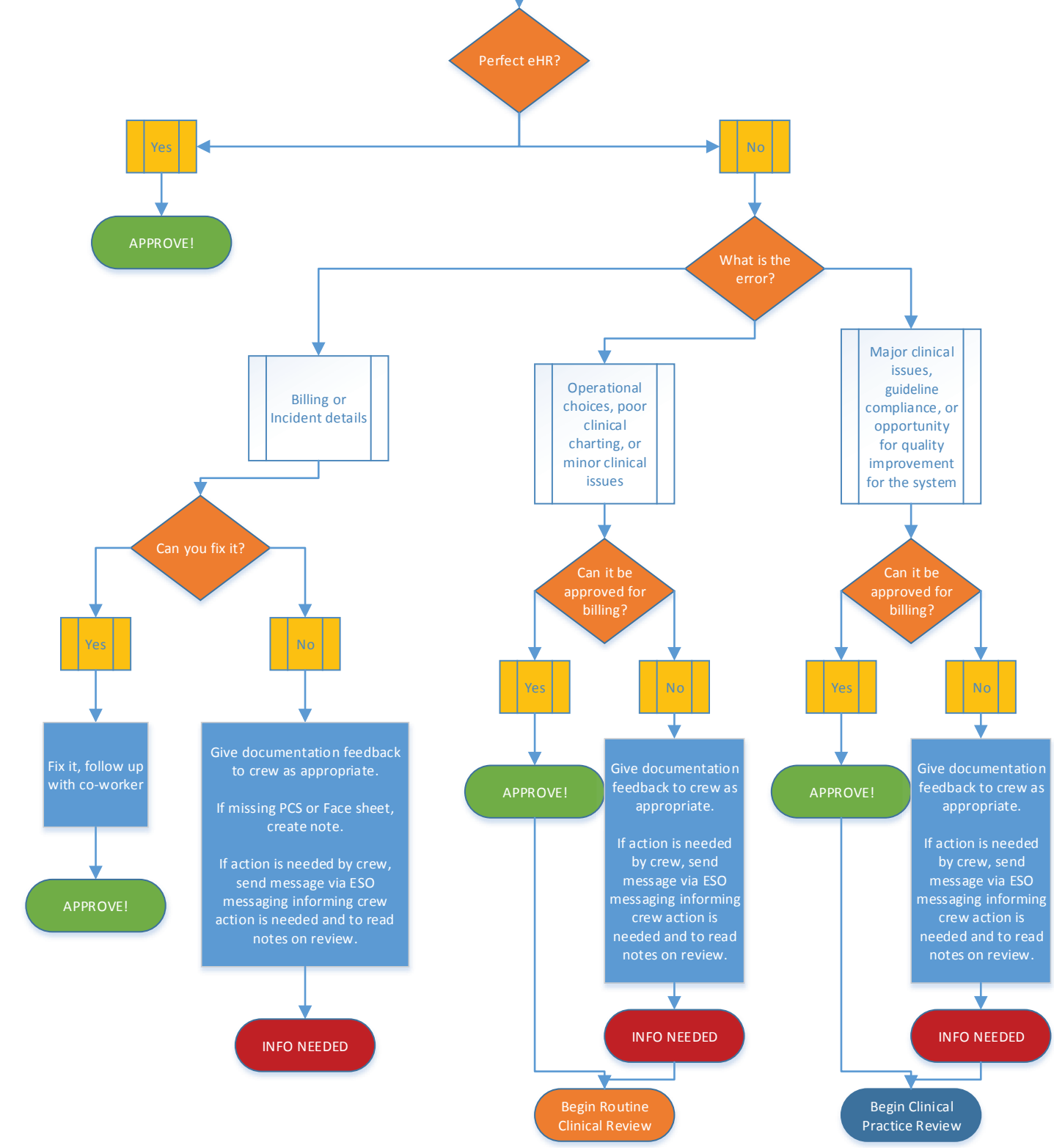



REVIEW

Review the eHRs documentation for the things listed below:

# Documentation Review, continued

- Patient demographics as complete as possible
- Guideline compliance
- Pain scores when pain is noted as a complaint
- Medical Necessity complete and matches narrative
- PCS obtained/correct for non-emergent transfers
- Medications/Allergies/History not blank
- Complete and appropriate assessment
- Run Type and Priority Scene correct
- Signatures obtained
- Mileage verified as correct
- At least 2 sets of vital signs to include GCS
- Items documented in proper locations
- CMS Service Level correct
- Face sheet attached for non-Mercy facilities
- Shift name and zones entered

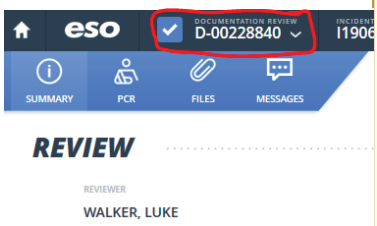


# Routine Clinical Review

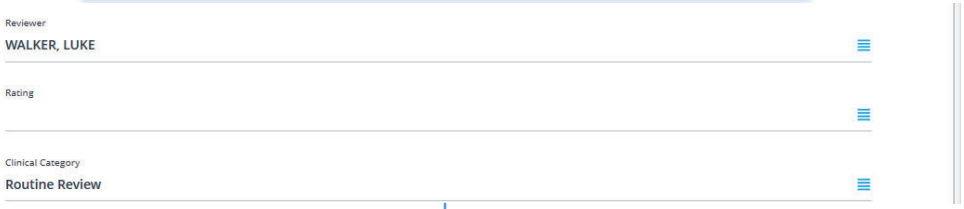
**- Expected to be completed by Supervisors or QA/QI personnel when suboptimal operational choices, poor clinical documentation, or minor clinical issues are encountered during Documentation Review, or are reported from any outside source.**
**- To be completed on a random basis by the Medical Director and members of the Clinical Operations team.**

Are you starting a random review, or starting a review from an issue found in Documentation Review?

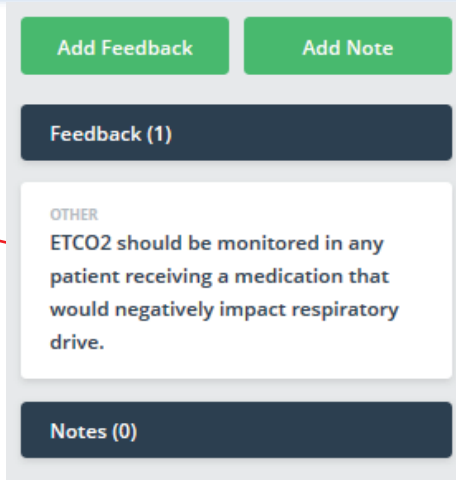
- **Random** → Enter the QM Module → Reset filters as follows: Reviews to "All Reviews," Type to "Clinical Reviews," and Status to "Show All." You can add other filters as desired to search for certain call types. Click on the individual eHR header to start the review.
- **From Documentation Review** → Complete Documentation Review, and move ticket to approved status if possible. → While still in the Documentation Review screen for that EHR, in the review header change from "Documentation Review" to "Clinical". This will start a Clinical Review for that chart and open it automatically.




The "Status" of the review will automatically be set to "In Progress". Change the "Category" to "Routine Review". LEAVE ALL OTHER CATEGORIES BLANK.




In the top right click Add Feedback, and add APPROPRIATE comments. Then click "Add". There may be more than one "Clinical Feedback" category and comment added.

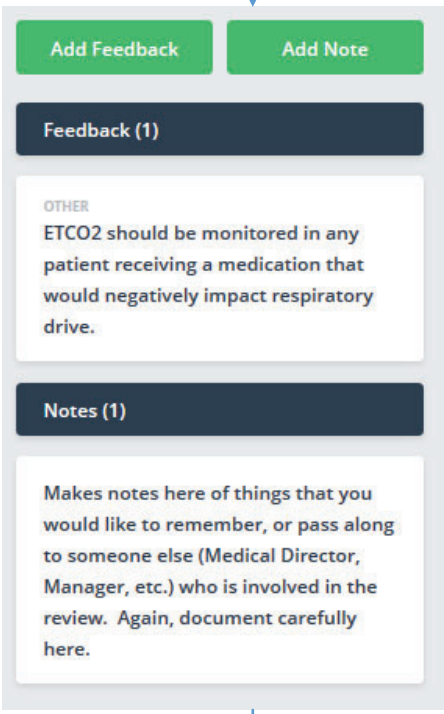



It would be better to say "Consider ETCO2 monitoring…"

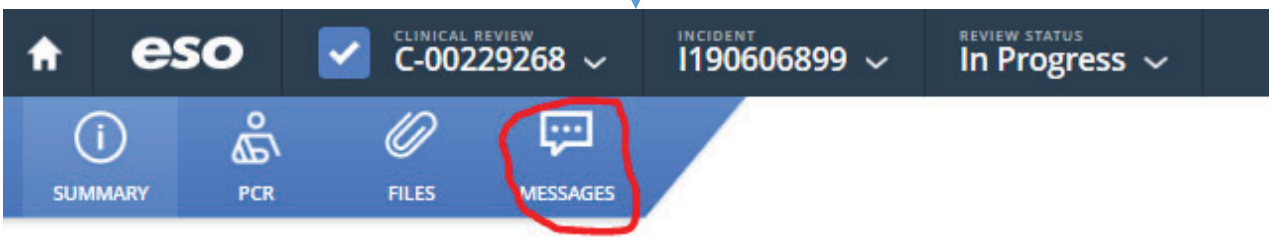
**All communication within ESO is discoverable. Document generically: "consider," etc. Anything more in detail should be handled face-to-face.**

# Routine Clinical Review, continued

When done adding "Feedback" categories and comments you feel appropriate, you can click on "Add Note" if you desire to leave a note for other Leaders to be able to see and understand what is going on with the review. These notes CANNOT be seen by the crew, only by those with QM rights.




When done adding "Notes," click on "Messages" to send a message to the crew notifying them they have an issue they need to address.




Click the "New Message" button and add the Lead Provider, their Supervisor/Manager as recipients, type a message like the one detailed below, and click "OK".

TO: LUKE WALKER

Luke -

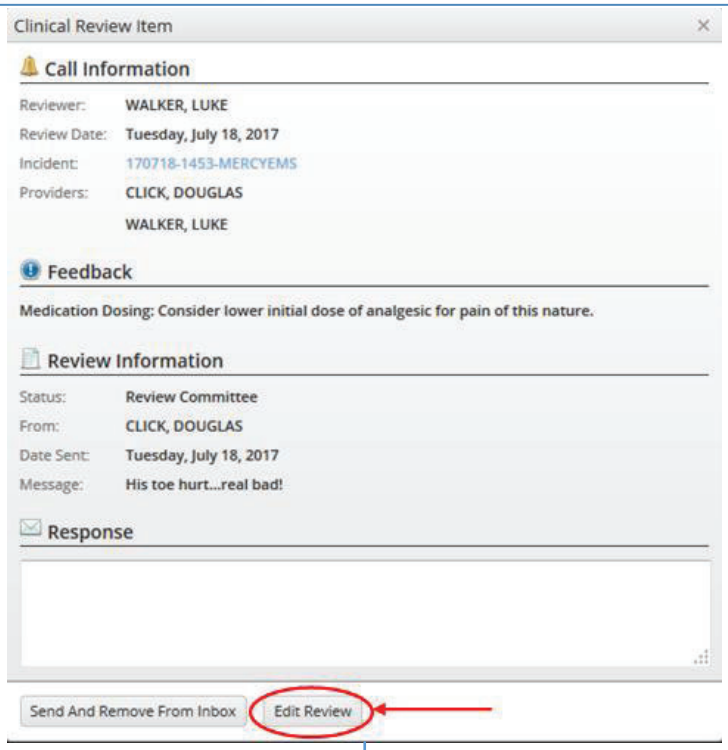
Please review this call and see the feedback comments in this review. Please reply to this message with your respon se to my thoughts. Thank you.

ldw

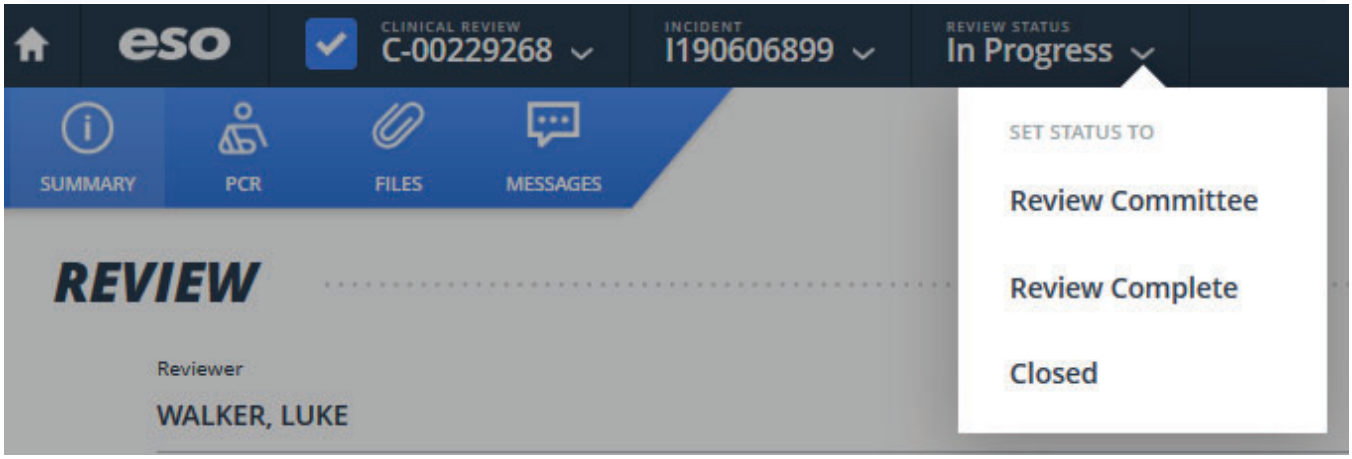


# Routine Clinical Review, continued

At this point, the Routine Clinical Review is In Progress and assigned to you, until you are satisfied with the lead provider's response and take action to move the review to a "Closed" status. Once the lead provider has responded to you and the loop is closed in the communication on the review, click "Edit Review" at the bottom of the QM message.

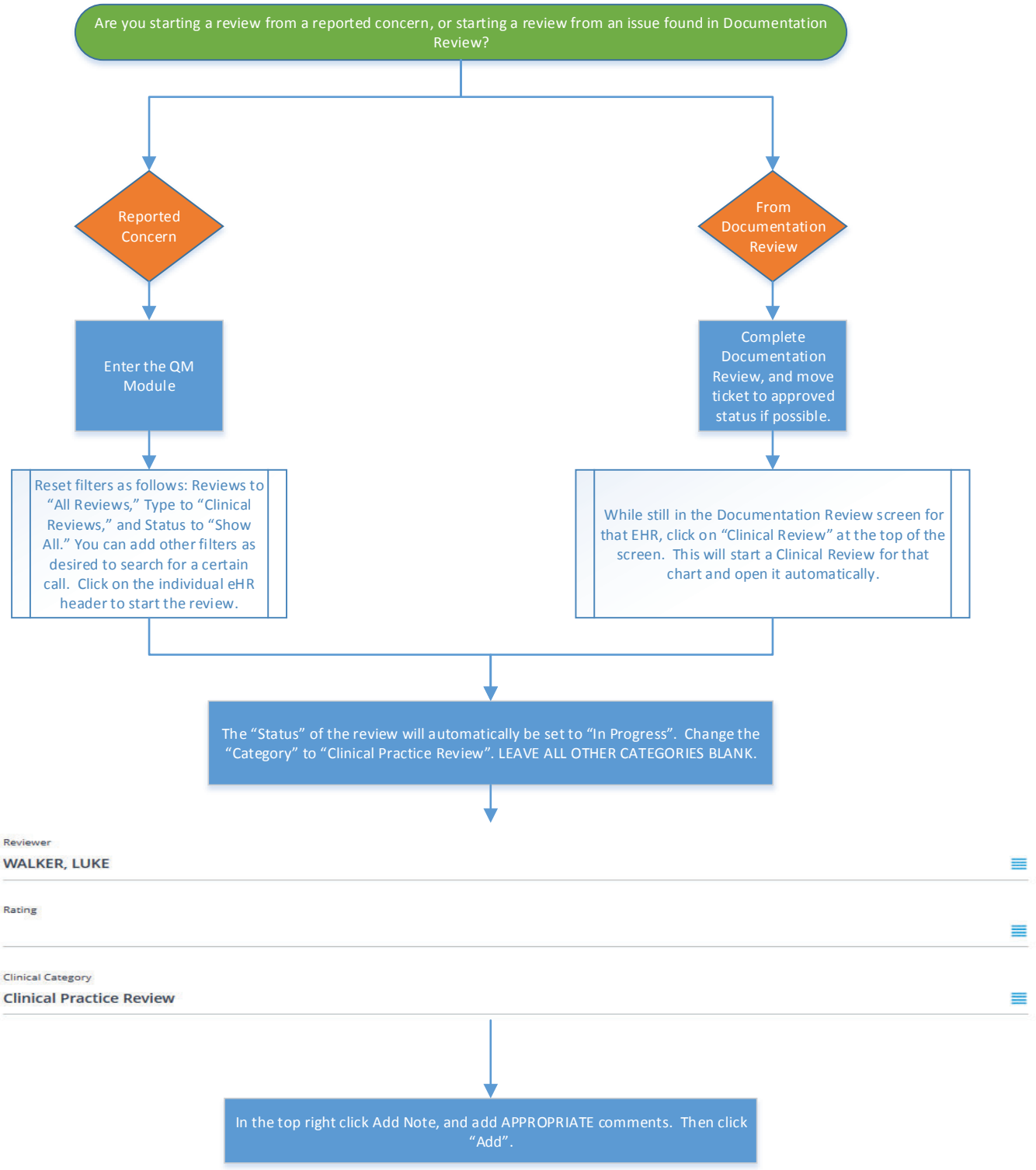


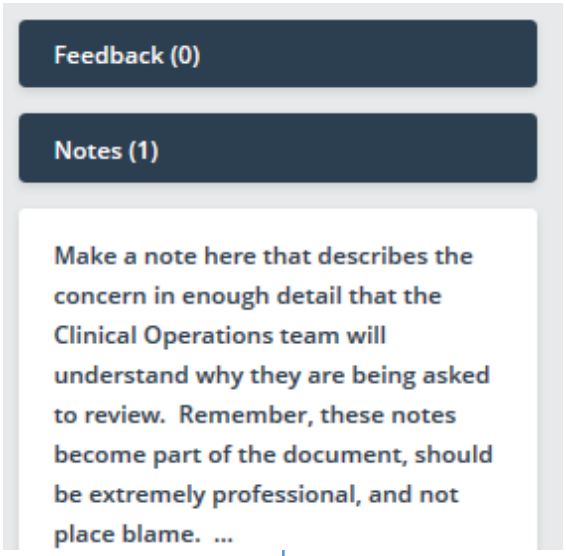

Once you are back in the review you can add notes, if needed, like you did before. Then click Review Status and change to "Closed". All message notifications will be removed from all providers' and reviewers' message inboxes, and the review can no longer be edited. All information is saved indefinitely, and the review can be re-opened if needed. The Routine Clinical Review is now complete!



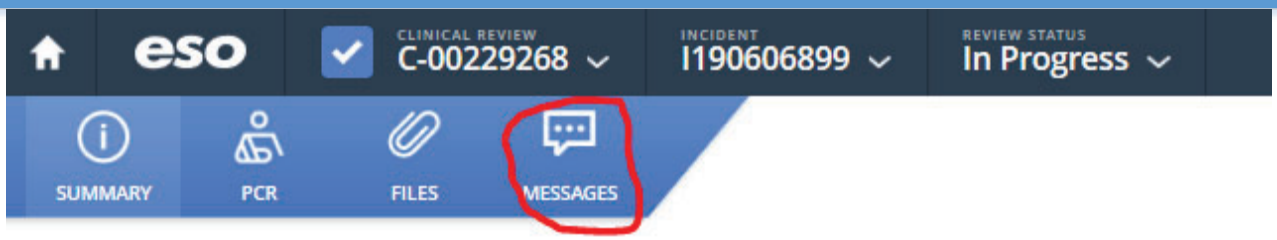
# Clinical Practice Review

- The Clinical Practice Review process can be instigated by anyone, inside or outside the organization, who has a concern about the quality of care or operations rendered to a customer. These concerns may come from patients or family members, co-workers, supervisors doing chart review, healthcare professionals receiving the patient, or members of the general public who were witness to an event.
- The Clinical Practice review process, while instigated by one of many, will be completed by the Clinical Operations team, with loop closure communication provided to all involved.

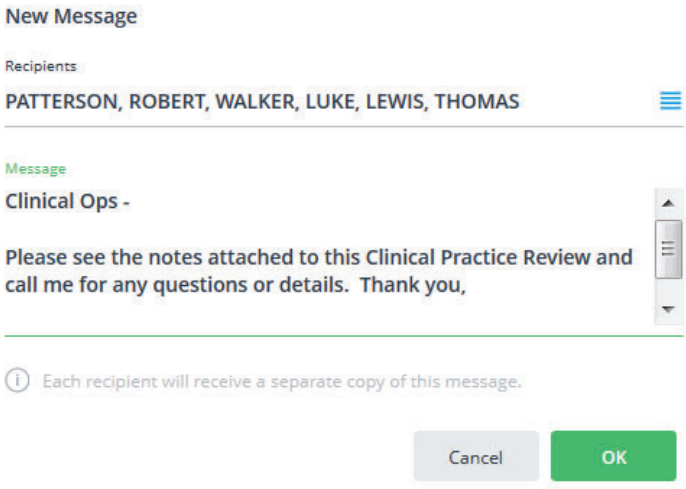





When done adding "Notes," click "Messages" to send a message to the Clinical Operations Team notifying them of the request to review the case




Add the Clinical Operations Team as recipients, type a message like the one detailed below, and click "OK".




The Clinical Operations Team will complete the Clinical Practice Review, keep appropriate documentation within ESO, and provide loop closure communication with all parties involved.

# Guidance for what should be a Clinical Practice Review

Most Clinical reviews you complete with be Routine Reviews that are handled by you at the local level. There will be, however, some reviews that need to be handled by the Clinical Operations Team. The criteria set forth by the Medical Director for what must be a Clinical Practice Review are the following:

- Any medication error (weight estimation errors do count as a medication error).
- Guideline deviation in any arrest patient, cardiac or respiratory.
- Guideline deviation in a Rapid Sequence or Delayed Sequence Intubation.
- Any action or inaction that could be reasonably concluded to have caused patient harm.
- Any complaint initiated by a Physician.
- Any complaint initiated by another healthcare provider that you feel needs further action than what you have provided at the local level.
- Any SAFE system report that addresses any of the above issues
- Any prolonged scene, response or transport time
- Ambulance diversions from destination

Remember that the Clinical Practice Review process is an opportunity for the entire team to learn and grow together to improve quality. If there is ever something questionable in your mind, please err on the side of start the Clinical Practice Review process and giving all the opportunity to learn from the situation.

# Cot Unloading

| ACTION | CONTROL OPERATOR | ASSISSTING OPERATOR |
|---|---|---|
| **Begin cross-check** | "Cross-check." | "Ready." |
| **Assess readiness** | "All straps buckled, the bumper is up; do you confirm?" | "Confirmed." |
| **Discuss procedure with patient (await patient confirmation as appropriate)** | "We are about to remove you from the ambulance. You will feel some lifting and a few bumps, but please keep your arms safely on your lap." | |
| **Check surroundings** | "Are we clear?" | "Clear." |
| **Begin removing patient** | Unlatch securing mechanism, and begin slowly removing cot. | |
| **Stop removing cot before the safety bar engages the safety catch.** | | "Stop." |
| **Prepare to lower undercarriage** | | "Drop." |
| **Lower undercarriage** | Operates controls | Assists manual cot undercarriage to the ground. Visualizes power cot undercarriage lowered to correct height. |
| | | "Wheels are down." |
| **Prepare to roll cot away from ambulance.** | | Unhooks safety bar from safety catch. "Roll." |

# Cot Loading

| ACTION | CONTROL OPERATOR | ASSISSTING OPERATOR |
|---|---|---|
| **Begin cross-check** | "Cross-check." | "Ready." |
| **Assess readiness** | "All straps buckled, we're at load height, the bumper is up; do you confirm?" | "Confirmed." |
| **Discuss procedure with patient (await patient confirmation as appropriate)** | "We are about to load you into the ambulance. You will feel some lifting and a few bumps, but please keep your arms safely on your lap." | |
| **Begin advancing cot until safety latch has been visualized to go over hook – DO NOT PULL BACK ON SAFETY HOOK** | | "Hooked." |
| **Prepare to lift wheels** | | "Raise" |
| **Cot lifted, undercarriage raised to load.** | Controls are activated | Cot legs raised on manual cot. On power cot, visualize legs raising all the way |
| **Prepare to load cot into ambulance** | | "Roll" |
| **Load cot into ambulance, lock into securing mechanism** | "We're latched." | |

# EMS COT UNLOADING CROSS-CHECK

| ACTION | CONTROL OPERATOR | ASSISSTING OPERATOR |
|---|---|---|
| **Begin cross-check** | "Cross-check." | "Ready." |
| **Assess readiness** | "All straps buckled, the bumper is up; do you confirm?" | "Confirmed." |
| **Discuss procedure with patient (await patient confirmation as appropriate)** | "We are about to remove you from the ambulance. You will feel some lifting and a few bumps, but please keep your arms safely on your lap." | |
| **Check surroundings** | "Are we clear?" | "Clear." |
| **Begin removing patient** | Unlatch securing mechanism, and begin slowly removing cot. | |
| **Stop removing cot before the safety bar engages the safety catch.** | | "Stop." |
| **Prepare to lower undercarriage** | | "Drop." |
| **Lower undercarriage** | Operates controls | Assists manual cot undercarriage to the ground. Visualizes power cot undercarriage lowered to correct height. |
| | | "Wheels are down." |
| **Prepare to roll cot away from ambulance.** | | Unhooks safety bar from safety catch. "Roll." |

