

TRINITY EMS SYSTEM STANDARD OPERATING GUIDELINES

2017



Approved by EMS Medical Director and Illinois
Department of Public Health




TRINITY EMS SYSTEM 2017



Welcome and Introduction

The following guidelines have been established to allow the Trinity EMS System to provide excellent, aggressive, consistent, and evidence-based pre-hospital care to the communities and patients we serve. While not all-inclusive, they will cover most of the diseases and conditions EMS will encounter and provide a strong basis for all patient care delivered. The first rule of medicine should always be “Primum non nocere,” or “first, do no harm,” while also providing care and assistance. Each provider at any level will be called upon to use their knowledge, education, and skills to render care to those in need.

The following guidelines are designed based on algorithms, much like AHA/ACLS guidelines, and were devised similar to the North Carolina EMS protocols and those of Wake County EMS, available online. To assist you, color-coding for levels of providers has been adopted. Any skill or procedure at and below your level of service may be performed. The top portion of the protocol has the sections **History, Signs and Symptoms, and Differential** to help guide providers on essentials questions, documentation, and critical thinking for specific complaints. While not comprehensive, they provide a good foundation for initial evaluation.

The middle section of the protocols contain the flow chart which are the **Guidelines for Patient Care**. Simply follow the arrows, answering the questions when prompted, and proceed until patient care ceases. Each protocol has been reviewed and is based on research and evidence-based medicine and approved by the Medical Director, and should provide you with all the tools and support to provide excellent care. The Trinity logo  designates protocols, the syringe  indicates medication administration, and the reflex hammer  denotes a procedure or skill. The protocols are divided into sections for **General, Medical, Cardiac, OB/Pediatric, Trauma, Special, and Destination/Triage**. The **Universal Patient Care Protocol** is the center “hub” for all care and is the foundation for scene safety, assessment, oxygen, vitals, monitor, glucose, IV, and basic EMS duties designed to initiate essential patient care needs in delivering care.

The last box entitled **Pearls** is meant to help guide care, refresh knowledge, and point to specific information helpful to individual complaints or conditions. These pearls are meant to be a good quick reference guide and source of useful medical knowledge.

The Trinity EMS System will strive to educate and assist all providers in implementing these guidelines. We will review them periodically and make necessary changes to keep up with the ever-evolving medical advances and suggestions of our providers. Medical Control and our office are always available to assist and provide support, feedback, or answer questions. Thank you all for your time and effort, your caring and compassion, the sacrifice and willingness to help those in need in our community, our homes, and our lives.

Sincerely,

Michael T. Barr, M.D.
Trinity EMS Medical Director
(309) 779-3057



Trinity EMS System

Standard Operating Guidelines

2012



SIGNATURES

Michael Barr, MD

11 / 7 / 2012

Date

Susan M. Beswick, RN, MSN

11-7-2012

Date

Adam Sowell, NREMT-P, CCP

11-7-2012

Date

Protocol Development / Revision

Illinois Department of Public Health Approval: 11/2012

Active: 11/2012

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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Trinity EMS Procedure Scope of Practice for Credentialed Personnel

Standardized Medical Abbreviations

APGAR Scores

Burn Resources/Guidelines

Difficult Airway Evaluation

RSI Audit Form

RSI Flow Chart

Appendix B – Medication Delivery

Trinity EMS System Medication List

Pediatric Color-coded Medication List

Standardized Medication Delivery Guide

Amiodarone

Dopamine

Etomidate

Rocuronium

Succinylcholine

Versed (Pediatric)

Appendix C – General Forms

Preliminary Report Form

Short Report Form – Non-transport Services

Disposition/Refusal Form

Patient Instructions for Disposition/Refusal Form

School Bus Incident Form

Appendix D – Trinity EMS System Forms

EMS Incident Report

Improvement Opportunity Report (IOR) Form

Service Excellence Form

General Protocols

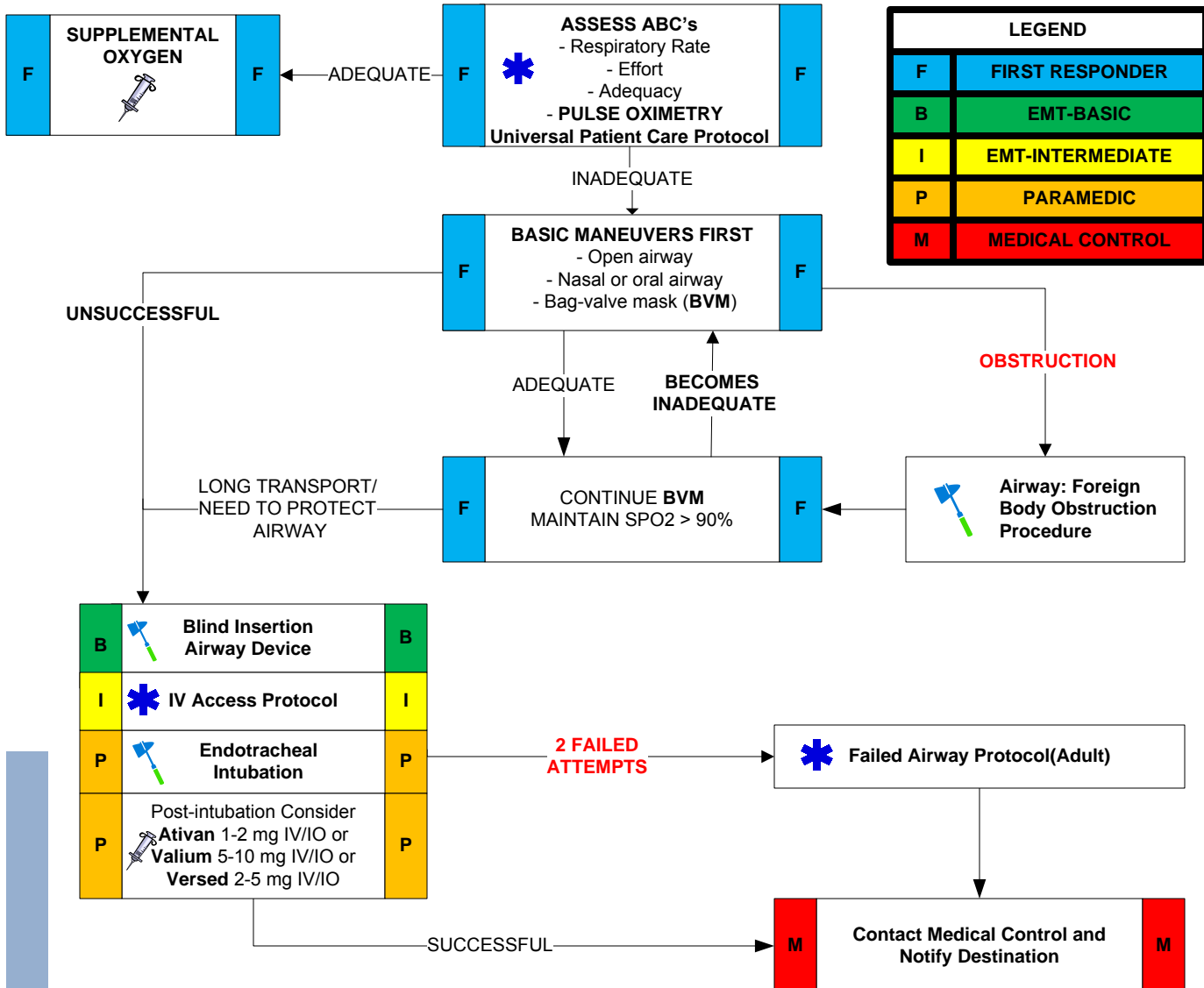
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AIRWAY, ADULT GENERAL PROTOCOL # 1 - 01



PEARLS

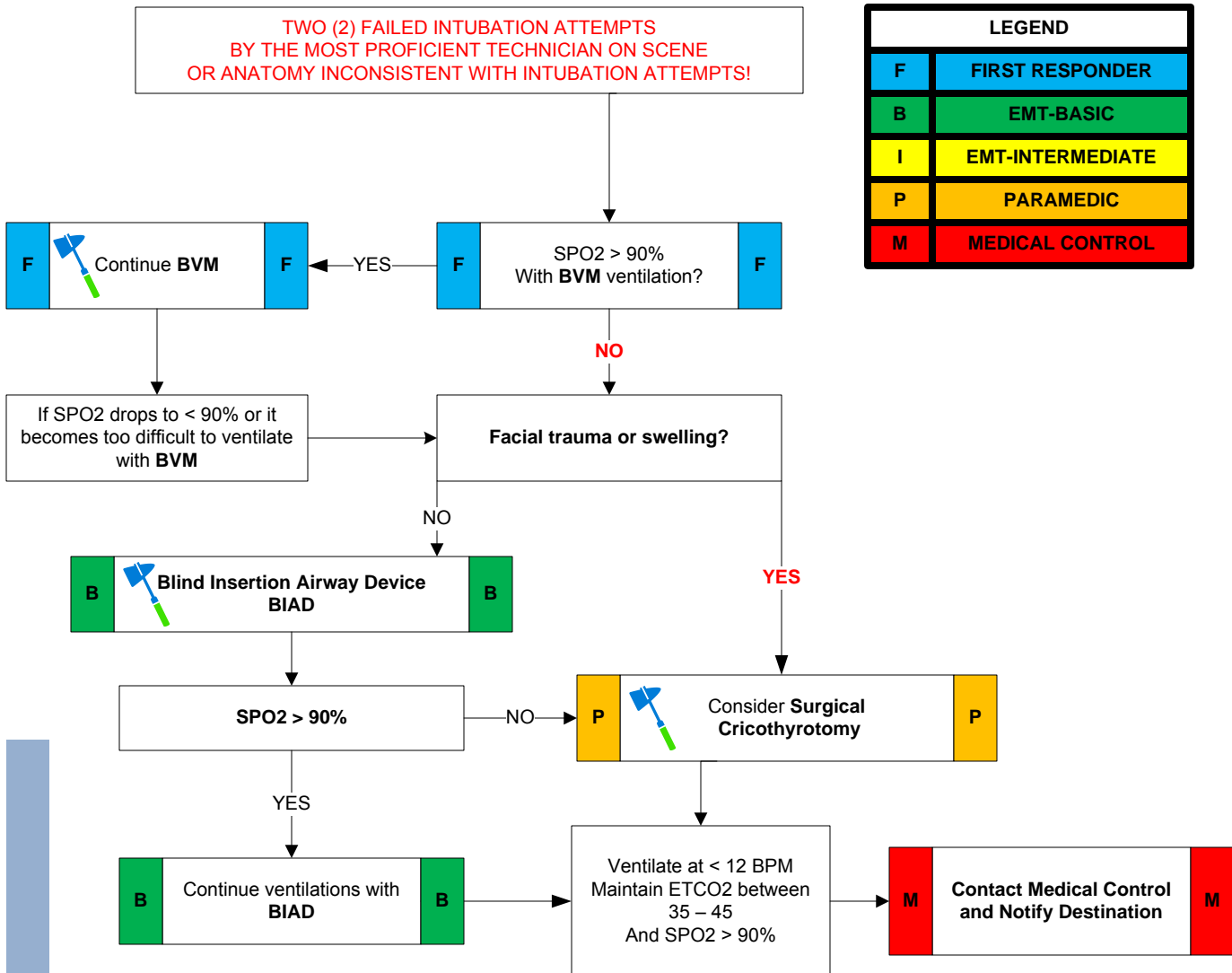
- ✓ This protocol is only for use in patients with an age of >12 years or patients longer than the Broselow-Luten Tape
- ✓ Capnometry (color) or capnography is mandatory with all methods of intubation. Document results
- ✓ Continuous capnography (EtCO2) is strongly recommended for the monitoring of all patients with a BIAD or endotracheal tube
- ✓ If an effective airway is being maintained by BVM with continuous pulse oximetry of >90%, it is acceptable to continue with basic airway measures instead of using a BIAD or intubation
- ✓ For the purposes of this protocol, a secure airway is when the patient is receiving appropriate oxygenation and ventilation
- ✓ An intubation attempt is defined as passing the laryngoscope blade or endotracheal tube past the teeth
- ✓ Ventilatory rate should be 6 – 8 per minute to maintain an EtCO2 of 35 – 45. AVOID HYPERVENTILATION
- ✓ Maintain C-spine immobilization for patients with suspected spinal injury
- ✓ Do not assume hyperventilation is psychogenic – use oxygen, not a paper bag
- ✓ It is important to secure the endotracheal tube well and consider using a c-collar to better maintain ETT placement
- ✓ Consider using bimanual laryngoscopy or BURP maneuver in difficult intubations

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FAILED AIRWAY, ADULT GENERAL PROTOCOL # 1 - 02



PEARLS

- ✓ If first intubation attempt fails, make an adjustment and consider:
 - Different laryngoscope blade or use of bougie
 - Different ETT size
 - Change cricoid pressure
 - Apply BURP maneuver (push trachea back (posterior), up, and to patient's right) or bimanual laryngoscopy
 - Change head positioning
- ✓ Continuous pulse oximetry should be utilized in all patients with an inadequate respiratory function
- ✓ Continuous EtCO2 should be applied to all patients with respiratory failure or to all patients with advanced airways
- ✓ Notify Medical Control AS EARLY AS POSSIBLE about the patient's difficult/failed airway
- ✓ Adult sizes for the King LT-D are **Yellow Size 3** (4 - 5 ft), **Red Size 4** (5 - 6 ft), and **Purple Size 5** (6 ft and up)

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES

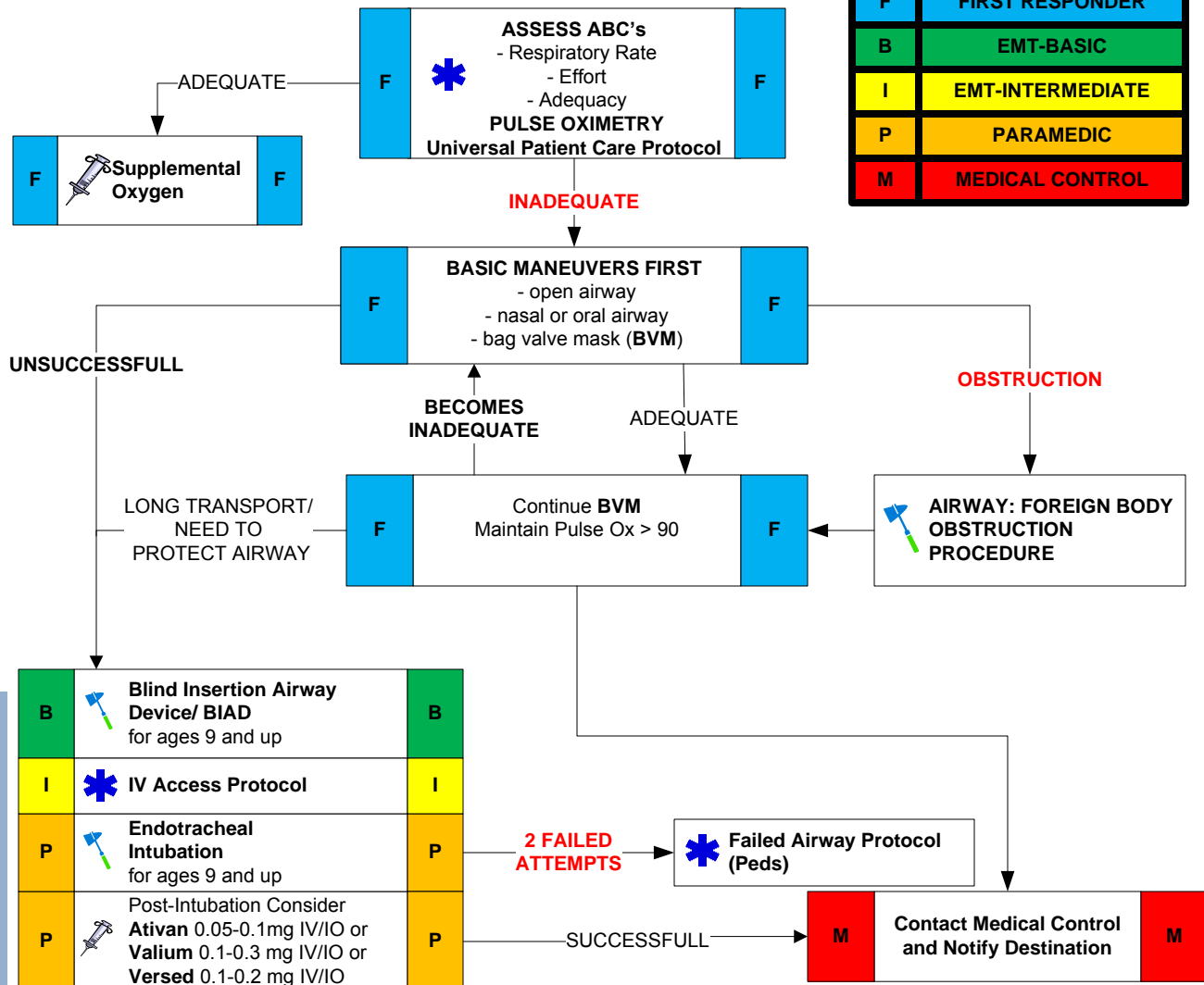


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AIRWAY, PEDIATRIC GENERAL PROTOCOL # 1 - 03

- ✓ PEDIATRIC PATIENTS AGE 8 AND YOUNGER ARE TO BE MAINTAINED WITH BVM
- ✓ ONLY PEDIATRIC PATIENTS ≥ 9 YEARS MAY BE INTUBATED
- ✓ ONLY 2 ATTEMPTS AT ENDOTRACHEAL INTUBATION ARE ALLOWED

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



GENERAL PROTOCOL # 1 - 03

PEARLS

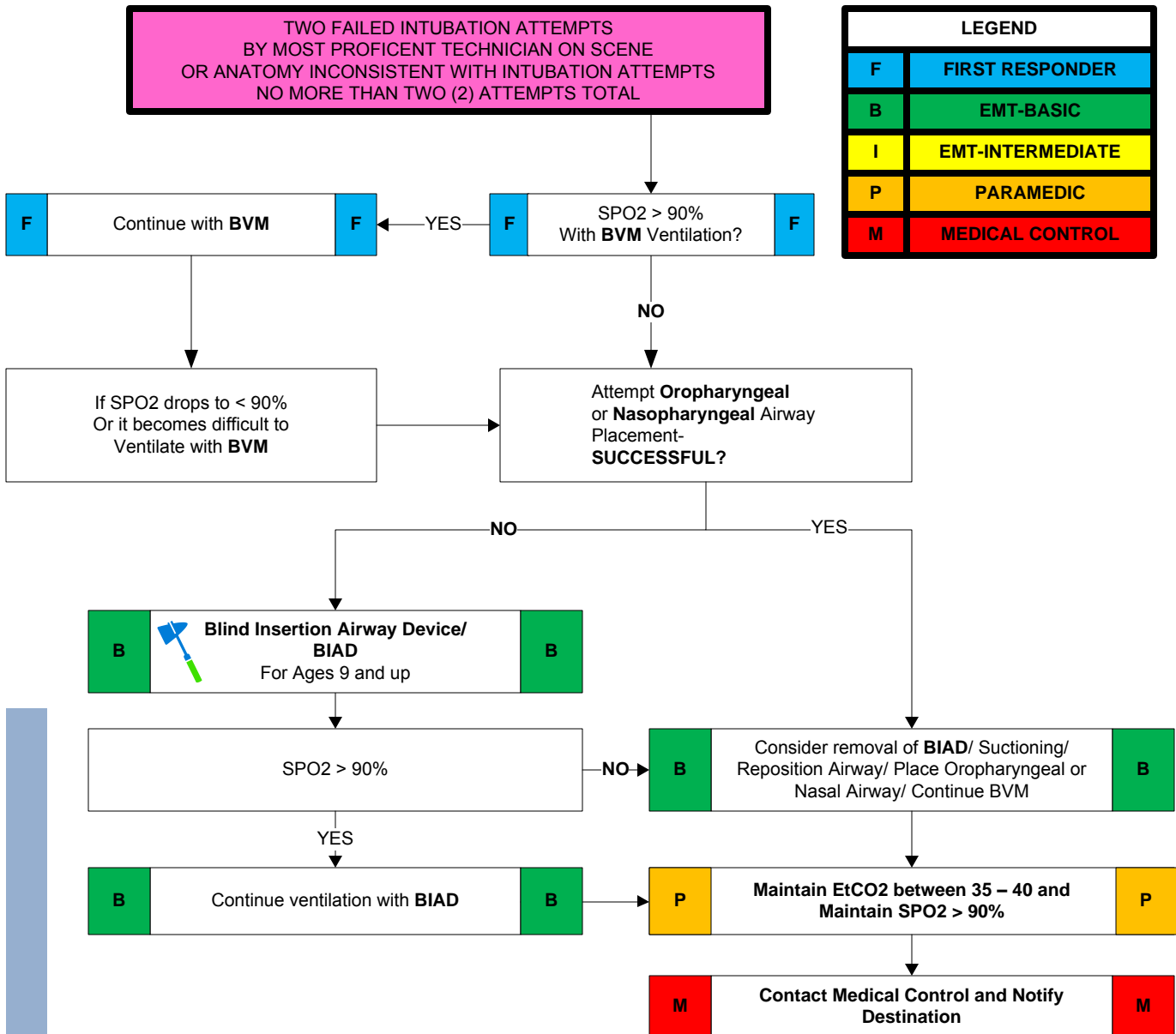
- ✓ IT IS THE POLICY OF TRINITY EMS TO NOT PERFORM ENDOTRACHEAL INTUBATION IN PATIENTS < 9 YEARS
- ✓ Capnometry (color) or capnography is mandatory with ALL methods of intubation. Document results
- ✓ If an effective airway is being maintained with BVM, continue with BVM to maintain pulse oximetry > 90
- ✓ A secure airway is when a patient is receiving appropriate oxygenation and ventilation
- ✓ Ventilatory rate is 30 for Neonates, 25 for Toddlers, 20 for School Age, and 12 for Adolescents
- ✓ Paramedics should consider use of BIAD if first ET attempt is unsuccessful
- ✓ King LT-D sizes for pediatrics are **Green Size 2 (35 - 45 inches)** and **Orange Size 2.5 (41 - 51 inches)**
- ✓ Maintain c-spine immobilization in patients with suspected spinal injury
- ✓ Hyperventilation in deteriorating head trauma should only be done to maintain a pCO2 of 30-35
- ✓ C-collar may be used to help maintain endotracheal placement. Ensure the endotracheal tube is secured!

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FAILED AIRWAY, PEDIATRIC GENERAL PROTOCOL # 1 - 04



PEARLS

- ✓ **TRINITY EMS POLICY PROHIBITS ENDOTRACHEAL INTUBATION OF PATIENTS <9 YEARS OF AGE**
- ✓ **NOTIFY MEDICAL CONTROL AS EARLY AS POSSIBLE REGARDING PATIENT'S DIFFICULT/FAILED AIRWAY**
- ✓ If first intubation attempt fails, make an adjustment and then try again
 - *Different laryngoscope blade
 - *Different ET size or use of Bougie
 - *Change cricoid pressure
 - *Change head positioning
- ✓ Ventilatory rate should be 30 for Neonates, 25 for Toddlers, 20 for School age, and 12 for Adolescents
- ✓ Continuous pulse oximetry should be utilized in all patients with inadequate respiratory function
- ✓ Continuous EtCO2 should be applied to all patients with respiratory failure or patients with advanced airways

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BACK PAIN GENERAL PROTOCOL # 1 - 05

HISTORY

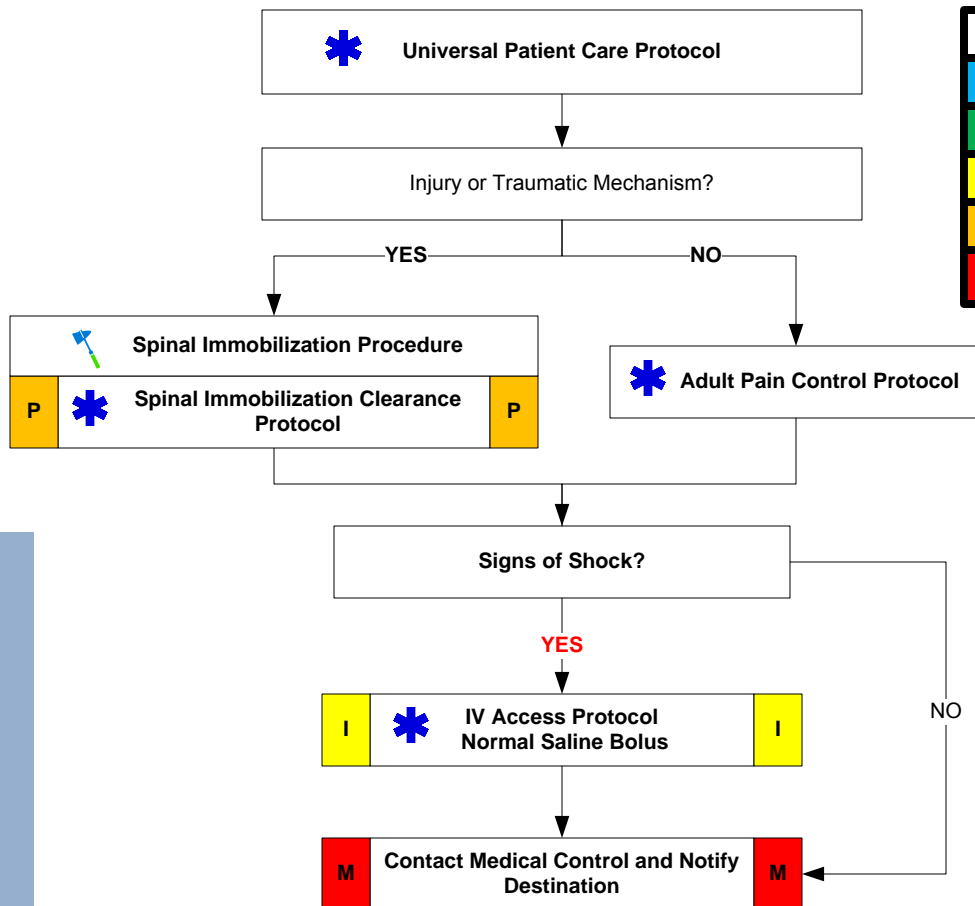
- ✓ Age
- ✓ Past medical history
- ✓ Past surgical history
- ✓ Medications
- ✓ Onset of pain/injury
- ✓ Previous back injury
- ✓ Traumatic mechanism
- ✓ Location of pain
- ✓ Fever
- ✓ Improvement or worsening with activity

SIGNS AND SYMPTOMS

- ✓ Pain
- ✓ Swelling
- ✓ Pain with range of motion
- ✓ Extremity weakness
- ✓ Extremity numbness
- ✓ Shooting pain into an extremity
- ✓ Bowel/bladder dysfunction

DIFFERENTIAL

- ✓ Muscle spasm/strain
- ✓ Herniated disc with nerve compression
- ✓ Sciatica
- ✓ Spine fracture
- ✓ Kidney stone
- ✓ Pyelonephritis
- ✓ Aneurysm
- ✓ Pneumonia
- ✓ Spinal Epidural Abscess
- ✓ Metastatic Cancer



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

PEARLS

- ✓ Recommended Exam: Mental status, HEENT, Neck, Chest, Lungs, Abdomen, Back, Extremities, Neuro
- ✓ Abdominal Aneurysms are a concern in patients over age 50
- ✓ Kidney stones typically present with an acute onset of flank pain which radiates to the groin area
- ✓ Patients with midline pain over the spinous process should be spinally immobilized
- ✓ Any bowel or bladder incontinence is a significant finding which require immediate medical evaluation
- ✓ In patients with a history of IV drug abuse, a spinal epidural abscess should be considered

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BEHAVIORAL GENERAL PROTOCOL # 1 - 06

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/violet
- ✓ Expression of suicidal/homicidal thoughts

DIFFERENTIAL

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

GENERAL PROTOCOL # 1 - 06

F SCENE SAFETY F



Universal Patient Care Protocol

- ✓ Remove patient from stressful environment
- ✓ Use verbal calming techniques because communication is very important (reassurance, calm, establish rapport)
- ✓ GCS on all patients



GO TO APPROPRIATE PROTOCOL
Altered Mental Status Protocol
Overdose/Toxicity Protocol
Head Trauma Protocol



Check **Blood Glucose** on any patient with altered mental status OR suspicion of hypoglycemia

>60

M If patient refuses care, CONTACT MEDICAL CONTROL M

P May consider
 Ativan 1-2 mg IV/IO/IM or Valium 5-10 mg IV/IO or Versed 2-5 mg IV/IO/IM/IN **P**

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

<60

B	Oral glucose if awake and no risk of aspiration	B
I	Glucagon 1 mg IM if decreased LOC or risk of aspiration Adults – D50 slow IVP Pediatrics – D25 slow IVP Glucagon 1 mg IM if no IV access	I

GLUCOSE >60

PEARLS

- ✓ YOUR SAFETY FIRST; CONSIDER INTRANASAL SEDATION FOR COMBATIVE PATIENTS
- ✓ Recommended exam: Mental Status, Skin, Heart, Lungs, Neuro
- ✓ Be sure to consider all possible medical/trauma causes for behavior (hypoglycemia, overdose, substance abuse, hypoxia, head injury, etc.)
- ✓ Do not irritate patient with a prolonged exam
- ✓ Do not overlook possibility of domestic violence, child abuse, elder abuse
- ✓ If patient suspected of agitated delirium suffers cardiac arrest, begin CPR and consider a fluid bolus and sodium bicarbonate
- ✓ Law enforcement must accompany any patient handcuffed or restrained by law enforcement

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FEVER/INFECTION CONTROL GENERAL PROTOCOL # 1 - 07

HISTORY

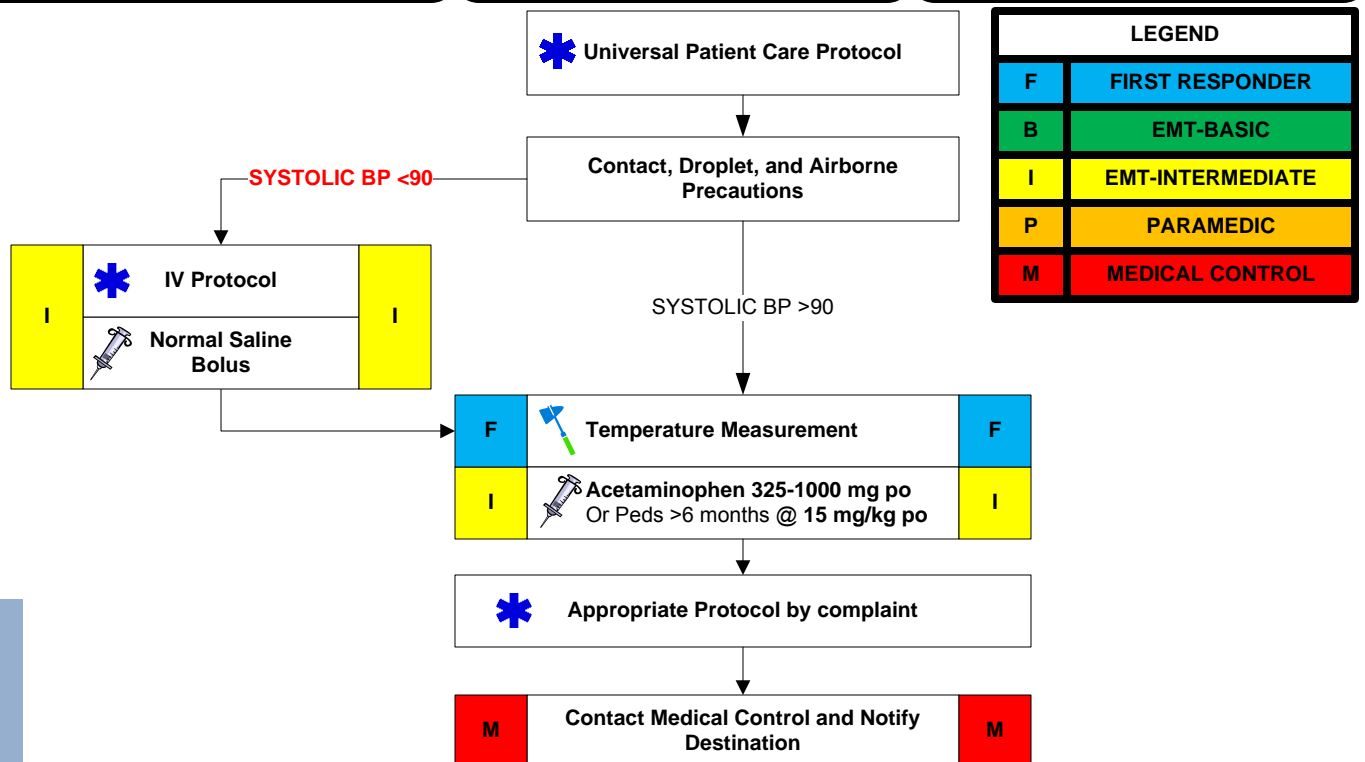
- ✓ Age
- ✓ Duration of fever
- ✓ Severity of fever
- ✓ Past medical history
- ✓ Medications
- ✓ Immunocompromised (transplant, HIV, diabetes, cancer)
- ✓ Environmental exposure
- ✓ Last acetaminophen or ibuprofen

SIGNS AND SYMPTOMS

- ✓ Warm
 - ✓ Flushed
 - ✓ Sweaty
 - ✓ Chills/Rigors
- ASSOCIATED SYMPTOMS**
(Helpful to localize source)
- ✓ Myalgias, cough, chest pain, headache, dysuria, abdominal pain, mental status changes, rash

DIFFERENTIAL

- ✓ Infections/sepsis
- ✓ Cancer/Tumors/Lymphomas
- ✓ Medication or drug reaction
- ✓ Connective tissue disease
 - Arthritis
 - Vasculitis
- ✓ Hyperthyroid
- ✓ Heat Stroke
- ✓ Meningitis



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

PEARLS

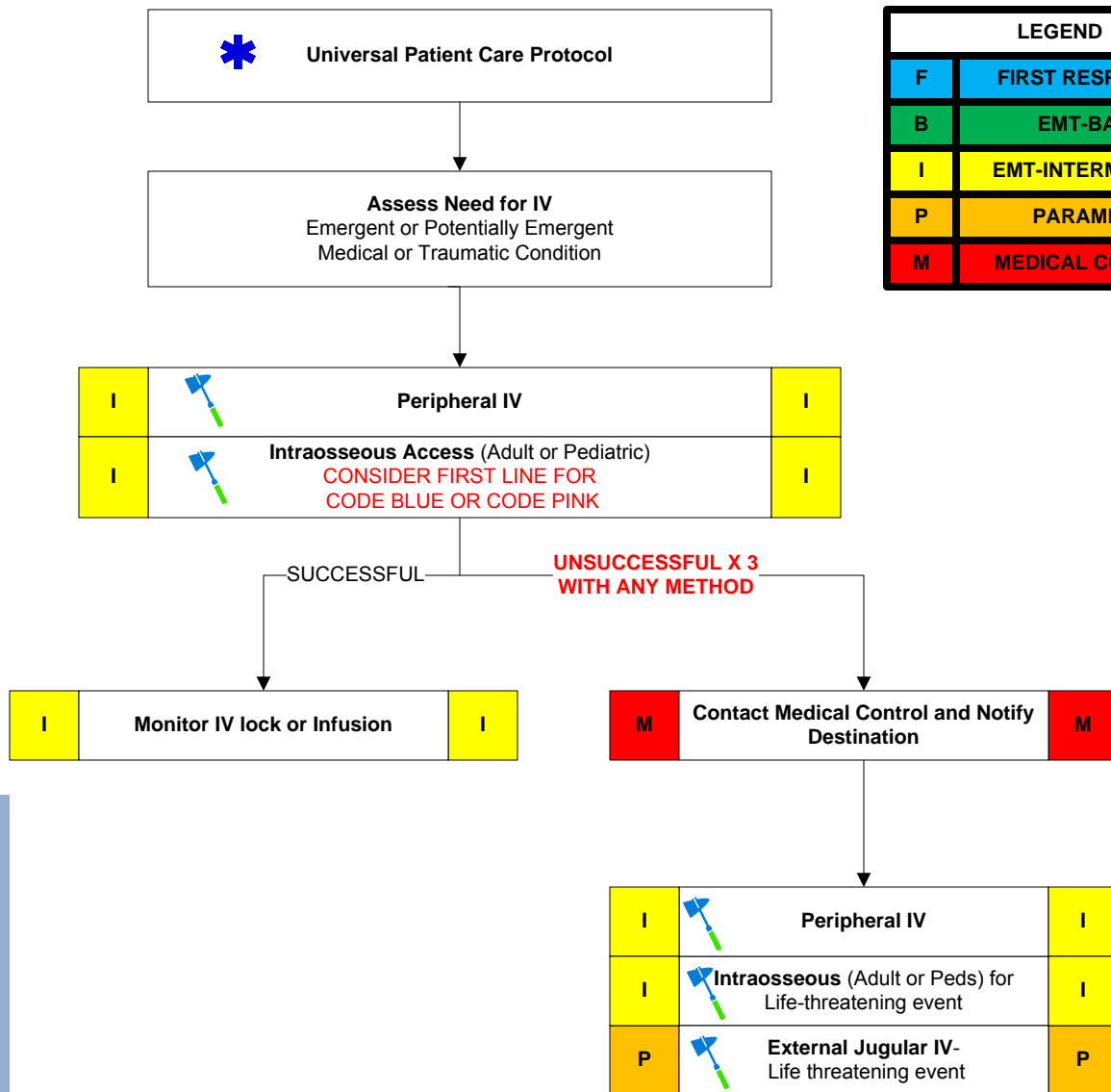
- ✓ Recommended Exam: Mental Status, Skin, HEENT, Neck, Heart, Lungs, Abdomen, Back, Extremities, Neuro
- ✓ Febrile seizures are more likely in children with a history of febrile seizures and with a rapid elevation in temperature
- ✓ Patients with a history of liver failure should not receive acetaminophen
- ✓ Droplet precautions include standard PPE plus a standard surgical mask for providers who accompany patients in the back of the ambulance and a surgical mask or NRB O2 mask for the patient. This level of precaution should be utilized when influenza, meningitis, mumps, streptococcal pharyngitis, and other illnesses spread via large particle droplets are suspected. A patient with a potentially infectious rash should be treated with droplet precautions
- ✓ Airborne precautions include standard PPE plus utilization of a gown, change of gloves after every patient contact, and strict hand washing precautions. This level of precaution is utilized when multi-drug resistant organisms (e.g., MRSA), scabies, or zoster (shingles), or other illnesses spread by contact are suspected
- ✓ All-hazards precautions include standard PPE plus airborne precautions plus contact precautions. This level of precaution is utilized during the initial phases of outbreak when the etiology of the infection is unknown or when the causative agent is found to be highly contagious (e.g., SARS)
- ✓ Rehydration with fluids increase the patient's ability to sweat and improves heat loss
- ✓ All patients should have drug allergies documented prior to administering pain medications
- ✓ Do not give aspirin to a child

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IV ACCESS GENERAL PROTOCOL # 1 - 08



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

GENERAL PROTOCOL # 1 - 08

PEARLS

- ✓ Consider Intraosseous as first line in cardiac arrest
- ✓ In cardiac arrest, pre-existing dialysis catheter or external central venous catheter may be used
- ✓ Any pre-hospital fluids or medications approved for IV use may be given through the IO
- ✓ All IV rates should be kept at KVO rate, unless administering fluid bolus
- ✓ Use microdrips in patients less than 6 years
- ✓ Upper extremity IV sites are preferred to lower extremity sites
- ✓ Lower extremity IV sites are discouraged in patients with vascular disease or diabetes
- ✓ Avoid IV, blood pressure, injections on affected side of post-mastectomy patients

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ADULT PAIN CONTROL GENERAL PROTOCOL # 1 - 09

HISTORY

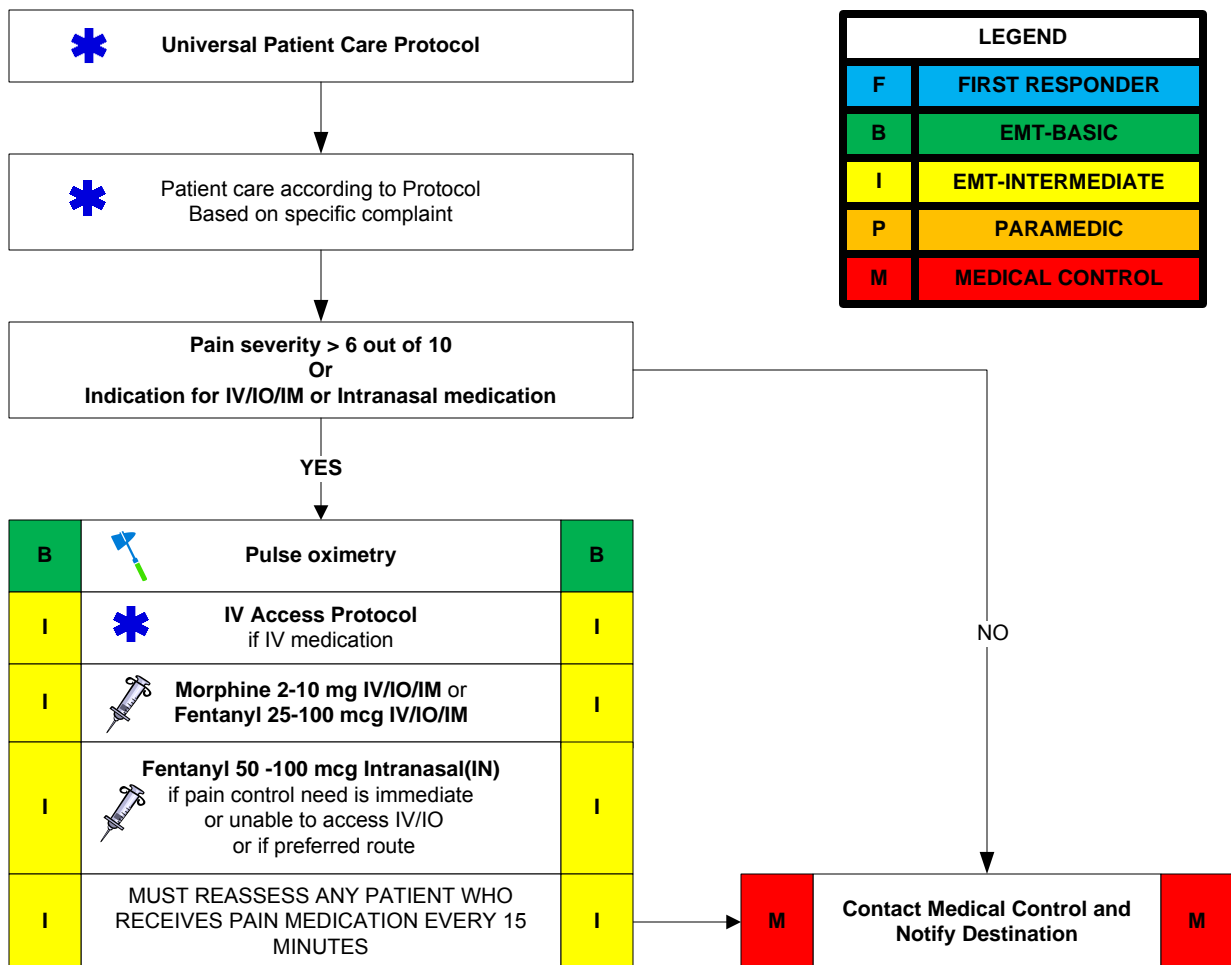
- ✓ Age
- ✓ Location
- ✓ Duration
- ✓ Severity (1 – 10)
- ✓ Use Wong-Baker faces pain scale for pediatrics
- ✓ Past medical history
- ✓ Medications
- ✓ Allergies

SIGNS AND SYMPTOMS

- ✓ Severity (pain scale)
- ✓ Radiation
- ✓ Relation to movement, respirations
- ✓ Increased with palpation

DIFFERENTIAL

- ✓ Per the specific protocol
- ✓ Visceral (abdominal)
- ✓ Cardiac
- ✓ Pleural/Respiratory
- ✓ Neurogenic
- ✓ Renal (colic)
- ✓ Musculoskeletal



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

GENERAL PROTOCOL # 1 - 09

PEARLS

- ✓ Recommended Exam: Mental Status, Area of Pain, Neuro
- ✓ Pain severity is a vital sign and should be recorded pre and post pain medication delivery and at disposition
- ✓ Contraindications for use of narcotic: hypotension, head injury, respiratory distress, severe COPD
- ✓ Document drug allergies prior to administering pain medication
- ✓ All patients who receive medications must be observed 15 minutes for drug reaction
- ✓ Do not administer PO meds to patient who may require surgical intervention (fractures, headaches, abdominal pain)
- ✓ See drug list for other contraindications to Morphine and Fentanyl

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PEDIATRIC PAIN GENERAL PROTOCOL # 1 - 10

HISTORY

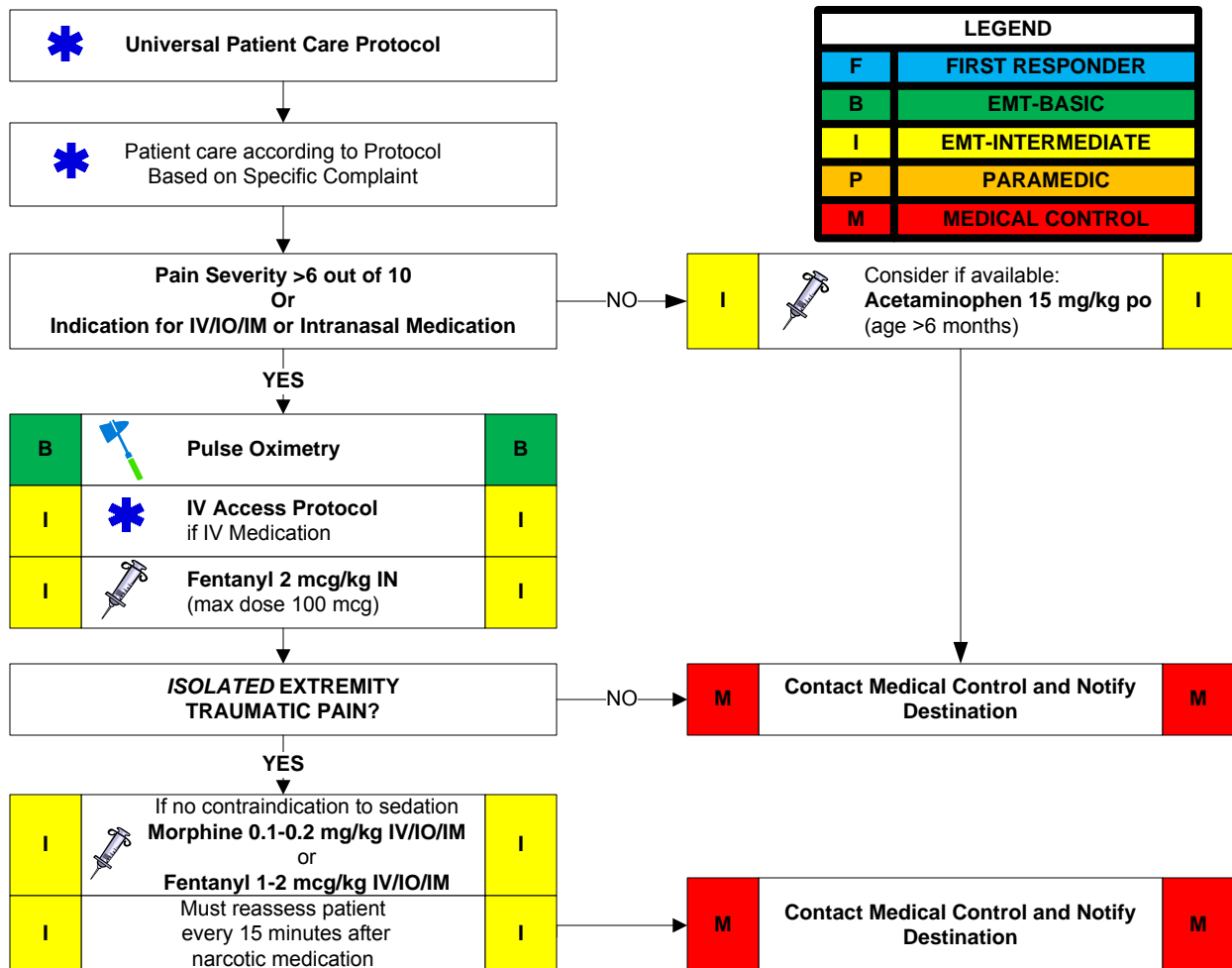
- ✓ Age
- ✓ Location
- ✓ Duration
- ✓ Severity (1 – 10)
- ✓ Use Wong-Baker faces
- ✓ Past Medical History
- ✓ Medications
- ✓ Drug Allergies

SIGNS AND SYMPTOMS

- ✓ Severity (pain scale)
- ✓ Quality (sharp, dull, etc.)
- ✓ Radiation
- ✓ Relation to movement, respiration

DIFFERENTIAL

- ✓ Per specific protocol
- ✓ Musculoskeletal
- ✓ Visceral (abdominal)
- ✓ Cardiac
- ✓ Pleural/Respiratory
- ✓ Neurogenic
- ✓ Renal (colic)



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

GENERAL PROTOCOL # 1 - 10

PEARLS

- ✓ Recommended Exam: Mental Status, Area of Pain, Neuro
- ✓ Pain severity is a vital sign and is recorded pre and post medication delivery and at disposition
- ✓ Pediatric patients' pain is assessed using the Wong-Baker faces score or the FLACC score (see Assessment Pain Procedure)
- ✓ Vital signs should be obtained 15 minutes post administration and at disposition
- ✓ All patients who receive medication should be observed 15 minutes for a drug reaction
- ✓ Do not give PO meds to patients who may need surgical interventions, such as open fractures
- ✓ Contraindications for narcotics: hypotension, head injury, respiratory distress

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POLICE CUSTODY GENERAL PROTOCOL # 1 - 11

HISTORY

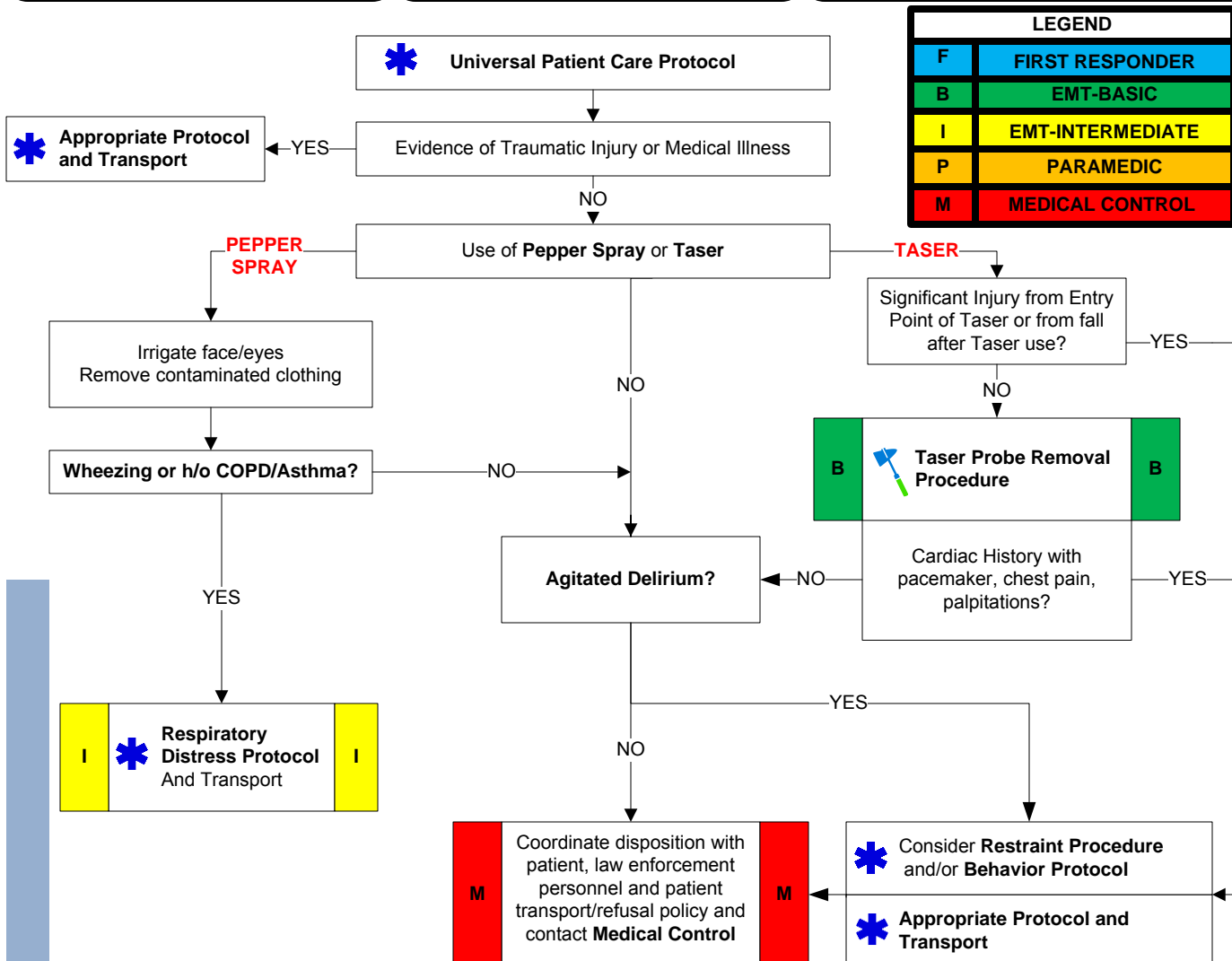
- ✓ Traumatic Injury
- ✓ Drug Abuse
- ✓ Cardiac History
- ✓ History of Asthma
- ✓ Psychiatric History

SIGNS AND SYMPTOMS

- ✓ External signs of trauma
- ✓ Palpitations
- ✓ Shortness of breath
- ✓ Wheezing
- ✓ Altered mental status
- ✓ Intoxication
- ✓ Substance abuse

DIFFERENTIAL

- ✓ Psychiatric illness
- ✓ Substance Abuse
- ✓ Traumatic Injury
- ✓ Closed Head Injury
- ✓ Asthmatic Exacerbation
- ✓ Cardiac Dysrhythmia



PEARLS

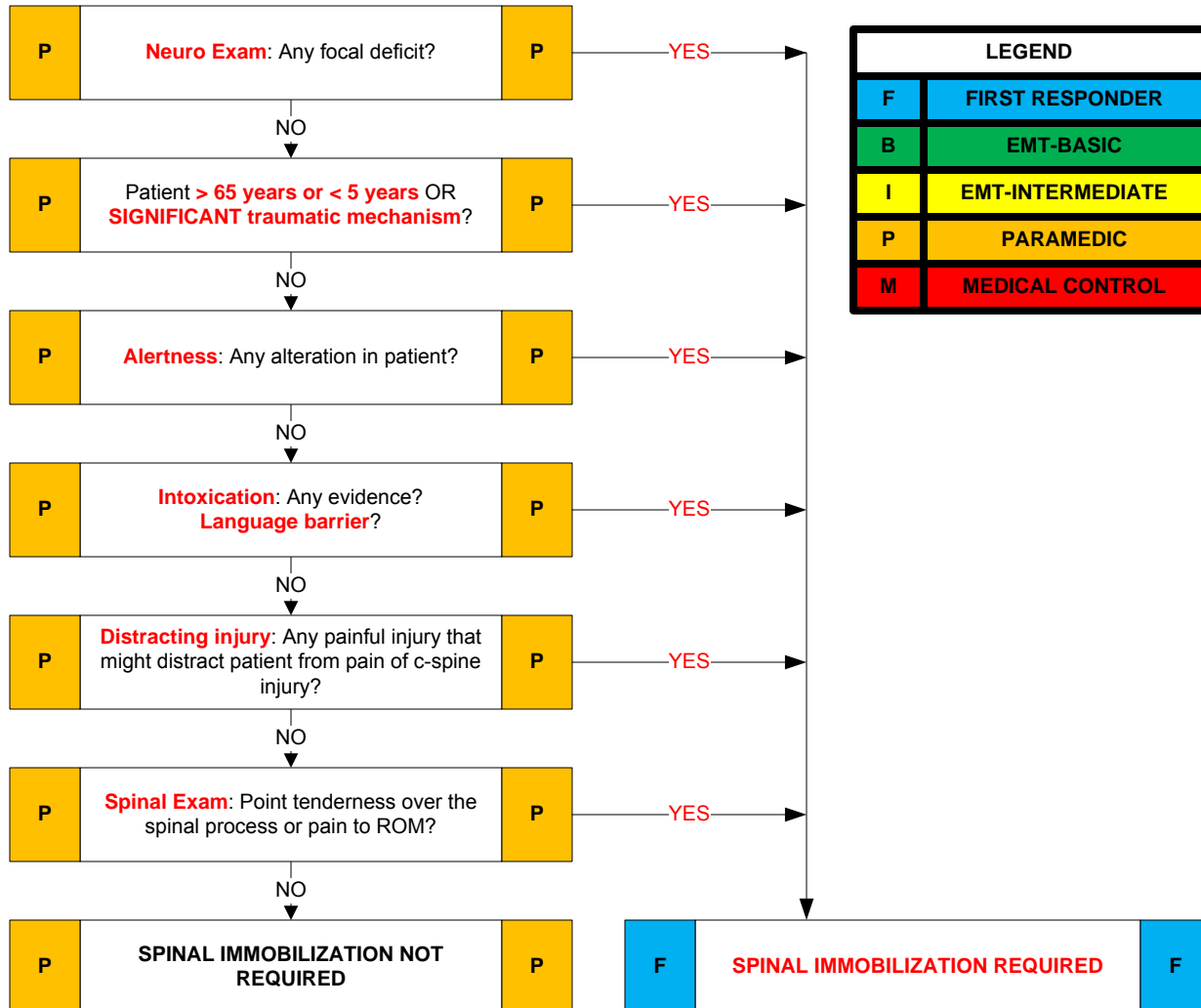
- ✓ Agitated delirium is characterized by marked restlessness, irritability, and/or high fever. Patients exhibiting these signs are at high risk for sudden death and should be transported to hospital by ALS personnel
- ✓ Patients restrained by law enforcement cannot be transported in the ambulance without a law enforcement officer in the patient care compartment who can remove the devices
- ✓ If there is any doubt regarding a patient's mental status, transport to the hospital for evaluation
- ✓ Asthmatic patients exposed to pepper spray and released to law enforcement should notify EMS if wheezing/SOB occurs
- ✓ Patients in police custody retain the right to request transport to the hospital. Coordinate with law enforcement

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



Approved by EMS Medical Director

SPINAL IMMOBILIZATION CLEARANCE GENERAL PROTOCOL # 1 - 12



PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Neck, Heart, Lungs, Abdomen, Back, Extremities, Neuro
- ✓ Consider immobilization in any patient with arthritis, cancer, or other underlying spinal or bone disease
- ✓ Significant mechanism includes high energy events such as ejections, high fall, abrupt deceleration crashes and may indicate the need for spinal immobilization in the absence of symptoms
- ✓ Range of motion should NOT be assessed if patient has midline spinal tenderness. Patient's range of motion should not be assisted. In the absence of tender, ROM is assessed by patient touching his chin to chest, extend neck (look up), and turn his head from side to side 45° (shoulder to shoulder) without spinal process pain
- ✓ The acronym **NSAIDS** should be used to remember the steps in this protocol:
 - N**: Neurologic exam. Look for focal deficits such as tingling, reduced strength, extremity numbness
 - S**: Significant mechanism or extremes of age
 - A**: Alertness Is patient A & O x 3? Any changes from prior to accident?
 - I**: Intoxication: Is there any indication the patient may be intoxicated? Language barrier?
 - D**: Distracting injury: Any injury which is capable of producing significant pain in this patient(i.e. Long Bone Fractures)?
 - S**: Spinal exam: Look for point tenderness in any spinal process or spinal process tenderness with range of motion
- ✓ The decision to **not** implement spinal immobilization in a patient is the responsibility of the **PARAMEDIC**
- ✓ In the very old and very young, a normal exam may NOT be sufficient to rule out spinal injury

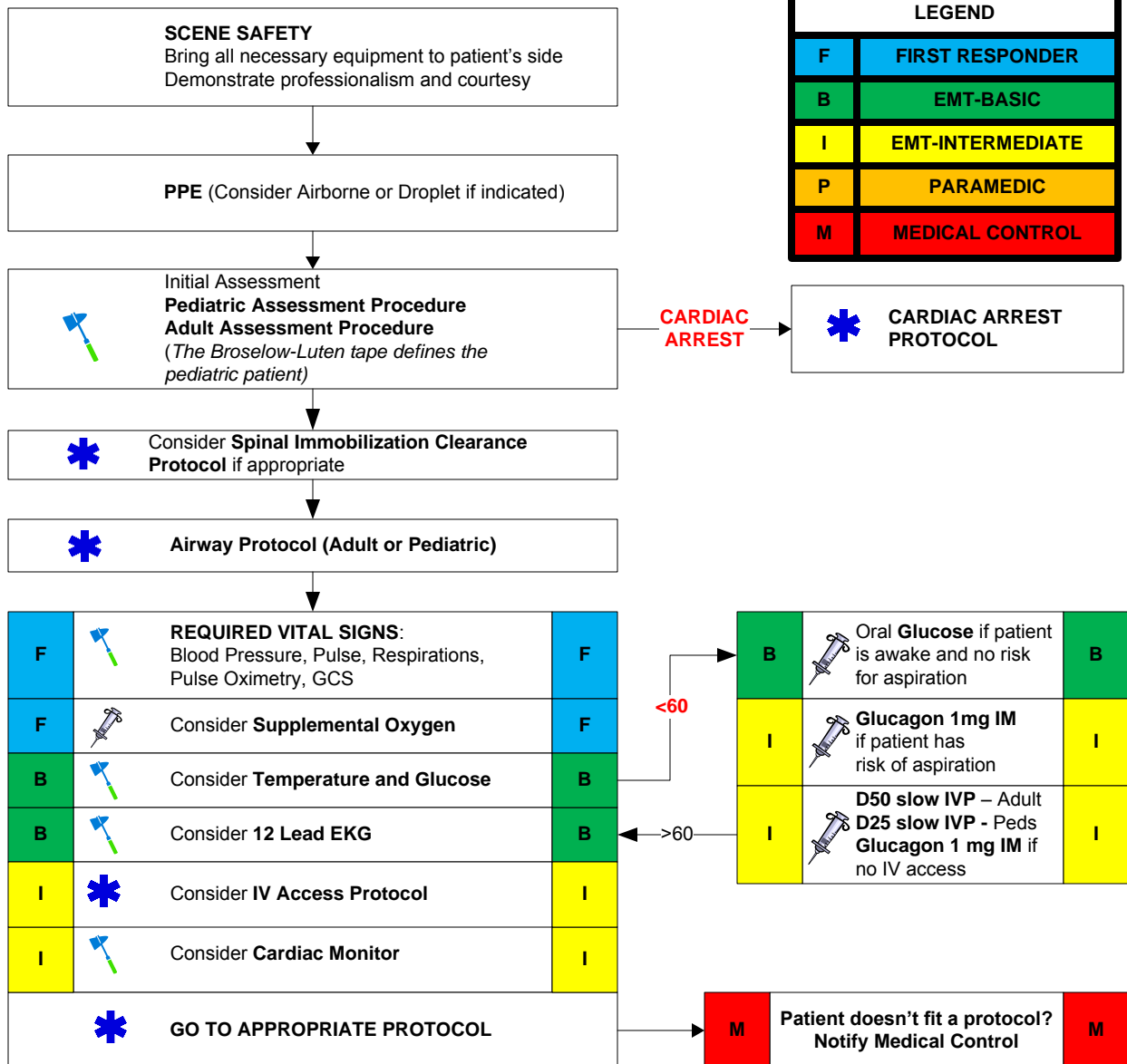
GENERAL PROTOCOL # 1 - 12

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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UNIVERSAL PATIENT CARE GENERAL PROTOCOL # 1 - 13



PEARLS

- ✓ Recommended Exam: Minimal exam if not noted on the specific protocol is vital signs, mental status with GCS, and location of injury or complaint
- ✓ Any patient contact which does not result in an EMS transport must have a completed disposition form
- ✓ Required vital signs on every patient: blood pressure, pulse, respirations, pulse oximetry and GCS
- ✓ Temperature is patient dependent on specific complaint
- ✓ A pediatric patient is defined by the Broselow-Luten tape
- ✓ Timing of transport should be based on patient's condition:
Category/Level I: load and go **Category/Level II:** < 10 minutes **STEMI/Medical:** < 15 minutes
- ✓ Never hesitate to contact medical control for patient who refuses transport

Medical Protocols

Abdominal Pain	Protocol 2-01
Allergic Reaction	Protocol 2-02
Altered Mental Status	Protocol 2-03
Deceased Person	Protocol 2-04
Dental Problems	Protocol 2-05
Epistaxis	Protocol 2-06
Overdose / Toxicity	Protocol 2-07
Pulmonary Edema	Protocol 2-08
Respiratory Distress	Protocol 2-09
Seizure	Protocol 2-10
Vomiting and Diarrhea	Protocol 2-11
Sepsis / Sepsis Alert	Protocol 2-12

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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ABDOMINAL PAIN MEDICAL PROTOCOL # 2 - 01

HISTORY

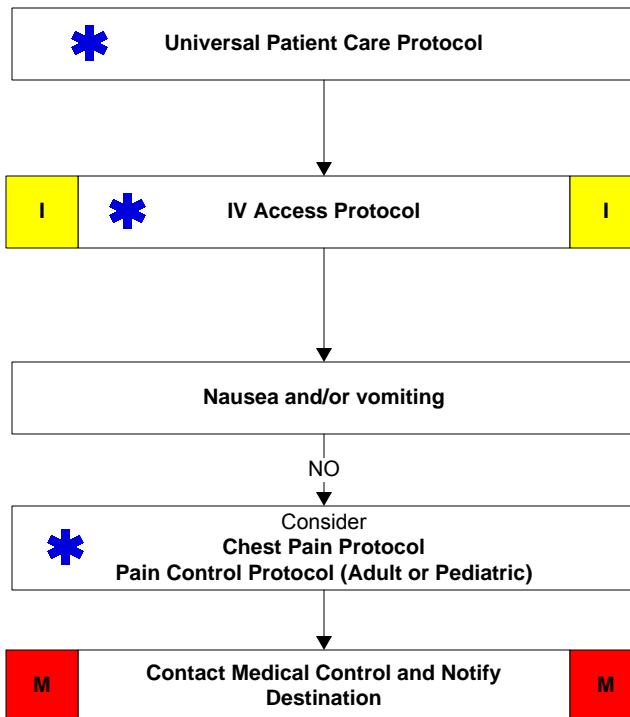
- ✓ Age
- ✓ Past medical /surgical history
- ✓ Medications
- ✓ Onset
- ✓ Palliation/Provocation
- ✓ Quality (crampy, dull, sharp, etc.)
- ✓ Region, Radiation, Referred
- ✓ Severity (1- 10)
- ✓ Time (duration/repetition)
- ✓ Fever
- ✓ Last meal eaten
- ✓ Last bowel movement/emesis
- ✓ Menstrual history (pregnancy)

SIGNS AND SYMPTOMS

- ✓ Pain (location/migration)
 - ✓ Tenderness
 - ✓ Nausea
 - ✓ Vomiting
 - ✓ Diarrhea
 - ✓ Dysuria
 - ✓ Constipation
 - ✓ Vaginal bleeding/discharge
 - ✓ Pregnancy
- ASSOCIATED SYMPTOMS**
- ✓ Fever, headache, weakness, malaise, myalgias, mental status changes, rash

DIFFERENTIAL

- ✓ Liver (hepatitis, hemorrhage)
- ✓ Peptic ulcer disease/Gastritis
- ✓ Myocardial Infarction
- ✓ Pancreatitis
- ✓ Kidney Stones
- ✓ Abdominal Aneurysm
- ✓ Appendicitis
- ✓ Bladder/Prostate disorder
- ✓ Pelvic (PID, Ectopic pregnancy, ovarian cyst)
- ✓ Diverticulitis
- ✓ Bowel Obstruction
- ✓ Gastroenteritis (infectious)



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

I	Consider Normal Saline Bolus	I
I	Administer Zofran 4mg IV	I

PEARLS

- ✓ 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-emetic
- ✓ Abdominal pain in women of child-bearing age should be treated as ectopic pregnancy until proven otherwise
- ✓ Antacids should be avoided in patients with renal disease
- ✓ Abdominal aneurysm should be suspected in patients over the age of 50
- ✓ Repeat vital signs after any fluid bolus
- ✓ Appendicitis may present with vague, peri-umbilical pain which migrates to the RLQ over time

MEDICAL PROTOCOL # 2 - 01

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ALLERGIC REACTION MEDICAL PROTOCOL # 2 - 02

HISTORY

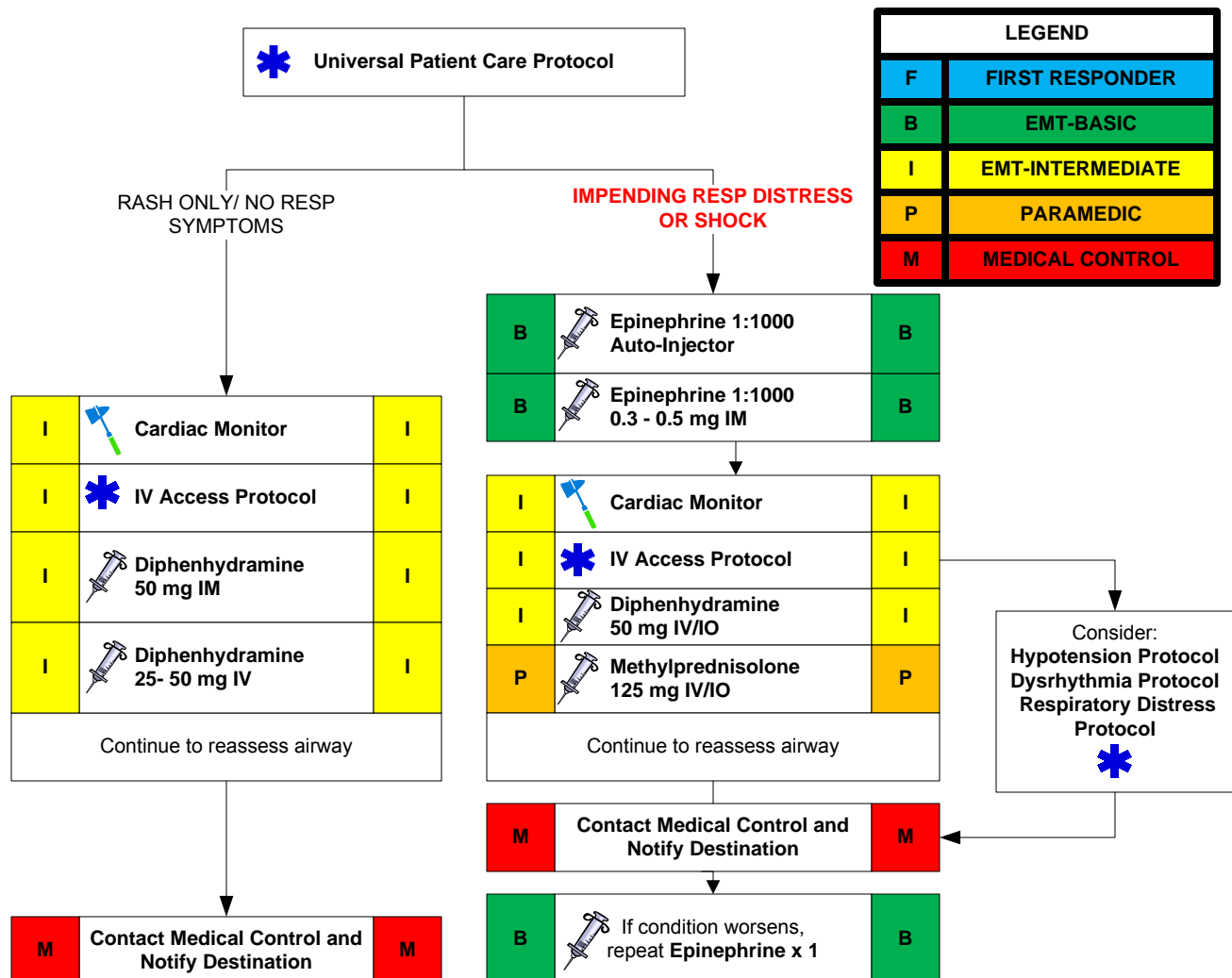
- ✓ Onset and location
- ✓ Insect sting or bite
- ✓ Food allergy/exposure
- ✓ Medication allergy/exposure
- ✓ New clothing, soap, detergent
- ✓ Past history of reactions
- ✓ Past medical history
- ✓ Medication history

SIGNS AND SYMPTOMS

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

DIFFERENTIAL

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



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Heart, Lungs
- ✓ Contact Medical Control prior to administering epinephrine in patients > 50 years of age, who have a history of cardiac disease, or if the patient's heart rate is >150. Epinephrine may precipitate cardiac ischemia. These patients should receive a 12 lead EKG
- ✓ Any patient with respiratory symptoms or extensive reaction should receive IV or IM diphenhydramine
- ✓ The shorter the onset of symptoms from contact, the more severe the reaction

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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ALTERED MENTAL STATUS MEDICAL PROTOCOL # 2 - 03

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 sleeping 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)
- ✓ Cardiac (MI, CHF)
- ✓ Hypothermia
- ✓ Infection (CNS and other)
- ✓ Shock (septic, metabolic, traumatic)
- ✓ Diabetes (hypo/hyperglycemia)
- ✓ Toxicologic or Ingestion
- ✓ Acidosis/Alkalosis/Hypoxia
- ✓ Electrolyte Abnormality
- ✓ Mental Health disorder

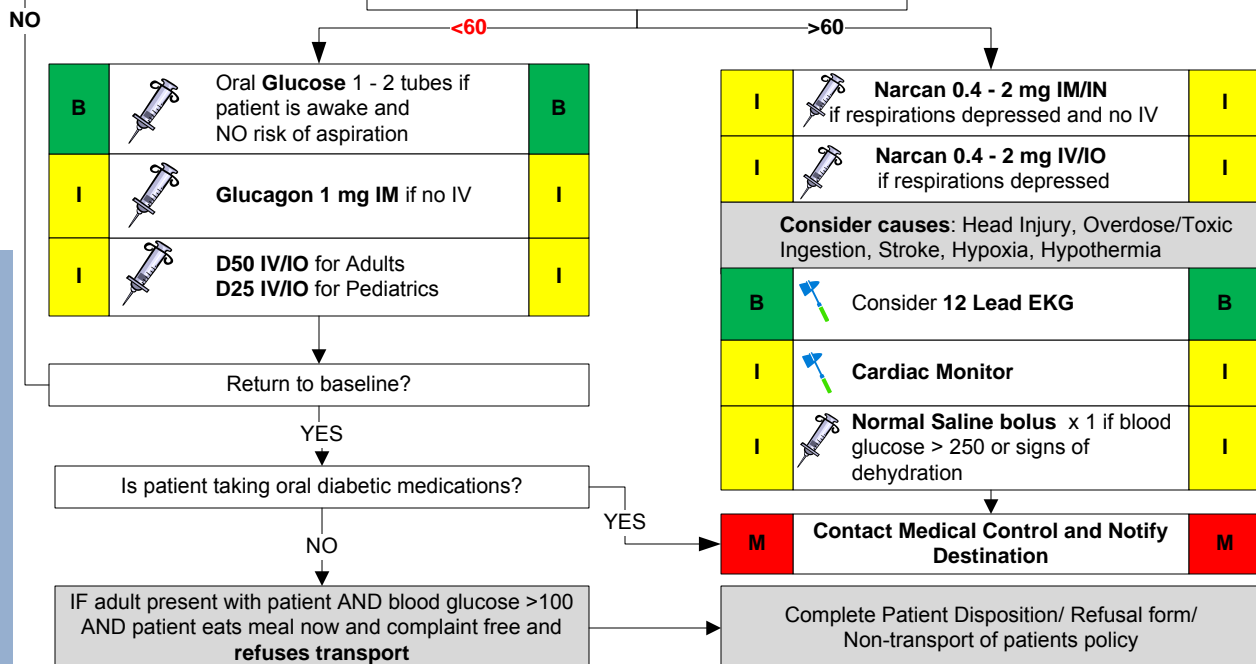
Universal Patient Care Protocol

Consider **Spinal Immobilization Procedure**

I **IV Access Protocol** **I**

Blood Glucose

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



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 injury
- ✓ Be aware of Altered Mental Status as presenting sign of environmental toxin or Haz-Mat exposure and protect personal safety
- ✓ It is safer to assume hypoglycemia than hyperglycemia if doubt exists. Recheck blood glucose after Dextrose or Glucagon
- ✓ Do not let alcohol confuse the clinical picture. Alcoholics frequently develop hypoglycemia and may have unrecognized injuries
- ✓ Low glucose (<60), normal glucose (60 – 120), high glucose (>250)
- ✓ Consider restraints if necessary for patient's and/or personnel's protection per the restraint procedure

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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DECEASED PERSON MEDICAL PROTOCOL # 2 - 04

HISTORY

- ✓ Person encountered by EMS who meets criteria for obvious death
- ✓ Patient with DNR in place who is pulseless and apneic
- ✓ Patient for whom resuscitative efforts are ceased on scene

KEY INFORMATION:

- ✓ Name of primary care physician
- ✓ Known medical conditions
- ✓ Last time known to be alive

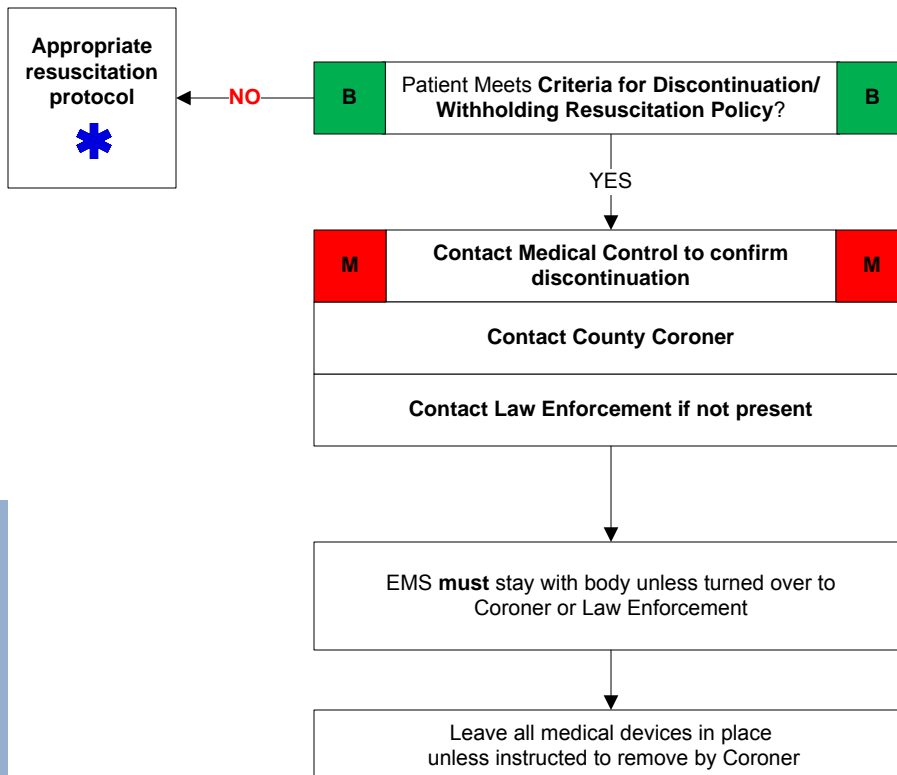
DIFFERENTIAL

- ✓ All deaths must be referred to law enforcement and/or coroner

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

MEDICAL PROTOCOL # 2 - 04



Criteria for Discontinuation/ Withholding Resuscitation:

- ✓ Valid DNR order
- ✓ Rigor Mortis and/or Dependent Lividity
- ✓ Decapitation
- ✓ Incineration

PEARLS

- ✓ Contact of coroner is mandatory and must be done by either EMS or law enforcement
- ✓ Medical control must be contacted because a 911 call is considered a call for help. Medical control must approve not initiating CPR or cessation of efforts
- ✓ Body may be released to Deputy Coroner
- ✓ All pre-hospital deaths **must** be reported to Coroner

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DENTAL PROBLEMS MEDICAL PROTOCOL # 2 - 05

HISTORY

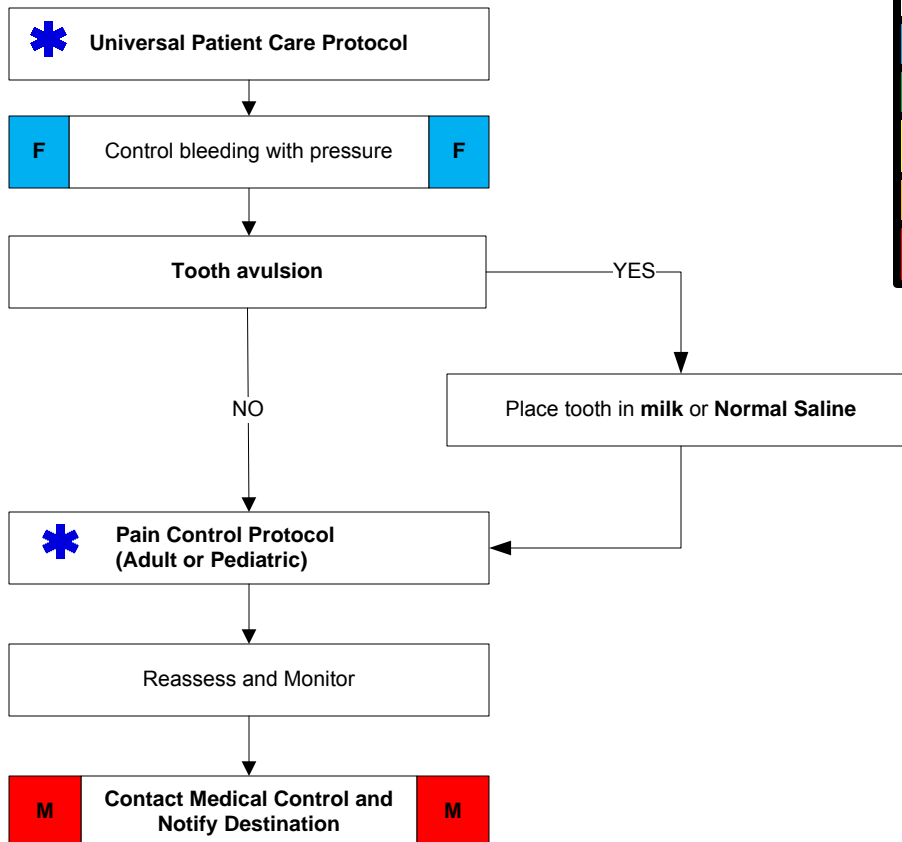
- ✓ Age
- ✓ Past medical history
- ✓ Medications
- ✓ Onset of pain/injury
- ✓ Trauma with "knocked out" tooth
- ✓ Location of tooth
- ✓ Whole vs. partial tooth injury

SIGNS AND SYMPTOMS

- ✓ Bleeding
- ✓ Pain
- ✓ Fever
- ✓ Swelling
- ✓ Tooth missing or fractured

DIFFERENTIAL

- ✓ Decay
- ✓ Infection
- ✓ Fracture
- ✓ Avulsion
- ✓ Abscess
- ✓ Facial cellulitis
- ✓ Impacted tooth (wisdom)
- ✓ TMJ syndrome
- ✓ Myocardial infarction



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Neck, Chest, Lungs, Neuro
- ✓ Significant soft tissue swelling to the face or oral cavity can represent a cellulitis or abscess
- ✓ Scene and transport times should be minimized in complete tooth avulsions. Reimplantation is possible within 4 hours if the tooth is properly cared for
- ✓ All tooth disorders typically need antibiotic coverage in addition to pain control
- ✓ Occasionally cardiac chest pain can radiate to the jaw
- ✓ All pain associated with teeth should be associated with a tooth which is tender to tapping or touch (or sensitivity to cold or hot)

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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EPISTAXIS MEDICAL PROTOCOL # 2 - 06

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

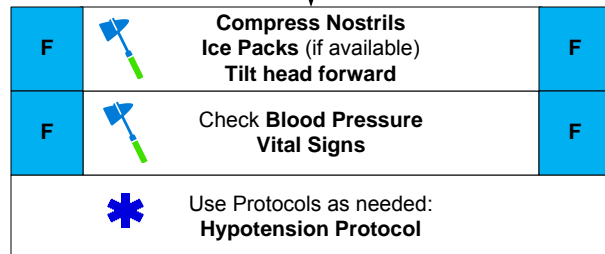
- ✓ Trauma
- ✓ Infection (viral URI or sinusitis)
- ✓ Allergic rhinitis
- ✓ Lesion (polyps, ulcers)
- ✓ Hypertension

LEGEND

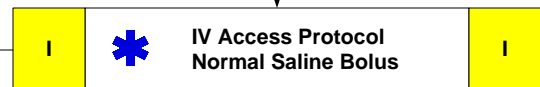
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



UNIVERSAL PATIENT CARE PROTOCOL



SBP < 100



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 the posterior blood loss by examining the posterior pharynx
- ✓ Anticoagulants include aspirin, Coumadin, Pradaxa, Plavix, Effient, non-steroidal inflammatory medications (NSAIDS) (ibuprofen), and many over the counter headache relief powders

MEDICAL PROTOCOL # 2 - 06

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OVERDOSE/TOXICITY MEDICAL PROTOCOL # 2 - 07

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, Dysrhythmia
- ✓ Seizures

DIFFERENTIAL

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



Universal Patient Care Protocol

B		12 Lead EKG	B
I		Cardiac Monitor	I
I		IV Access Protocol	I
P		Consider Calcium Chloride if a dialysis patient	P
P		Tricyclic Ingestion? Sodium Bicarbonate if Tachycardia/QRS Widening	P
Consider Chest Pain Protocol			

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

MEDICAL PROTOCOL # 2 - 07

Respiratory Depression

I	Narcan 0.4-2 mg IV/IO/IM/IN	I
---	------------------------------------	---

Contact Medical Control and Notify Destination

Organophosphates

B	DuoDote®	B
I	Atropine 1-2 mg IV/IO	I

Contact Medical Control and Notify Destination

Other

Hypotension, Seizures, Ventricular dysrhythmias, or Mental Status Changes
Appropriate Protocol

Contact Medical Control and Notify Destination

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Abdomen, Extremities, Neuro
- ✓ 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 bottles, contents, emesis to ED
- ✓ Tricyclic: 4 major areas of toxicity: seizures, dysrhythmia, hypotension, decreased mental status or coma; 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: Dysrhythmia 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: Initiate MABAS-kits are for responders only

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PULMONARY EDEMA MEDICAL PROTOCOL # 2 - 08

HISTORY

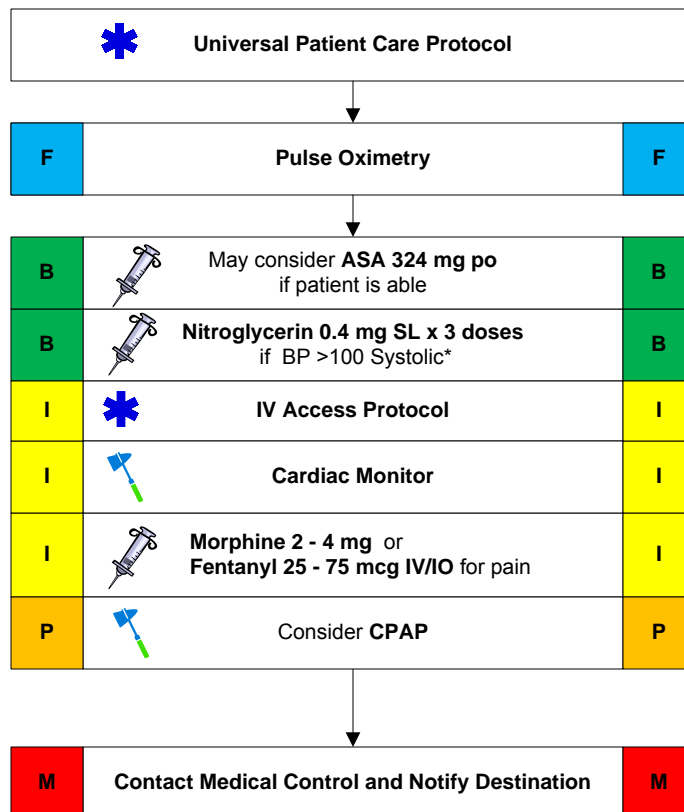
- ✓ Congestive Heart Failure
- ✓ Past medical history
- ✓ Medications (digoxin, Lasix)
- ✓ Viagra, Levitra, Cialis
- ✓ Cardiac history-past myocardial infarction

SIGNS/SYMPTOMS

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

Differential

- ✓ Myocardial infarction
- ✓ Congestive Heart Failure
- ✓ Asthma
- ✓ Anaphylaxis
- ✓ Aspiration
- ✓ COPD
- ✓ Pleural effusion
- ✓ Pulmonary embolus
- ✓ Pericardial tamponade
- ✓ Toxic exposure



LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

EMT-B may administer
nitroglycerin SL if IV
present*

Consider ILS/ALS intercept
early.

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
- ✓ AVOID NITROGLYCERIN IN ANY PATIENT WHO HAS USED VIAGRA OR LEVITRA IN THE PAST 24 HOURS OR CIALIS IN THE PAST 36 HOURS DUE TO POTENTIAL FOR SEVERE HYPOTENSION
- ✓ Furosemide and narcotics have not been shown to improve the outcomes of EMS patients with pulmonary edema. Even though this traditionally been a mainstay of EMS treatment, it is no longer recommended
- ✓ If the patient has taken nitroglycerin without relief, consider the potency of the medication
- ✓ Contraindications to narcotics include severe COPD and respiratory distress. Monitor the patient closely
- ✓ Consider myocardial infarction in all these patients. Diabetics and geriatric patients often have atypical pain, or only generalized complaints
- ✓ Carefully monitor the level of consciousness, BP, and respiratory status with the above interventions
- ✓ Allow the patient to be in their position of comfort to maximize their breathing effort
- ✓ Document CPAP application. Document 12 lead EKG

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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RESPIRATORY DISTRESS MEDICAL PROTOCOL # 2 - 09

HISTORY

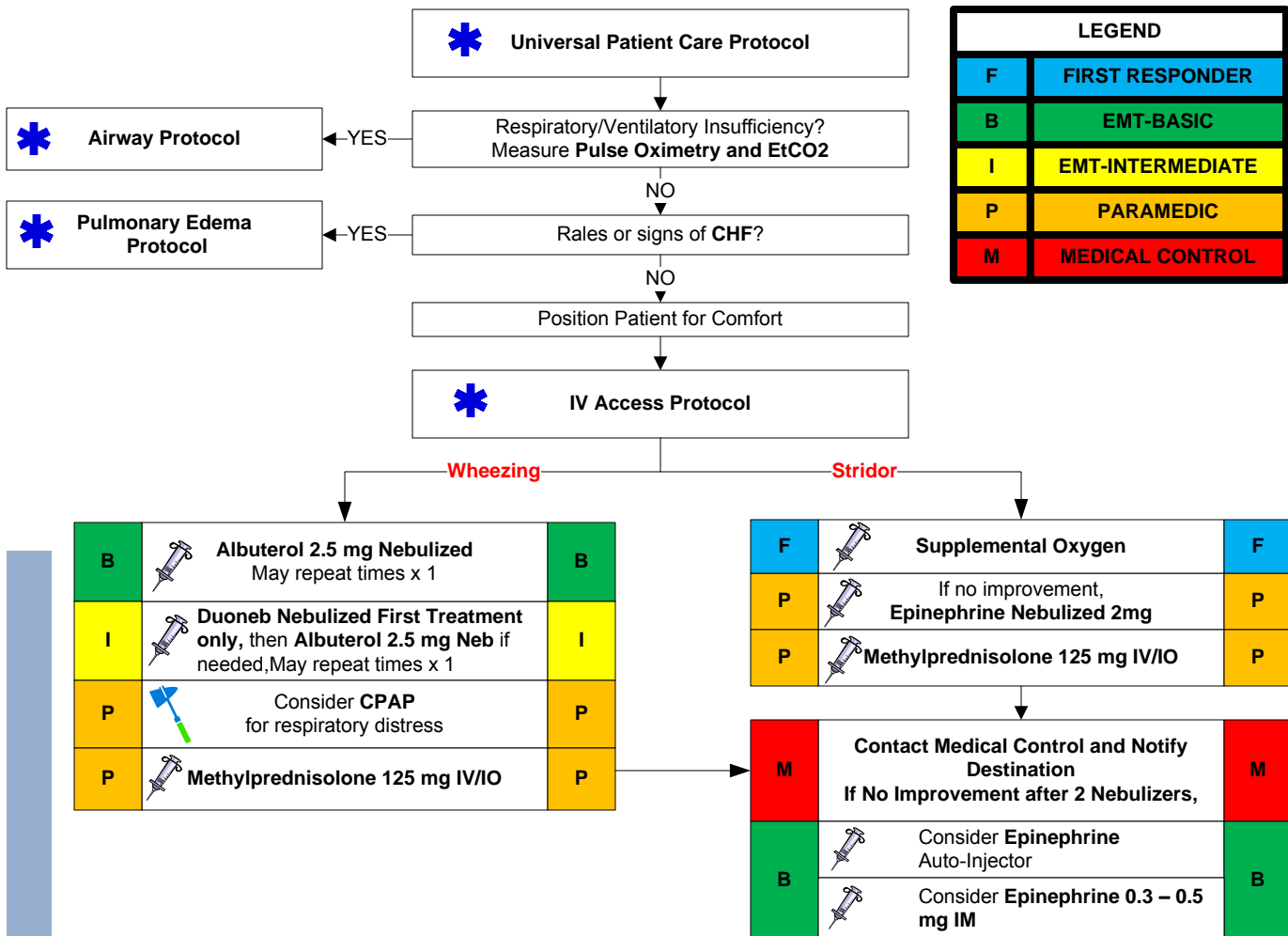
- ✓ Asthma/COPD – chronic bronchitis, emphysema, congestive heart failure
- ✓ Home treatment (oxygen, nebulizer)
- ✓ Medications (theophylline, steroids, inhalers)
- ✓ Toxic exposure, smoke inhalation

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

- ✓ Anaphylaxis
- ✓ Aspiration
- ✓ COPD (Asthma, Emphysema, Bronchitis)
- ✓ Pneumonia
- ✓ Pulmonary embolus
- ✓ Pneumothorax
- ✓ Cardiac (MI or CHF)
- ✓ Hyperventilation
- ✓ Inhaled toxin (carbon monoxide, etc.)



PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Skin, Neck, Heart, Lungs, Abdomen, Extremities, Neuro
- ✓ Pulse oximetry must be monitored closely if initial saturation is $\leq 90\%$, or there is a decline in patient status despite normal pulse oximetry reading
- ✓ Contact Medical Control prior to administering epinephrine in patients over 50 years of age, have a history of cardiac disease, or if the patient's heart rate is >150 . Epinephrine may precipitate cardiac ischemia. These patients must be on a cardiac monitor. A 12-lead EKG is strongly recommended in these patients
- ✓ A silent chest in respiratory distress is a pre-respiratory arrest sign
- ✓ ETCO2 should be used when Respiratory Distress is significant and does not respond to initial Albuterol dose

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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SEIZURE MEDICAL PROTOCOL # 2 - 10

HISTORY

- ✓ Reported/witnessed seizure activity
- ✓ Previous seizure activity
- ✓ Medical alert tag information
- ✓ Seizure medications
- ✓ History of trauma
- ✓ History of diabetes
- ✓ History of pregnancy

SIGNS AND SYMPTOMS

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

DIFFERENTIAL

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



Universal Patient Care Protocol



Spinal Immobilization Procedure

Seizing?

Postictal?



Airway Protocol



IV Access Protocol

Ativan 1-2 mg IV/IO/IM or
Valium 5-10 mg IV/IO/PR or
Versed 2-5 mg IV/IO/IM/IN

May Repeat x 1
in 5 minutes

Blood Glucose

Glucose < 60, D50
slow IVP or Glucagon 1
mg IM if no IV

Still seizing?

No

Yes

F	Assess Patient	F
B	Blood Glucose	B
I	Cardiac Monitor	I

Seizure Recurs

Ativan 1-2 mg IV/IO/IM or
Valium 5-10 mg IV/IO/PR or
Versed 2-5 mg IV/IO/IM/IN

May Repeat x 1
in 5 minutes

Contact Medical Control and
Notify Destination

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

<60

D50 slow IVP

Glucagon 1mg
IM if no IV

> 60

PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Heart, Lungs, Extremities, Neuro
- ✓ Status epilepticus is defined as two or more successive seizures without a period of consciousness or recovery
- ✓ 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
- ✓ Jacksonian seizures are seizures which start as focal seizures and become generalized
- ✓ Be prepared for airway problems with continued seizures – ILS or ALS intercept is necessary
- ✓ Assess occult trauma and substance abuse
- ✓ Be prepared to assist with ventilations, especially if diazepam or midazolam is used
- ✓ For any seizure in a pregnant patient, follow OB emergencies protocol
- ✓ Diazepam (valium) is not effective when administered IM. It should only be given IV/IO or rectally. Midazolam is well absorbed when administered IM and nasal

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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VOMITING AND DIARRHEA MEDICAL PROTOCOL # 2 - 11

- ✓ **HISTORY**
- ✓ Age
- ✓ Time of last meal
- ✓ Last bowel movement/emesis
- ✓ Improvement or worsening with food or activity
- ✓ Duration of problem
- ✓ Other sick contacts
- ✓ Past medical history
- ✓ Past surgical history
- ✓ Medications
- ✓ Menstrual history
- ✓ Pregnancy
- ✓ Travel history
- ✓ Bloody emesis/diarrhea

- ✓ **SIGNS AND SYMPTOMS**
- ✓ Pain
- ✓ Character of pain (constant, intermittent, dull, sharp, etc.)
- ✓ Distention
- ✓ Constipation
- ✓ Diarrhea
- ✓ Anorexia
- ✓ Radiation
- ✓ **ASSOCIATED SYMPTOMS**
(Helpful to localize source)
- ✓ Fever, headache, blurred vision, weakness, malaise, myalgias, cough, dysuria, mental status changes, rash

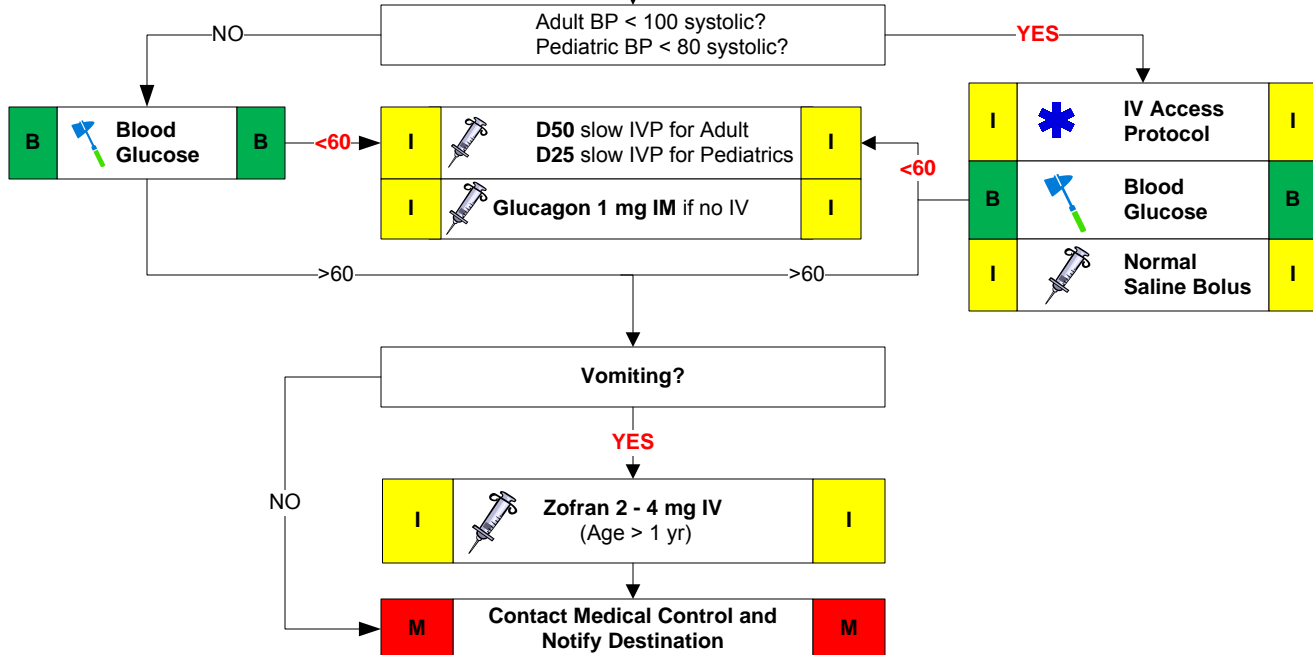
- ✓ **DIFFERENTIAL**
- ✓ CNS (increased pressure, headache, stroke, CNS lesions, trauma or hemorrhage, vestibular)
- ✓ Myocardial infarction
- ✓ Drugs (NSAIDs, antibiotics, narcotics, chemotherapy)
- ✓ GI or Renal disorders
- ✓ Diabetic ketoacidosis
- ✓ Gynecologic disease (ovarian cyst, PID)
- ✓ Infections (pneumonia, influenza)
- ✓ Electrolyte abnormalities
- ✓ Food or toxin induced
- ✓ Medication or substance abuse
- ✓ Pregnancy
- ✓ Psychological

MEDICAL PROTOCOL # 2 - 11



Universal Patient Care Protocol

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



PEARLS

- ✓ Recommended Exam: Mental Status, Skin, HEENT, Neck, Heart, Lungs, Abdomen, Back, Extremities, Neuro
- ✓ Beware of the children who are only vomiting. Pyloric stenosis, bowel obstruction, and CNS processes (bleeding, tumors, or increased CSF pressures) all may present with vomiting
- ✓ IV start is strongly recommended pre-hospital

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



Approved by EMS Medical Director 2015

SUSPECTED SEPSIS/SEPSIS ALERT MEDICAL PROTOCOL # 2 - 12

HISTORY

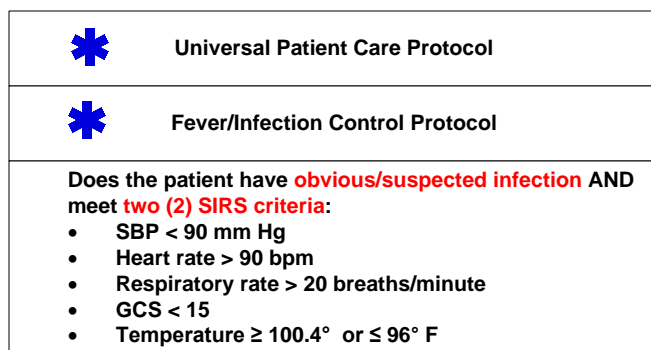
- ✓ Age (common in elderly)
- ✓ Past medical /surgical history
- ✓ Fever (onset, duration, elevation)
- ✓ Prior infections (UTI, pneumonia)
- ✓ Recent surgeries/procedures
- ✓ Immune status
- ✓ Implanted devices/prosthetics
- ✓ Immunizations
- ✓ Travel history
- ✓ Menstrual history (pregnancy)

SIGNS AND SYMPTOMS

- ✓ Hypo/Hyperthermia
- ✓ Rash/bruising/bleeding
- ✓ Rigors/chills
- ✓ Altered Mental Status
- ✓ Delayed capillary refill
- ✓ Cyanosis
- ✓ Tachypnea
- ✓ Tachycardia
- ✓ Decreased urine output

DIFFERENTIAL

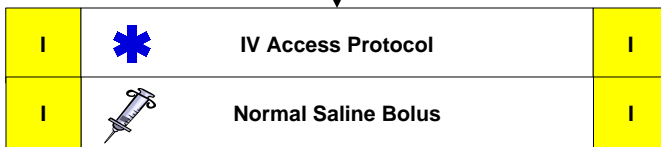
- ✓ Cardiogenic shock
- ✓ Hypovolemic shock
- ✓ Dehydration
- ✓ Neuroleptic malignant syndrome
- ✓ Toxicological emergency
- ✓ Stroke
- ✓ Hyperthyroidism



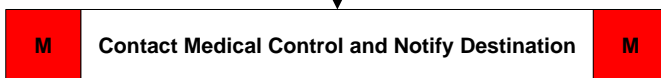
NO

Go to Appropriate Protocol

YES



Notify Medical Control of
SEPSIS ALERT



LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

MEDICAL PROTOCOL # 2 - 12

PEARLS

- ✓ Applies to all patients 18 years and older, with a suspected/known infection who meet SIRS criteria
- ✓ Recommended Exam: Mental Status, Skin, HEENT, Neck, Heart, Lung, Abdomen, Back, Extremities, Neuro
- ✓ Aggressive fluid resuscitation is the most important prehospital treatment for septic patients
- ✓ Boluses should be given in 500 mL increments
- ✓ Repeated boluses of Normal Saline should be repeated up to a maximum of 3 liters or 30 mL/kg
- ✓ If patient has a history of CHF or ESRD on dialysis, monitor for pulmonary edema or fluid overload
- ✓ If needed, supply supplemental oxygen or CPAP for oxygen saturations less than < 92%
- ✓ Repeat vital signs after any fluid bolus

Cardiac Protocols

Asystole	Protocol 3-01
Atrial Fibrillation	Protocol 3-02
Bradycardia	Protocol 3-03
Cardiac Arrest	Protocol 3-04
Chest Pain: Cardiac and STEMI	Protocol 3-05
Hypertension	Protocol 3-06
Hypotension	Protocol 3-07
Induced Hypothermia	Protocol 3-08
Post-Resuscitation	Protocol 3-09
Pulseless Electrical Activity (PEA)	Protocol 3-10
Suspected Stroke	Protocol 3-11
Supraventricular Tachycardia	Protocol 3-12
Syncope	Protocol 3-13
Ventricular Fibrillation/Pulseless Ventricular Tachycardia	Protocol 3-14
Ventricular Fibrillation/Pulseless Ventricular Tachycardia	Protocol 3-15
Wide Complex Tachycardia	Protocol 3-16

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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ASYSTOLE CARDIAC PROTOCOL # 3 - 01

HISTORY

- ✓ Past medical history
- ✓ Medications
- ✓ Events leading to arrest
- ✓ End stage renal disease
- ✓ Estimated downtime
- ✓ Suspected hypothermia
- ✓ Suspected overdose
- ✓ DNR form

SIGNS AND SYMPTOMS

- ✓ Pulseless
- ✓ Apneic
- ✓ No electrical activity on EKG
- ✓ No auscultated heart tones

DIFFERENTIAL

- ✓ Medical or trauma
- ✓ Hypoxia
- ✓ Potassium (hypo/hyper)
- ✓ Drug overdose
- ✓ Acidosis
- ✓ Hypothermia
- ✓ Device (lead) error
- ✓ Death

Criteria for Discontinuation/ Withholding Resuscitation:

- ✓ Valid DNR order
- ✓ Rigor Mortis and/or Dependent Lividity
- ✓ Decapitation
- ✓ Incineration



Universal Patient Care Protocol



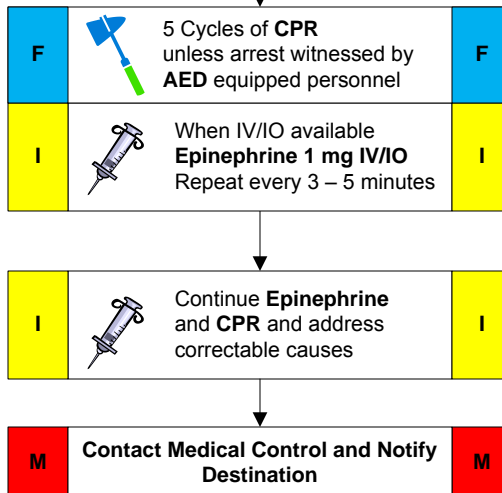
Cardiac Arrest Protocol

Criteria for Death/No Resuscitation?

**STOP
RESUSCITATION**

YES

NO



AT ANY TIME

Return of
Spontaneous
Circulation



Go to
Post Resuscitation
Protocol



LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

PEARLS

- ✓ Recommended Exam: Mental Status
- ✓ Always confirm asystole in more than one lead
- ✓ Successful resuscitation of asystole requires the identification and correction of a cause. Causes of asystole include:

Acidosis	Tension Pneumothorax
Hypovolemia	Hypoglycemia
Hyperkalemia	Overdose (Narcotics, Tricyclic Anti-depressants, Calcium Channel Blockers, Beta Blockers)

CARDIAC PROTOCOL # 3 - 01

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ATRIAL FIBRILLATION CARDIAC PROTOCOL # 3 - 02

HISTORY

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

SIGNS AND SYMPTOMS

- ✓ HR >130/min
- ✓ QRS < .12 sec
- ✓ Dizziness, Chest pain, Shortness of breath
- ✓ Potential presenting rhythm
 - Sinus tachycardia
 - Atrial fibrillation/flutter
 - Multifocal atrial tachycardia
 - PSVT

DIFFERENTIAL

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

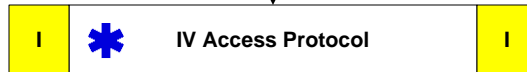
Unstable/Prearrest

Signs and Symptoms:

- ✓ Altered Mental Status
- ✓ Hypotension
- ✓ Chest Pain
- ✓ Syncope
- ✓ Pulmonary Edema

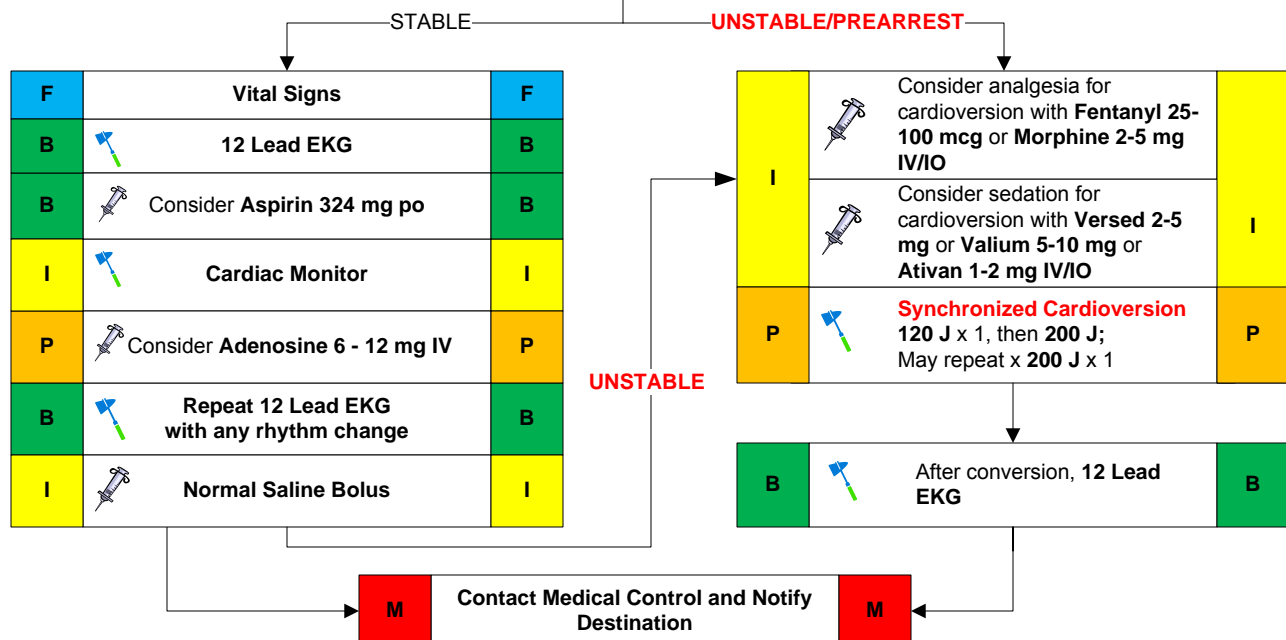


Universal Patient Care Protocol



LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



PEARLS

- ✓ Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
- ✓ Adenosine may not be effective in identifying atrial fibrillation, but it is not harmful
- ✓ Monitor for respiratory depression and hypotension associated with Versed
- ✓ Continuous pulse oximetry is required for all atrial fibrillation patients
- ✓ Document all rhythm changes with monitor strips and obtain monitor strips with each therapeutic intervention

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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BRADYCARDIA CARDIAC PROTOCOL # 3 - 03

HISTORY

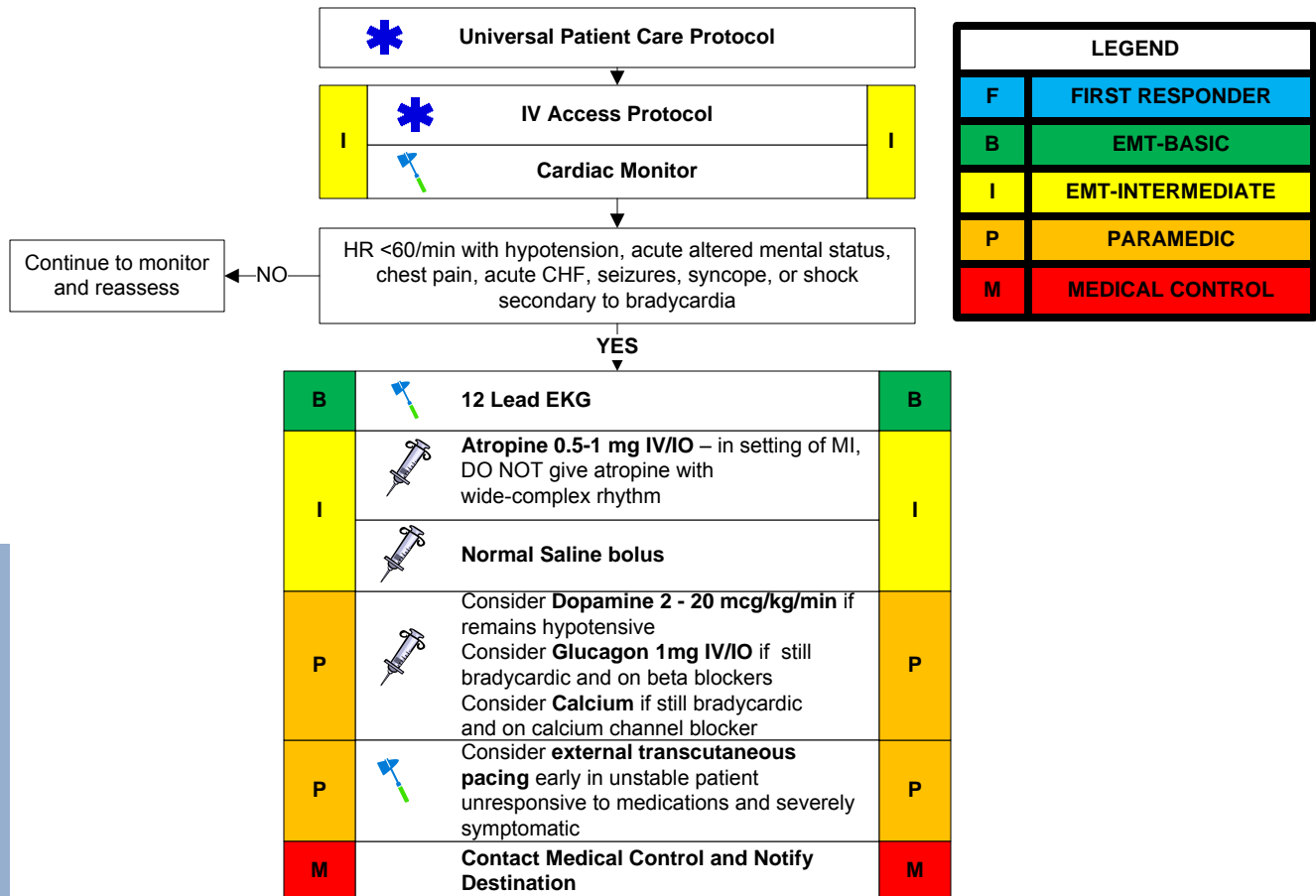
- ✓ Past medical history
- ✓ Medications
 - Beta blockers
 - Calcium channel blockers
 - Clonidine
 - Digoxin
- ✓ Pacemaker

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 (increased ICP) or stroke
- ✓ Spinal cord lesion
- ✓ Sick sinus syndrome
- ✓ AV blocks (1°, 2°, 3°)
- ✓ Overdose



LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

PEARLS

- ✓ Recommended Exam: Mental Status, Neck, Heart, Lungs, Neuro
- ✓ The use of Lidocaine, Beta Blockers, and Calcium Channel Blockers in heart block can worsen bradycardia and lead to asystole and death
- ✓ Pharmacological treatment of bradycardia is based upon the presence or absence of symptoms. If symptomatic, treat. If asymptomatic, monitor the patient
- ✓ In wide complex, slow rhythm, consider hyperkalemia
- ✓ Remember: The use of Atropine for PVC's in the presence of myocardial infarction may worsen heart damage
- ✓ Consider treatable causes for bradycardia: Beta Blocker overdose, Calcium Channel Blocker overdose, etc.
- ✓ Be sure to aggressively oxygenate the patient and support respiratory effort

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CARDIAC ARREST CARDIAC PROTOCOL # 3 - 04

HISTORY

- ✓ Events leading to arrest
- ✓ Estimated downtime
- ✓ Past medical history
- ✓ Medications
- ✓ Existence of terminal illness
- ✓ Signs of lividity, rigor mortis
- ✓ DNR or Living Will

SIGNS AND SYMPTOMS

- ✓ Unresponsive
- ✓ Apneic
- ✓ Pulseless

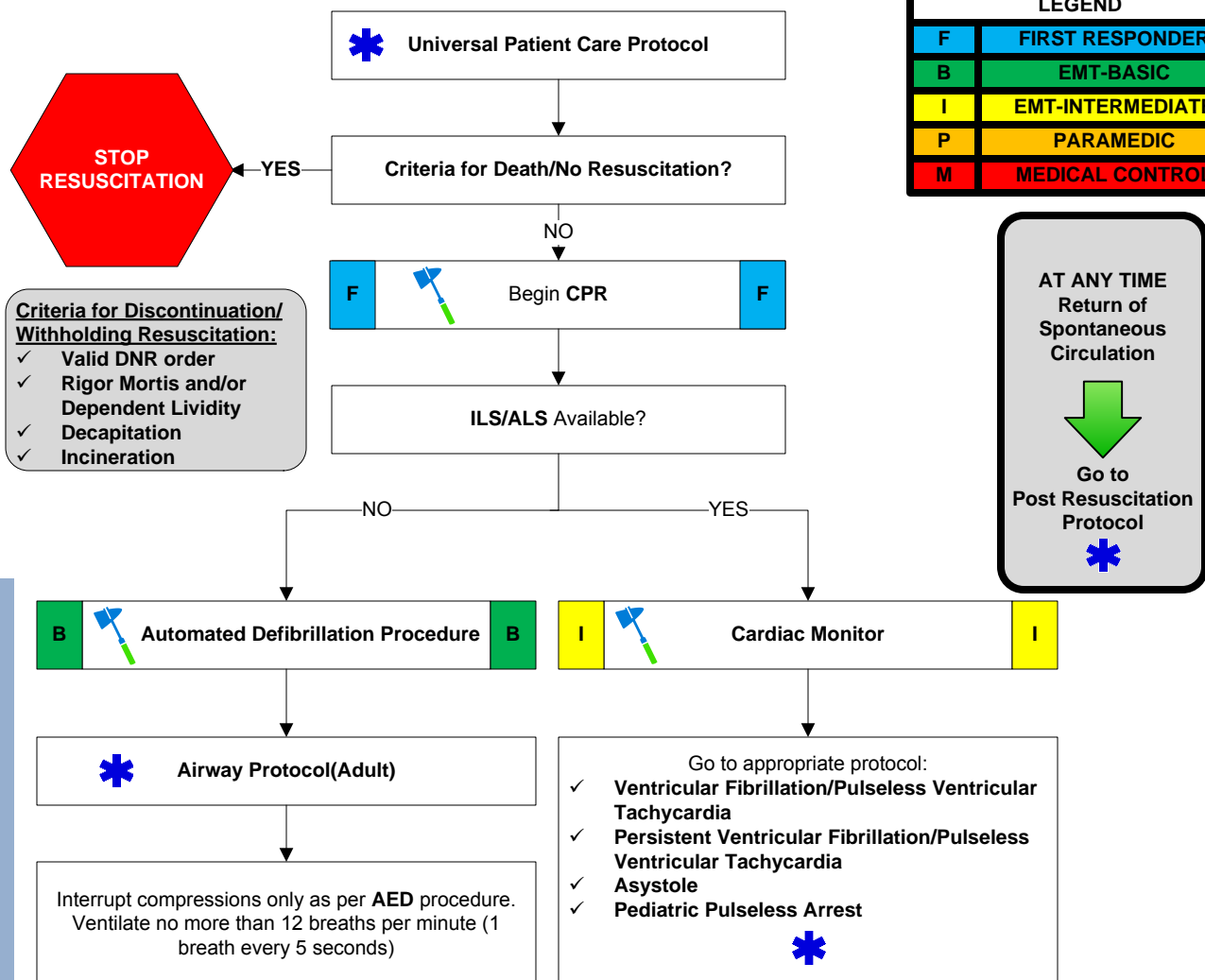
DIFFERENTIAL

- ✓ Medical v. Trauma
- ✓ Vfib v. Pulseless Vtach
- ✓ Asystole
- ✓ Pulseless Electrical Activity (PEA)

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

CARDIAC PROTOCOL # 3 - 04



PEARLS

- ✓ Recommended Exam: Mental Status
- ✓ Success is based on proper planning and execution. Procedures require space and patient access. Make room to work
- ✓ Reassess airway frequently and with every patient move
- ✓ Maternal arrest – Treat mother per appropriate protocol with immediate notification to Medical Control and rapid transport
- ✓ Adequate compressions with timely defibrillation are the keys to success

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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CHEST PAIN – CARDIAC AND STEMI CARDIAC PROTOCOL # 3 - 05

HISTORY

- ✓ Age ≥35 years
- ✓ Medications
- ✓ Viagra, Levitra, Cialis
- ✓ Past medical history (MI, Angina, Diabetes, post menopausal)
- ✓ Allergies (Aspirin, Morphine, Lidocaine)
- ✓ Recent physical exertion
- ✓ Palliation/Provocation
- ✓ Quality (crampy, sharp, dull, etc.)
- ✓ Region, Radiation, Referred
- ✓ Severity (1-10)
- ✓ Time (onset/duration/repetition)

SIGNS AND SYMPTOMS

- ✓ Chest pain (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 v. Medical
- ✓ Angina v. Myocardial Infarction
- ✓ Pericarditis
- ✓ Pulmonary embolism
- ✓ Asthma/COPD
- ✓ Pneumothorax
- ✓ Aortic dissection/Aneurysm
- ✓ GE reflux or Hiatal hernia
- ✓ Esophageal spasm
- ✓ Chest wall injury or pain
- ✓ Pleural pain
- ✓ Overdose (cocaine) or methamphetamine

Universal Patient Care Protocol

I	Cardiac Monitor	I
B	12 Lead EKG	B
I	IV Access Protocol	I
B	Aspirin 324 mg po	B
B	Nitroglycerin 0.4 mg SL* x 3 doses	B
I	Continued Pain: Morphine 2-6 mg or Fentanyl 25-100 mcg	I
I	Nausea and Vomiting: Consider Zofran 4 mg	I
I	Protocols as needed: Hypotension Pulmonary Edema	I

M	Contact Medical Control and Notify Destination	M
---	--	---

POSITIVE ACUTE MI
(STEMI ≥ 1 mm ST SEGMENT ELEVATION
IN 2 CONTIGUOUS LEADS)

LEGEND		
F	FIRST RESPONDER	
B	EMT-BASIC	
I	EMT-INTERMEDIATE	
P	PARAMEDIC	
M	MEDICAL CONTROL	

STEMI ALERT DESTINATION PROTOCOL With Early Notification KEEP SCENE TIME <15 MINUTES		
I	Consider Normal Saline Bolus for Inferior/ RV MI	I
I	Consider 2 nd IV en route	I

*EMT-B may administer Nitro SL when IV in place

PEARLS

- ✓ It is Trinity policy to withhold Nitroglycerin from patients <30 years old without a history of heart disease and SBP<180
- ✓ Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
- ✓ Avoid Nitroglycerin in any patient who has used Viagra or Levitra in the past 24 hours or Cialis in the past 36 hours due to potential for severe hypotension
- ✓ Patients with STEMI (ST- elevation Myocardial Infarction) should be taken to the appropriate destination based on EMS System STEMI Plan
- ✓ If patient has taken nitroglycerin without relief, consider potency of medication
- ✓ Monitor for hypotension after administration of Nitroglycerin and narcotics (Morphine, Fentanyl) AND administer only for SBP > 100
- ✓ Nitroglycerin and narcotics may be repeated per dosing guidelines in Formulary
- ✓ Diabetics and geriatric patients often have atypical pain, or only generalized complaints
- ✓ Document the time of the 12-Lead EKG in the PCR as a Procedure along with the interpretation

CARDIAC PROTOCOL # 3 - 05

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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HYPERTENSION CARDIAC PROTOCOL # 3 - 06

HISTORY

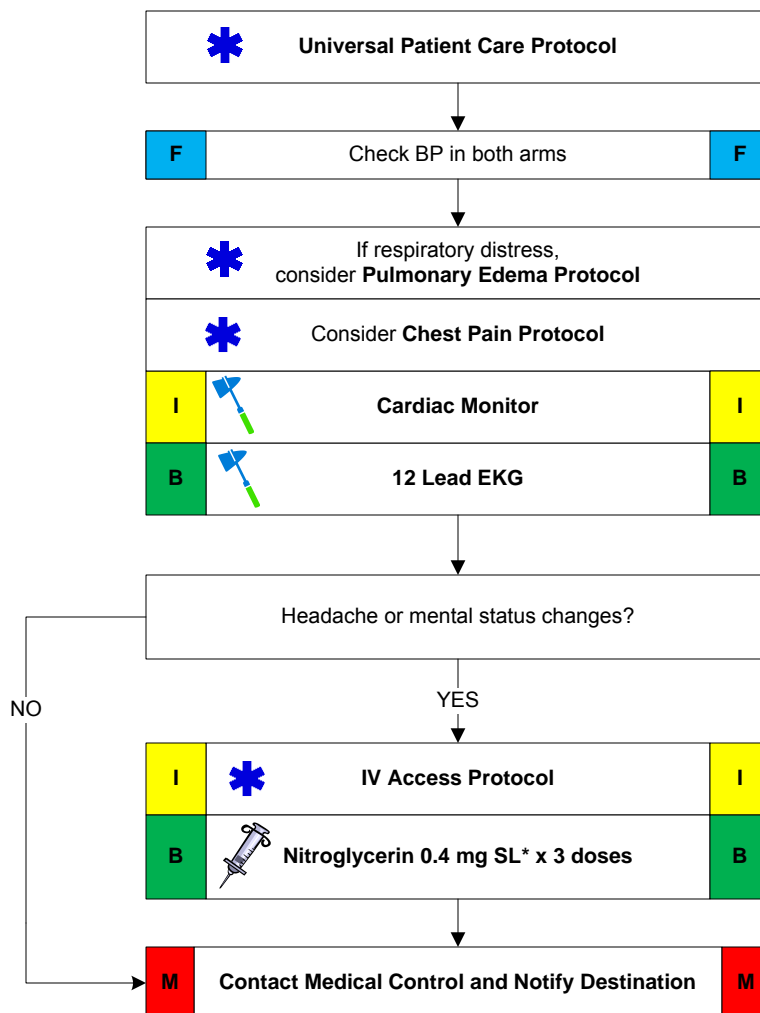
- ✓ Documented hypertension
- ✓ Related diseases: diabetes, CVA, renal failure, cardiac
- ✓ Medications (compliance?)
- ✓ Erectile dysfunction medication
- ✓ Pregnancy

SIGNS AND SYMPTOMS

- ✓ Systolic BP ≥ 200
- ✓ Diastolic BP ≥ 110
- AND AT LEAST **ONE OF THESE**
- ✓ Headache
- ✓ Nosebleed
- ✓ Blurred vision
- ✓ Dizziness

DIFFERENTIAL

- ✓ Hypertensive encephalopathy
- ✓ Primary CNS injury (Cushing's response = bradycardia with hypertension)
- ✓ Myocardial infarction
- ✓ Aortic dissection/Aneurysm
- ✓ Pre-eclampsia/Eclampsia



LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

CARDIAC PROTOCOL # 3 - 06

EMT-B may administer
nitroglycerin SL if IV
present*

Consider **ILS/ALS** intercept
early.

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
- ✓ Avoid Nitroglycerin in any patient who has used Viagra or Levitra in the past 24 hours or Cialis in the past 36 hours due to potential severe hypotension
- ✓ Never treat elevated blood pressure based on one set of vital signs
- ✓ Nitroglycerin may be given to lower blood pressure in patients who have an elevated diastolic BP of ≥ 110 and are symptomatic with chest pain, respiratory distress, syncope, headache, or mental status changes
- ✓ Symptomatic hypertension is typically revealed through end organ damage to the cardiac, CNS, or renal systems
- ✓ All symptomatic patients with hypertension should be transported with head elevated

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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HYPOTENSION CARDIAC PROTOCOL # 3 - 07

HISTORY

- ✓ Blood loss – vaginal or gastrointestinal bleeding, AAA, ectopic
- ✓ Fluid loss – vomiting, diarrhea, fever
- ✓ Infection
- ✓ Cardiac ischemia (MI, CHF)
- ✓ Medications
- ✓ Allergic reaction
- ✓ Pregnancy
- ✓ History of poor oral intake

SIGNS AND SYMPTOMS

- ✓ Restlessness, confusion
- ✓ Weak, rapid, pulse
- ✓ Pale, cool, clammy skin
- ✓ Delayed capillary refill
- ✓ Hypotension
- ✓ Coffee-ground emesis
- ✓ Tarry stools

DIFFERENTIAL

- ✓ Shock
 - Hypovolemic
 - Cardiogenic
 - Septic
 - Neurogenic
 - Anaphylactic
- ✓ Ectopic pregnancy
- ✓ Dysrhythmias
- ✓ Pulmonary embolus
- ✓ Tension pneumothorax
- ✓ Medication effect/overdose
- ✓ Vasovagal
- ✓ Physiologic (pregnancy)

CARDIAC PROTOCOL # 3 - 07



Universal Patient Care Protocol

I



IV Access Protocol

I

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

TRAUMA

NON-CARDIAC
NON-TRAUMA

CARDIAC



Treatment per appropriate **Trauma Protocol**

I



Normal Saline Bolus
May repeat x 2

I

M

Contact Medical Control and Notify Destination

M

P



Consider **Dopamine 2 - 20 mcg/kg/min** for SBP >90

P



Treatment per appropriate **Cardiac Protocol**

I



No rales present,
Normal Saline Bolus
May repeat x 2

I

M

Contact Medical Control and Notify Destination

M

P



Consider **Dopamine 2 - 20 mcg/kg/min** for SBP >90

P

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Heart, Lungs, Abdomen, Back, Extremities, Neuro
- ✓ Hypotension can be defined as a **systolic blood pressure of less than 90**
- ✓ Consider performing orthostatic vital signs on patients in non-trauma situations if suspected blood or fluid loss
- ✓ Consider all possible causes of shock and treat per appropriate protocol
- ✓ For non-cardiac, non-trauma hypotension, Dopamine should only be started after 2 liters of NS have been given

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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INDUCED HYPOTHERMIA CARDIAC PROTOCOL # 3 - 08

HISTORY

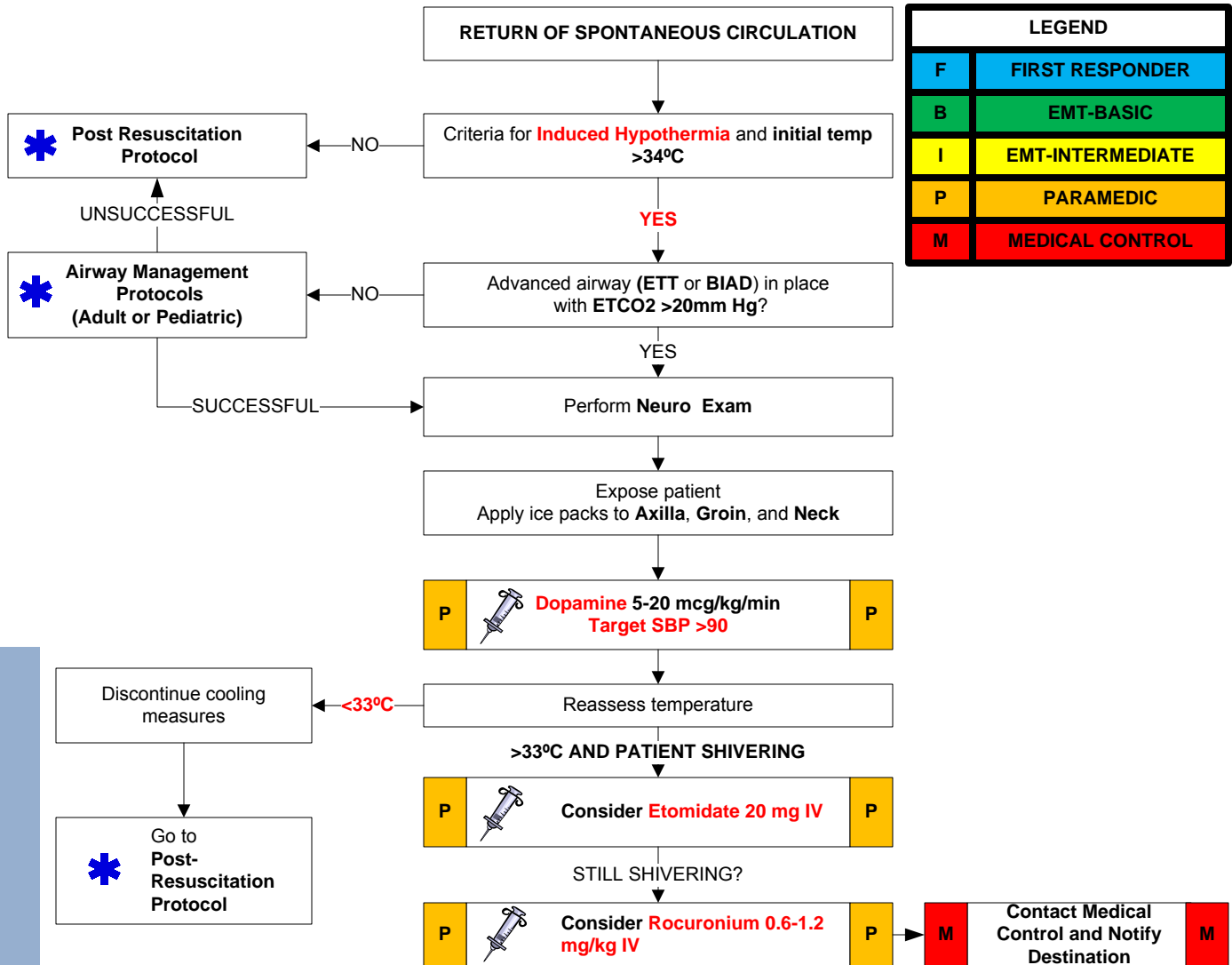
- ✓ Non-traumatic cardiac arrests
- ✓ Drownings, hangings, and asphyxiation are permissible for this protocol

SIGNS AND SYMPTOMS

- ✓ Cardiac arrest
- ✓ Return of spontaneous circulation post cardiac-arrest

DIFFERENTIAL

- ✓ Continue to address specific differentials associated with the original dysrhythmia



PEARLS

- ✓ Criteria for **Induced Hypothermia**:
 - Age **≥18 years**
 - Arrest related to trauma, hemorrhage, drug overdose, stroke, or seizures are excluded
 - Temperature after ROSC greater than 34°C
 - Advanced airway in place with no purposeful response to pain, no eye opening or GCS <9
- ✓ If no advanced airway can be obtained, cooling may only be initiated on order from Medical Control
- ✓ Take care to protect patient modesty. Undergarments may remain in place during cooling
- ✓ Do not delay transport to cool
- ✓ Frequently monitor airway, especially after each patient move
- ✓ Patients may develop metabolic alkalosis with cooling. Do not hyperventilate

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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POST-RESUSCITATION CARDIAC PROTOCOL # 3 - 09

HISTORY

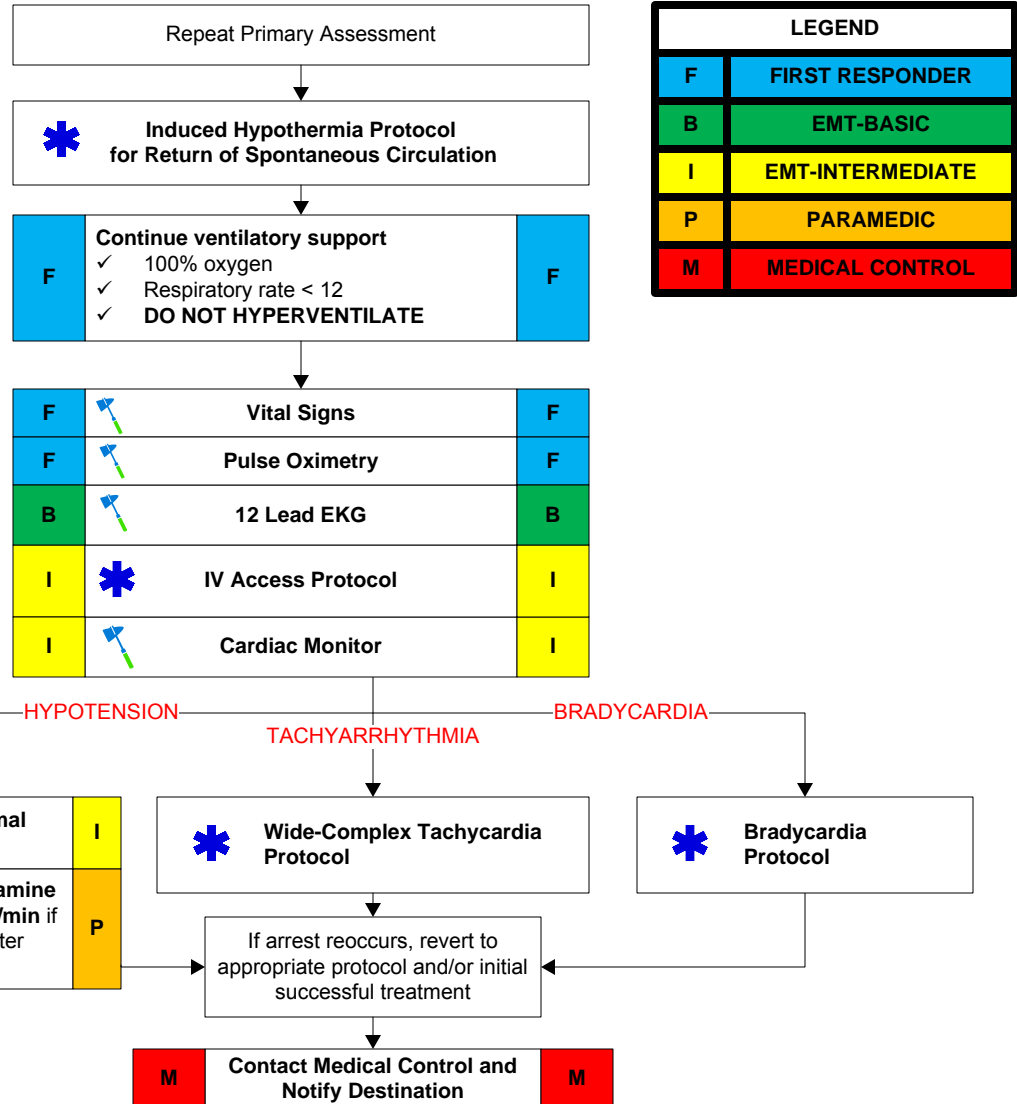
- ✓ Respiratory Arrest
- ✓ Cardiac Arrest

SIGNS/SYMPTOMS

- ✓ Return of Spontaneous Circulation(ROSC)

DIFFERENTIAL

- ✓ Continue to address specific differentials associated with the original dysrhythmia



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

CARDIAC PROTOCOL # 3 - 09

PEARLS

- ✓ Recommended Exam: Mental Status, Neck, Skin, Lungs, Heart, Abdomen, Extremities, Neuro
- ✓ If available, consider 1 L bolus infusion of chilled Normal Saline*
- ✓ Hyperventilation is a significant cause of hypotension and recurrence of cardiac arrest in the post resuscitation phase and must be avoided at all costs
- ✓ Most patients immediately post resuscitation will require ventilatory assistance
- ✓ The condition of post-resuscitation patients fluctuates rapidly and continuously; they require close monitoring
- ✓ Appropriate post-resuscitation management may best be planned in consultation with medical control
- ✓ Common causes of post-resuscitation hypotension include hyperventilation, hypovolemia, pneumothorax, and medication reaction to ACLS drugs
- ✓ Titrate Dopamine to maintain SBP>90. Ensure adequate fluid resuscitation is ongoing

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PULSELESS ELECTRICAL ACTIVITY CARDIAC PROTOCOL # 3 - 10

HISTORY

- ✓ Past medical history
- ✓ Medications
- ✓ Events leading to arrest
- ✓ End stage renal disease
- ✓ Estimated downtime
- ✓ Suspected hypothermia
- ✓ Suspected overdose
- ✓ DNR Form

SIGNS AND SYMPTOMS





- ✓ Pulseless
- ✓ Apneic
- ✓ Electrical activity on the EKG
- ✓ No heart tones on auscultation


DIFFERENTIAL

- ✓ Hypovolemia (Trauma, AAA, other)
- ✓ Cardiac tamponade
- ✓ Hypothermia
- ✓ Drug overdose
- ✓ Massive myocardial infarction
- ✓ Hypoxia
- ✓ Tension pneumothorax
- ✓ Pulmonary embolus
- ✓ Acidosis
- ✓ Hyperkalemia



CARDIAC PROTOCOL # 3 - 10

Cardiac Arrest Protocol

F		CPR	F
I		Cardiac monitor	I
I		Airway Protocol	I
I		IV Access Protocol	I

I		Epinephrine 1 mg IV/IO Repeat every 3-5 minutes	I
---	---	--	---

Consider early in all PEA patients:

I		<ul style="list-style-type: none"> ✓ Normal Saline Bolus ✓ D50 IV/IO ✓ Narcan 2mg IV/IO ✓ Glucagon 1 mg IV/IO (Beta Blocker overdose) 	I
P		<ul style="list-style-type: none"> ✓ Calcium (hyperkalemia) ✓ Bicarbonate (tricyclic overdose, hyperkalemia) ✓ Dopamine 2 - 20 mcg/kg/min IV ✓ Chest Decompression(Needle) 	P

Criteria for Discontinuation?

YES

**Stop
Resuscitation**

NO

M	Contact Medical Control and Notify Destination	M
---	---	---

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

Criteria for Discontinuation/ Withholding Resuscitation:

- ✓ Valid DNR order
- ✓ Rigor Mortis and/or Dependent Lividity
- ✓ Decapitation
- ✓ Incineration

AT ANY TIME

**RETURN OF
SPONTANEOUS
CIRCULATION**



**GO TO POST-
RESUSCITATION
PROTOCOL**



PEARLS

- ✓ Recommended Exam: Mental Status
- ✓ Consider each possible cause listed in the differential. Survival is based on identifying and correcting the cause!
- ✓ Discussion with Medical Control can be a valuable tool in developing a differential diagnosis and identifying possible treatment options: consider 5 H's and 5 T's

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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SUSPECTED STROKE CARDIAC PROTOCOL # 3 - 11

HISTORY

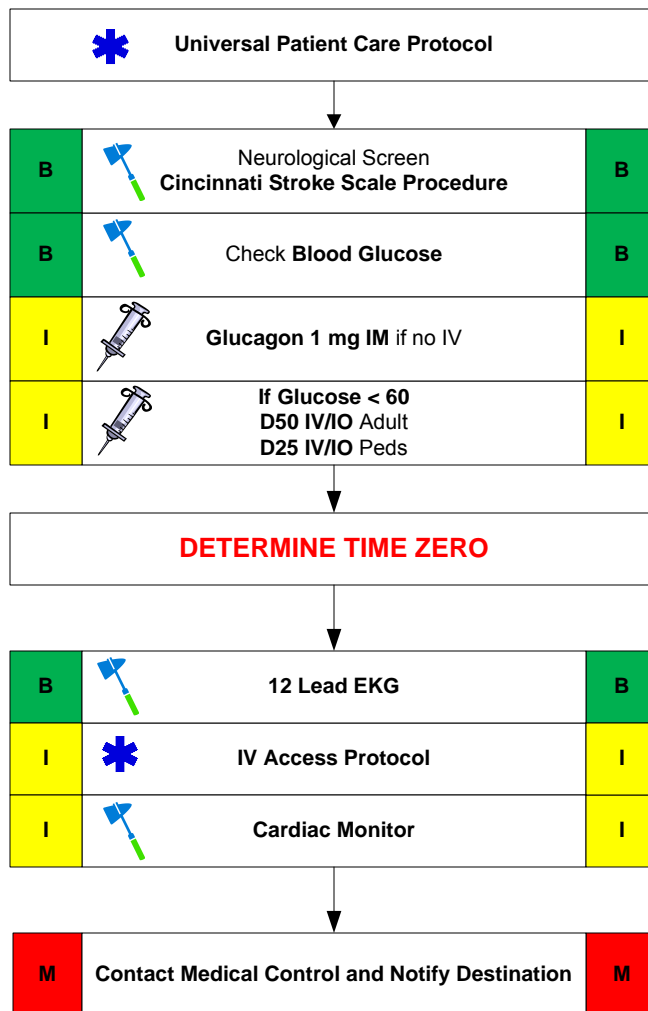
- ✓ Known cardiovascular history
- ✓ Medications
- ✓ History of trauma
- ✓ Change in condition

SIGNS AND SYMPTOMS

- ✓ Decreased mental status or lethargy
- ✓ Change in baseline mental status
- ✓ Bizarre behavior
- ✓ Hemiparesis, hemiplegia
- ✓ Facial droop
- ✓ Slurred speech
- ✓ Confusion
- ✓ Aphasia

DIFFERENTIAL

- ✓ Head trauma
- ✓ CNS (stroke, tumor, seizure, infection)
- ✓ Cardiac (MI, CHF)
- ✓ Diabetes (hypo/hyperglycemia)
- ✓ Toxicological or Ingestion
- ✓ Acidosis/Alkalosis
- ✓ Environmental Exposure
- ✓ Electrolyte Abnormality
- ✓ Mental Health disorder



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

CARDIAC PROTOCOL # 3 - 11

PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Skin, Heart, Lungs, Neuro, Extremities
- ✓ It is vital to determine Time Zero, the time the patient was last known to be neurologically normal
- ✓ Bring a family member or witness to confirm Time Zero
- ✓ **Checking the glucose level is crucial**

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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SUPRAVENTRICULAR TACHYCARDIA CARDIAC PROTOCOL # 3 - 12

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

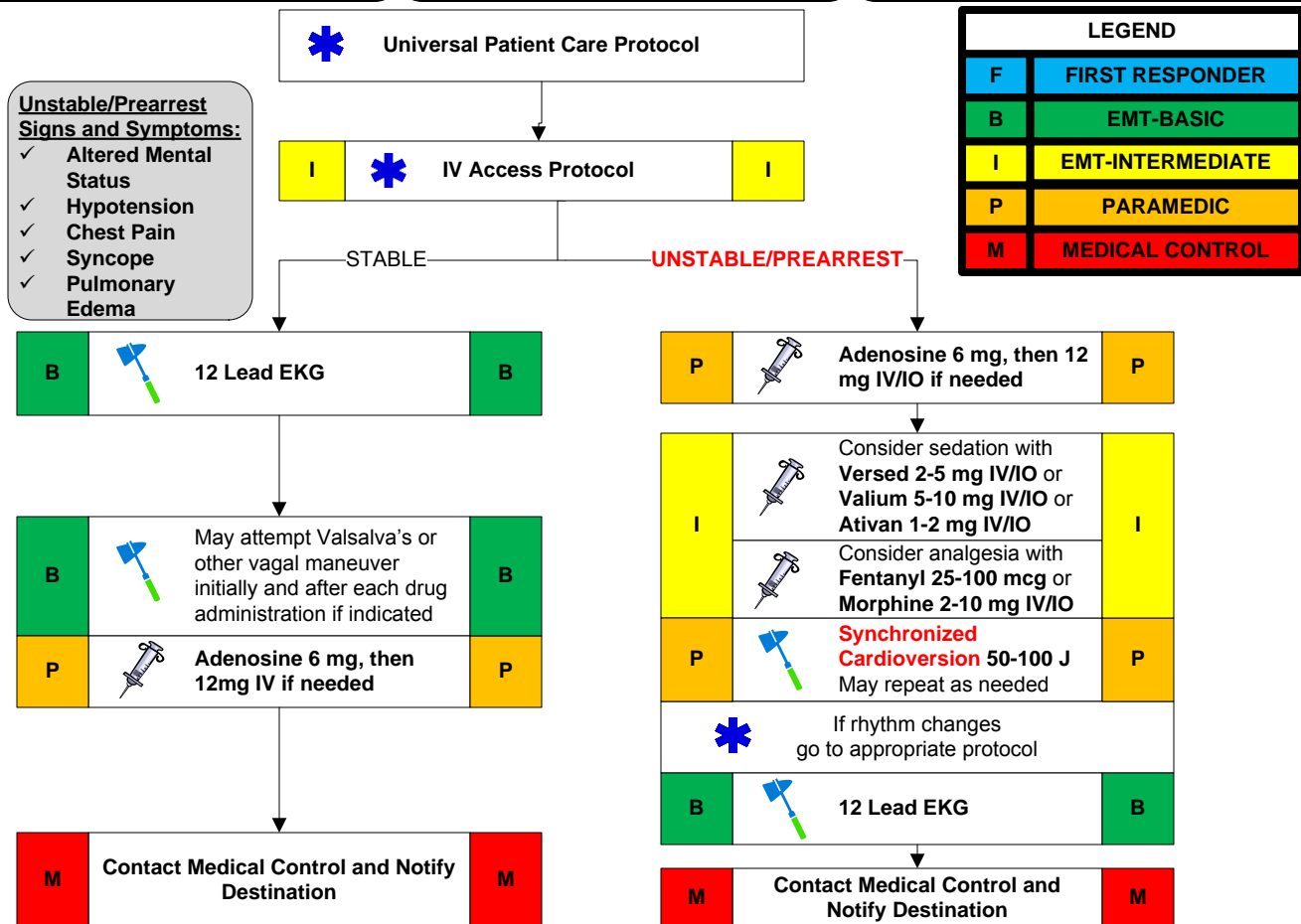
SIGNS AND SYMPTOMS

- ✓ HR >150/min
- ✓ QRS < .12 sec (if QRS > .12 sec, go to Wide-Complex Tachycardia protocol)
- ✓ If history of WPW, go to Wide-Complex Tachycardia protocol
- ✓ Dizziness, CP, SOB
- ✓ Potential presenting rhythm - Atrial/Sinus tachycardia
Atrial fibrillation/flutter
Multifocal atrial 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 History)
- ✓ Hyperthyroidism
- ✓ Pulmonary Embolus

CARDIAC PROTOCOL # 3 - 12



PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
- ✓ If patient has history of or if 12 Lead EKG reveals Wolfe-Parkinson-White (WPW), DO NOT administer a calcium channel blocker (e.g., Diltiazem) or Beta Blockers
- ✓ Adenosine may not be effective in identifying atrial flutter/fibrillation, yet is not harmful
- ✓ 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

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SYNCOPE CARDIAC PROTOCOL # 3 - 13

HISTORY

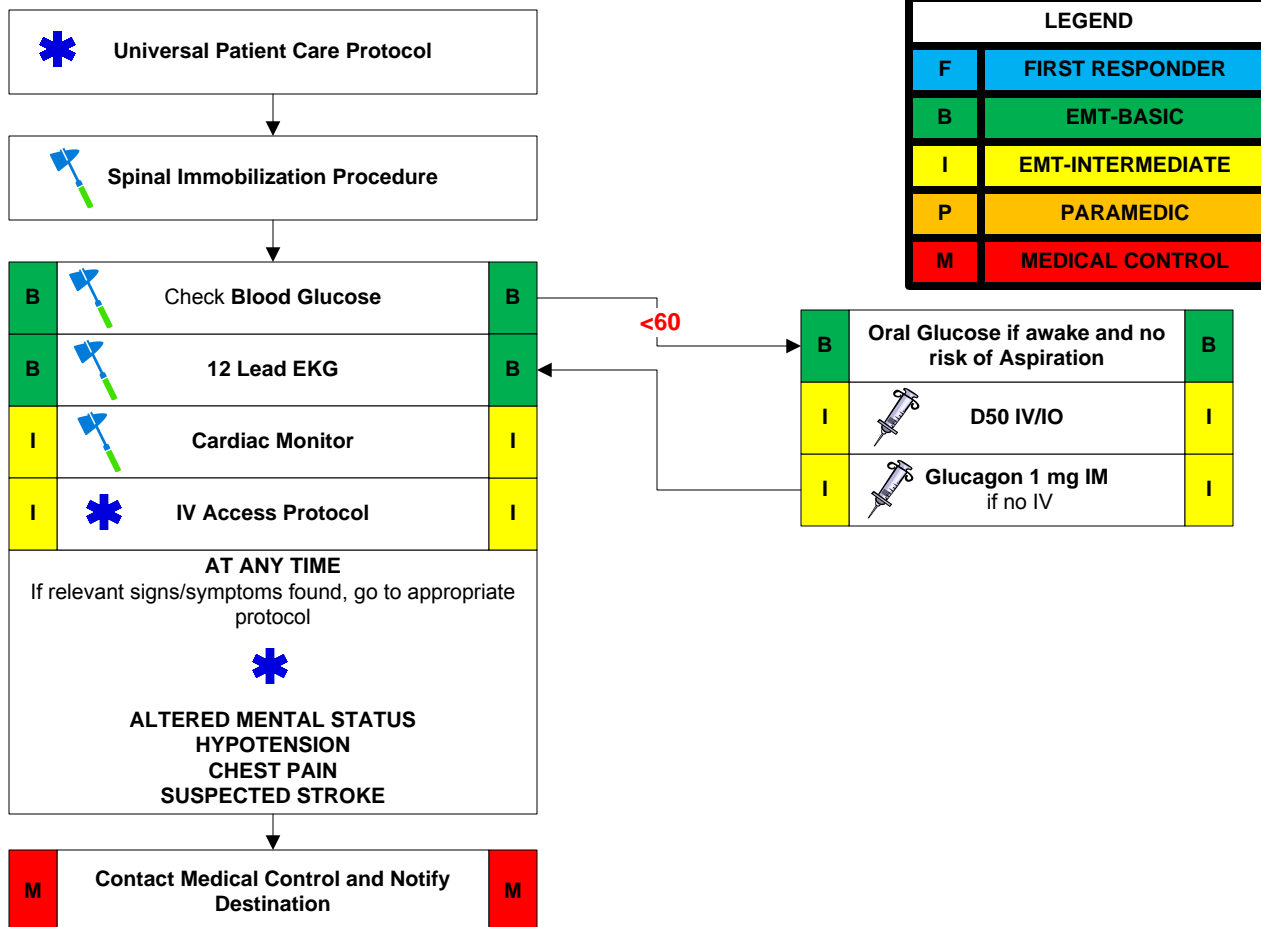
- ✓ Cardiac history, stroke, seizure
- ✓ Occult blood loss (GI, ectopic)
- ✓ Females: LMP, vaginal bleeding
- ✓ Fluid loss: nausea, vomiting, diarrhea
- ✓ Past medical history
- ✓ Medications

SIGNS AND SYMPTOMS

- ✓ Loss of consciousness with recovery
- ✓ Lightheadedness, dizziness
- ✓ Palpitations, slow or rapid pulse
- ✓ Pulse irregularity
- ✓ Decreased pulse pressure

DIFFERENTIAL

- ✓ Vasovagal
- ✓ Orthostatic hypotension
- ✓ Cardiac syncope
- ✓ Micturition/Defecation
- ✓ Syncope
- ✓ Psychiatric
- ✓ Stroke
- ✓ Hypoglycemia
- ✓ Seizure
- ✓ Shock
- ✓ Toxicological (Alcohol)
- ✓ Medication effect (hypertension)



PEARLS

- ✓ Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Abdomen, Back, Extremities, Neuro
- ✓ Assess for signs and symptoms of trauma if associated or questionable fall with syncope
- ✓ Consider dysrhythmias, GI bleed, ectopic pregnancy, and seizure as possible causes of syncope
- ✓ These patients should be transported
- ✓ More than 25% of geriatric syncope is cardiac dysrhythmia based

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VENTRICULAR FIBRILLATION/ PULSELESS VENTRICULAR TACHYCARDIA CARDIAC PROTOCOL # 3 - 14

HISTORY

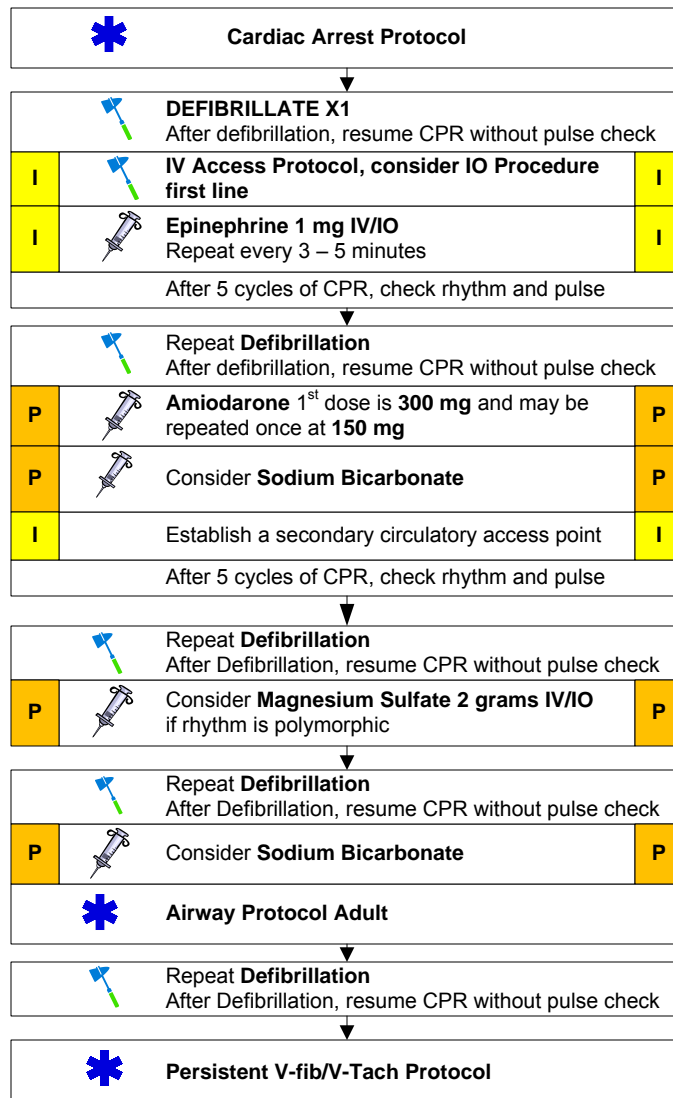
- ✓ Estimated down time
- ✓ Past medical history
- ✓ Medications
- ✓ Events leading to arrest
- ✓ Renal failure/dialysis
- ✓ DNR or living will

SIGNS AND SYMPTOMS

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

DIFFERENTIAL

- ✓ Asystole
- ✓ Artifact/Device failure
- ✓ Cardiac
- ✓ Endocrine/Metabolic
- ✓ Drugs
- ✓ Pulmonary



LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

AT ANY TIME
Rhythm Changes
to
Non-shockable
Rhythm



GO TO
APPROPRIATE
PROTOCOL

AT ANY TIME
**Return of
Spontaneous
Circulation**



GO TO
APPROPRIATE
PROTOCOL

PEARLS

- ✓ Recommended Exam: Mental Status
- ✓ Reassess and document endotracheal tube placement and ETCO₂ frequently, after every move, and at transfer of care
- ✓ Calcium chloride and sodium bicarbonate if hyperkalemia is suspected (renal failure, dialysis)
- ✓ Treatment priorities: uninterrupted compressions, defibrillation, then IV access and airway control
- ✓ Polymorphic ventricular tachycardia (Torsades de Pointes) may benefit from administration of Magnesium Sulfate
- ✓ Do not stop CPR to check for placement of ET tube or to give medications
- ✓ If arrest not witnessed by EMS, then 5 cycles of CPR prior to first defibrillation
- ✓ Effective CPR and prompt defibrillation are the keys to successful resuscitation
- ✓ If BVM is ventilating the patient successfully, intubation should be deferred until rhythm change or 4 or 5 defibrillation sequences completed

CARDIAC PROTOCOL # 3 - 14

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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V-FIB/PULSELESS V-TACH (PERSISTENT) CARDIAC PROTOCOL # 3 - 15

HISTORY

- ✓ Verified execution of resuscitation checklist

SIGNS AND SYMPTOMS

- ✓ Unresponsive, pulseless
- ✓ Persisted in ventricular fibrillation/tachycardia or returned to this rhythm post ROSC/other rhythm changes

DIFFERENTIAL

- ✓ Artifact/Device failure
- ✓ Cardiac
- ✓ Endocrine/Metabolic/Drugs
- ✓ Pulmonary



V-fib/V-tach Protocol complete and V-fib/V-tach still present?

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

CARDIAC PROTOCOL # 3 - 15

AT ANY TIME
Rhythm changes to non-shockable rhythm



GO TO APPROPRIATE PROTOCOL

AT ANY TIME
Return of Spontaneous Circulation



GO TO POST RESUSCITATION PROTOCOL

NO

YES

P	Lidocaine 1-1.5 mg/kg IV/IO	P
Apply new defib pads or new site		
After 5 cycles of CPR, check rhythm and pulse		
Repeat Defibrillation Pause 5 secs max to check rhythm/pulse, resume CPR		

Did VF/VT break?

P	Lidocaine 0.5-0.75 mg/kg IV/IO	P
After 5 cycles of CPR, check rhythm and pulse		
Repeat Defibrillation Pause 5 secs max to check rhythm/pulse, resume CPR		
Max dose of Lidocaine reached?		

YES

M	Contact Medical Control and Notify Destination	M
---	---	---

PEARLS

- ✓ Recurrent ventricular fibrillation/tachycardia is successfully broken by standard defibrillation techniques, but subsequently returns. It is managed by ongoing treatment of correctable causes and use of anti-arrhythmic medication therapies
- ✓ Refractory ventricular fibrillation/tachycardia is an arrhythmia not responsive to standard external defibrillation techniques. It is initially managed by treating correctable causes and antiarrhythmic medications.
- ✓ Prolonged cardiac arrests may lead to tired providers and decreased compression quality. Ensure compression rotation, summon additional resources as needed, and ensure provider rest and rehab during and post-event
- ✓ If available, automated CPR devices are encouraged for prolonged cardiac arrests

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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WIDE-COMPLEX TACHYCARDIA CARDIAC PROTOCOL # 3 - 16

HISTORY

- ✓ Past medical history/medications, diet, drugs
- ✓ Syncope/near syncope
- ✓ CHF
- ✓ Palpitations
- ✓ Pacemaker
- ✓ Allergies: Lidocaine/Novocain

SIGNS AND SYMPTOMS

- ✓ Ventricular tachycardia on EKG (runs or sustained)
- ✓ Conscious with rapid pulse
- ✓ Chest pain, shortness of breath
- ✓ Dizziness
- ✓ Rate usually 150 – 180 bpm for sustained v-tach
- ✓ QRS > .12 sec

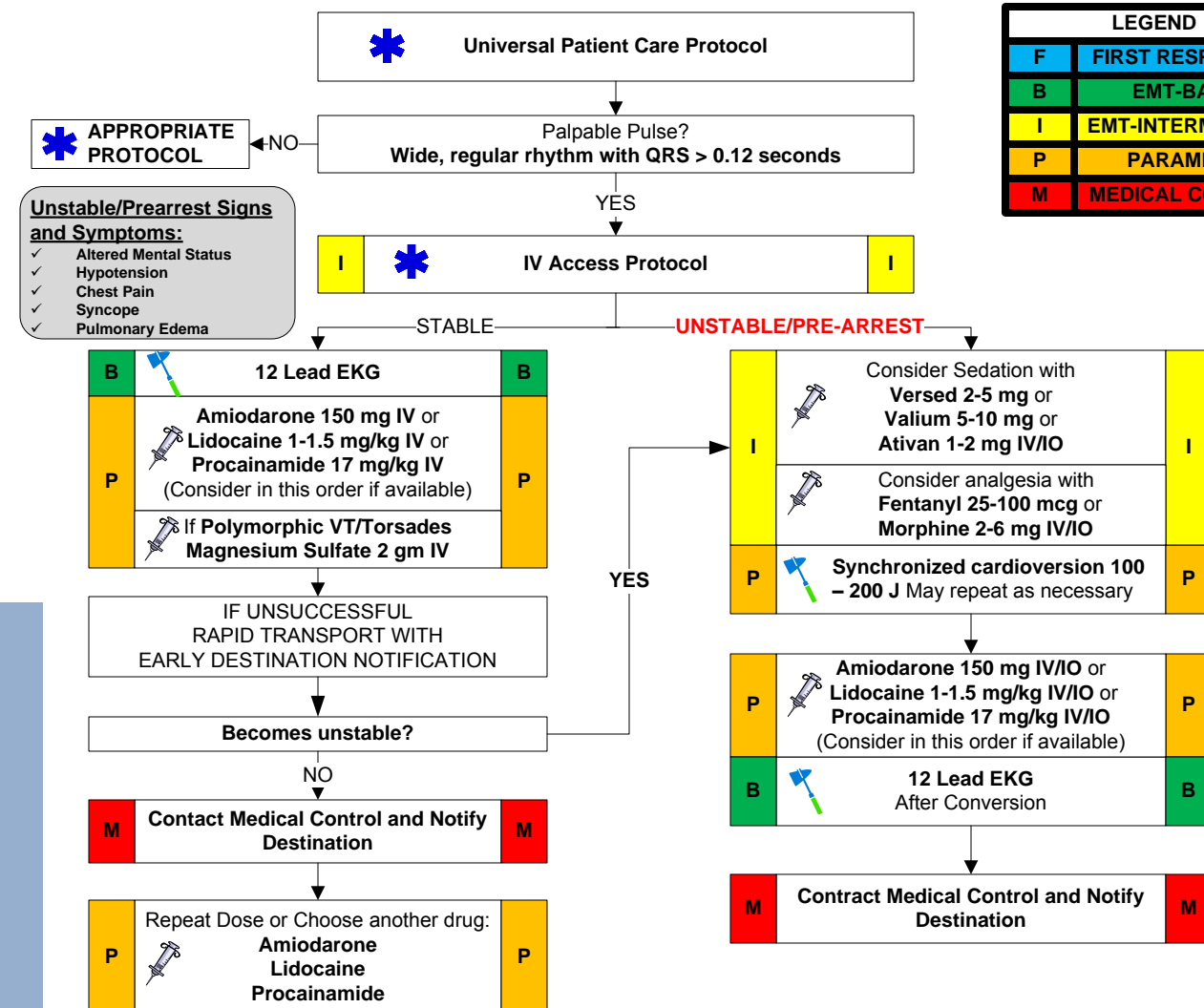
DIFFERENTIAL

- ✓ Artifact/device failure
- ✓ Cardiac
- ✓ Endocrine/Metabolic
- ✓ Drugs
- ✓ Pulmonary

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

CARDIAC PROTOCOL # 3 - 16



PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
- ✓ For witnessed/monitored ventricular tachycardia, try having the patient cough
- ✓ Polymorphic V-tach(Torsades de Pointes) may benefit from the administration of Magnesium Sulfate if available
- ✓ If presumed hyperkalemia (end stage renal disease, dialysis, etc.) administer sodium bicarbonate
- ✓ Procainamide is no longer second line agent and should not be given if there is history of CHF

Pediatric and OB Protocols

Childbirth/Labor	Protocol 4-01
Newly Born	Protocol 4-02
Obstetrical Emergency	Protocol 4-03
Pediatric Bradycardia	Protocol 4-04
Pediatric Head Trauma	Protocol 4-05
Pediatric Hypotension	Protocol 4-06
Pediatric Multiple Trauma	Protocol 4-07
Pediatric Pulseless Arrest	Protocol 4-08
Pediatric Respiratory Distress	Protocol 4-09
Pediatric Seizure	Protocol 4-10
Pediatric Supraventricular Tachycardia	Protocol 4-11
Pediatric Sepsis / Sepsis Alert	Protocol 4-12

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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CHILDBIRTH/LABOR OB/PEDIATRIC PROTOCOL # 4 - 01

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
- ✓ Gravida/Para status
- ✓ High risk pregnancy
- ✓ Name of OB physician

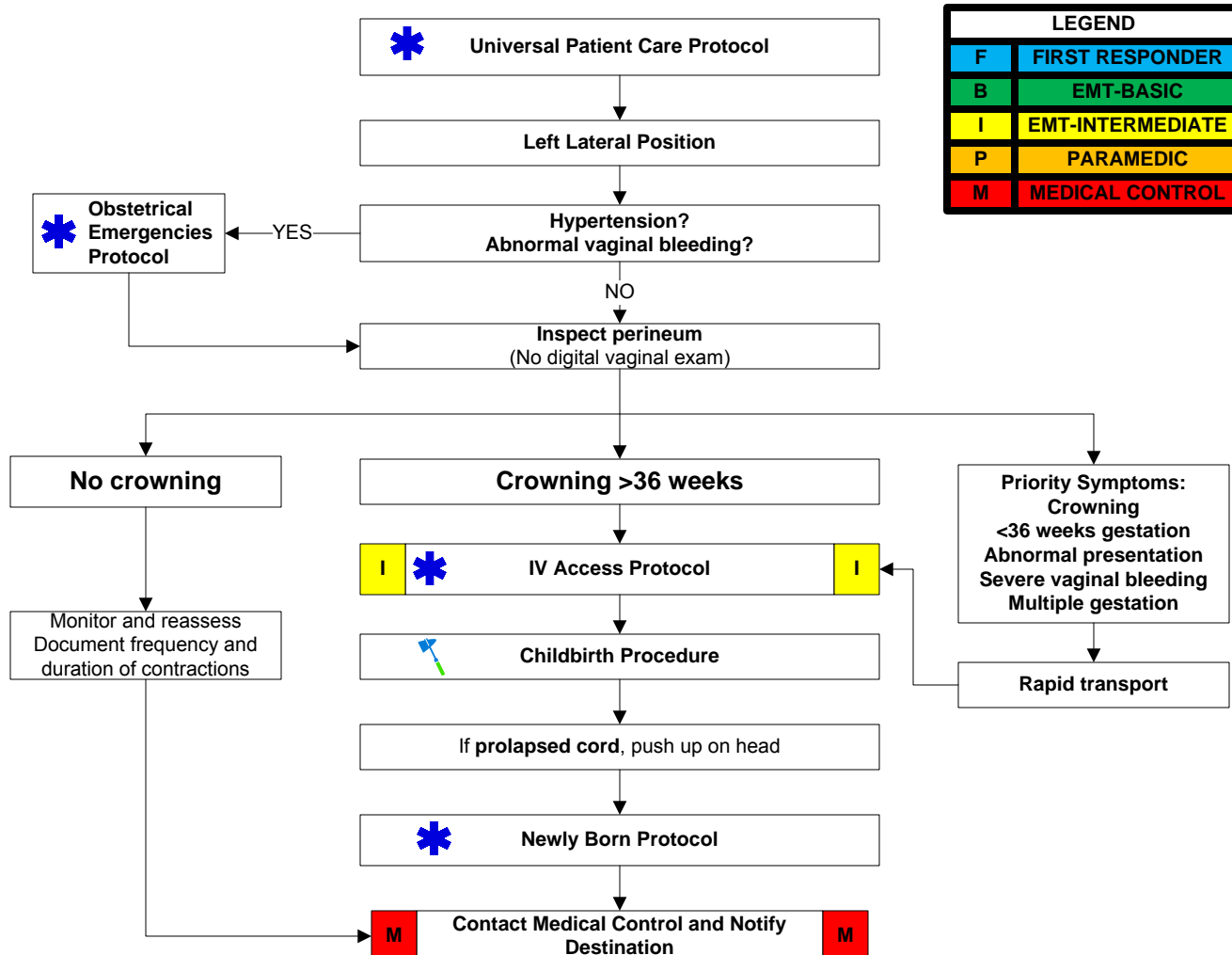
SIGNS AND SYMPTOMS

- ✓ Crampy pain
- ✓ Vaginal discharge or bleeding
- ✓ Leakage of fluid
- ✓ Crowning or urge to push
- ✓ Meconium

DIFFERENTIAL

- ✓ Abnormal presentation
 - Buttock
 - Foot
 - Hand
- ✓ Prolapsed cord
- ✓ Placenta Previa
- ✓ Abruptio placenta

OB/PEDIATRIC PROTOCOL # 4 - 01



PEARLS

- ✓ Recommended Exam (of Mother): Mental Status, Heart, Lungs, Abdomen, Neuro
- ✓ Document all times (delivery, contraction frequency and length, delivery of placenta)
- ✓ If maternal seizures occur, refer to the Obstetrical Emergencies Protocol
- ✓ 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 is abnormal
- ✓ Record APGAR at 1 minute and 5 minutes after birth

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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NEWLY BORN OB/PEDIATRIC PROTOCOL # 4 - 02

HISTORY

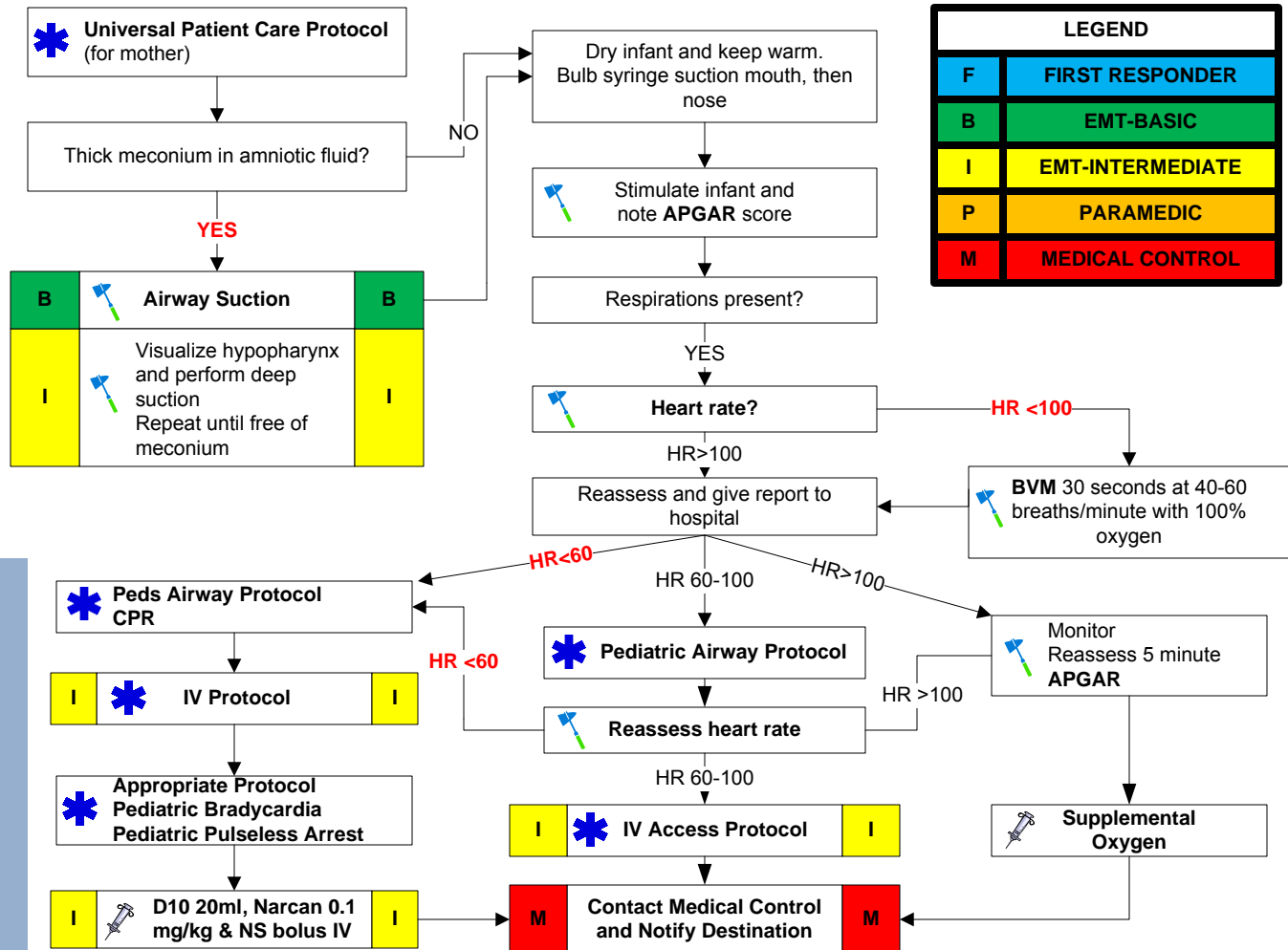
- ✓ Due date and gestational age
- ✓ Multiple gestation (twins, etc.)
- ✓ Difficult delivery
- ✓ Congenital disease
- ✓ Medications (maternal)
- ✓ Maternal risk factors
 - substance abuse
 - smoking

SIGNS AND SYMPTOMS

- ✓ Respiratory distress
- ✓ Peripheral cyanosis or mottling (normal)
- ✓ Central cyanosis (abnormal)
- ✓ Altered level of responsiveness
- ✓ Bradycardia

DIFFERENTIAL

- ✓ Airway failure
 - Secretions
 - Respiratory drive
- ✓ Infection
- ✓ Maternal medication effect
- ✓ Hypovolemia
- ✓ Hypoglycemia
- ✓ Congenital heart disease
- ✓ Hypothermia



OB/PEDIATRIC PROTOCOL # 4 - 02

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, HEENT, Neck, Chest, Heart, Abdomen, Extremities, Neuro
- ✓ CPR in infants is 120 compressions/minute with a 3:1 compression to ventilation ratio
- ✓ It is extremely important to keep infant warm
- ✓ Maternal sedation or narcotics will sedate infant (NARCAN EFFECTIVE BUT MAY PRECIPITATE SEIZURES)
- ✓ Consider hypoglycemia in infant
- ✓ Document APGAR score at 1 minute and 5 minute
- ✓ D10 = D50 diluted (1 ml of D50 with 4 ml of Normal Saline)

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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OBSTETRICAL EMERGENCY OB/PEDIATRIC PROTOCOL # 4 - 03

HISTORY

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

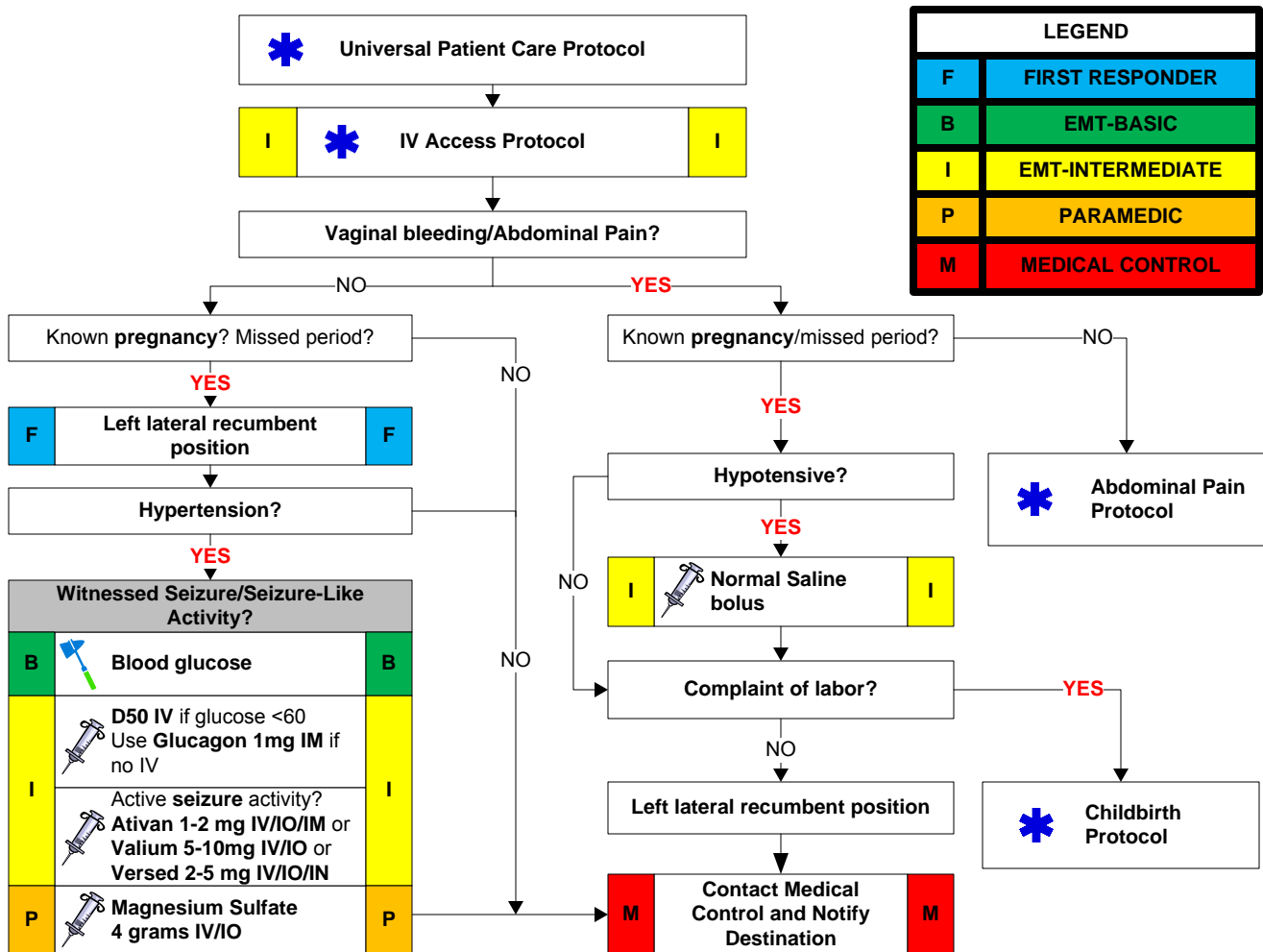
SIGNS AND SYMPTOMS

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

DIFFERENTIAL

- ✓ Preeclampsia/Eclampsia
- ✓ Placenta previa
- ✓ Placenta abruptio
- ✓ Spontaneous abortion

OB/PEDIATRIC PROTOCOL # 4 - 03



PEARLS

- ✓ Recommended Exam: Mental Status Abdomen, Heart, Lungs, Neuro
- ✓ Severe headache, vision changes, or RUQ pain may indicate preeclampsia
- ✓ In the setting of pregnancy, hypertension is defined as BP >140 systolic or > 90 diastolic, or a relative increase of 30 systolic and 20 diastolic from the patient's normal (pre-pregnancy) blood pressure
- ✓ Maintain patient in left lateral recumbent position to minimize risk of supine hypotensive syndrome
- ✓ Ask patient to quantify bleeding – number of pads used per hour
- ✓ Any pregnant patient involved in an MVC should be seen immediately by a physician for evaluation and fetal monitoring
- ✓ Remember that pregnant patients who are immobilized should be tilted in order to minimize risk of supine hypotensive syndrome
- ✓ Magnesium may cause hypotension and decreased respiratory drive. Use with caution

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC BRADYCARDIA OB/PEDIATRIC PROTOCOL # 4 - 04

HISTORY

- ✓ Past medical history
- ✓ Foreign body exposure
- ✓ Respiratory distress or arrest
- ✓ Possible toxin or poison exposure
- ✓ Congenital disease
- ✓ Medication (maternal or pediatric)

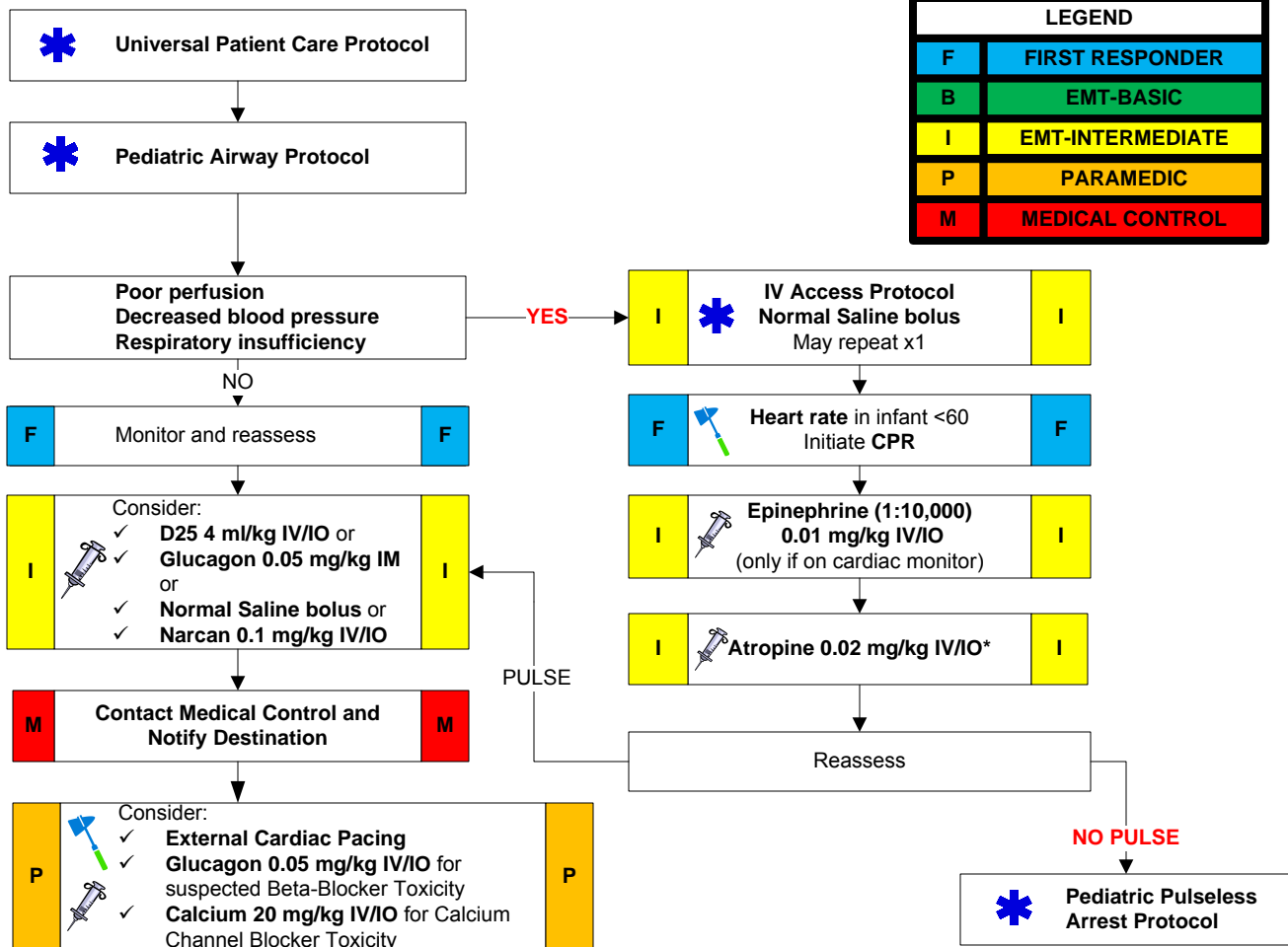
SIGNS AND SYMPTOMS

- ✓ 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, epiglottitis)
- ✓ Hypovolemia (dehydration)
- ✓ Congenital heart disease
- ✓ Tension pneumothorax
- ✓ Hypothermia
- ✓ Toxin or medication
- ✓ Hypoglycemia

OB/PEDIATRIC PROTOCOL # 4 - 04



PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Skin, Heart, Lungs, Abdomen, Back, Extremities, Neuro
- ✓ Use Broselow-Luten Tape for drug dosages
- ✓ Infant = < 1 year of age
- ✓ The majority of pediatric arrests are due to airway problems. Effective BVM is more effective than intubation
- ✓ Most maternal medications pass through breast milk to the infant
- ✓ Hypoglycemia, severe dehydration and narcotic effects may produce bradycardia
- ✓ Pediatric patients requiring external transcutaneous pacing require the use of pads appropriate for pediatric patients per the manufacturer's guidelines
- ✓ Minimum Atropine dose is 0.1 mg IV*

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC HEAD TRAUMA OB/PEDIATRIC PROTOCOL # 4 - 05

HISTORY

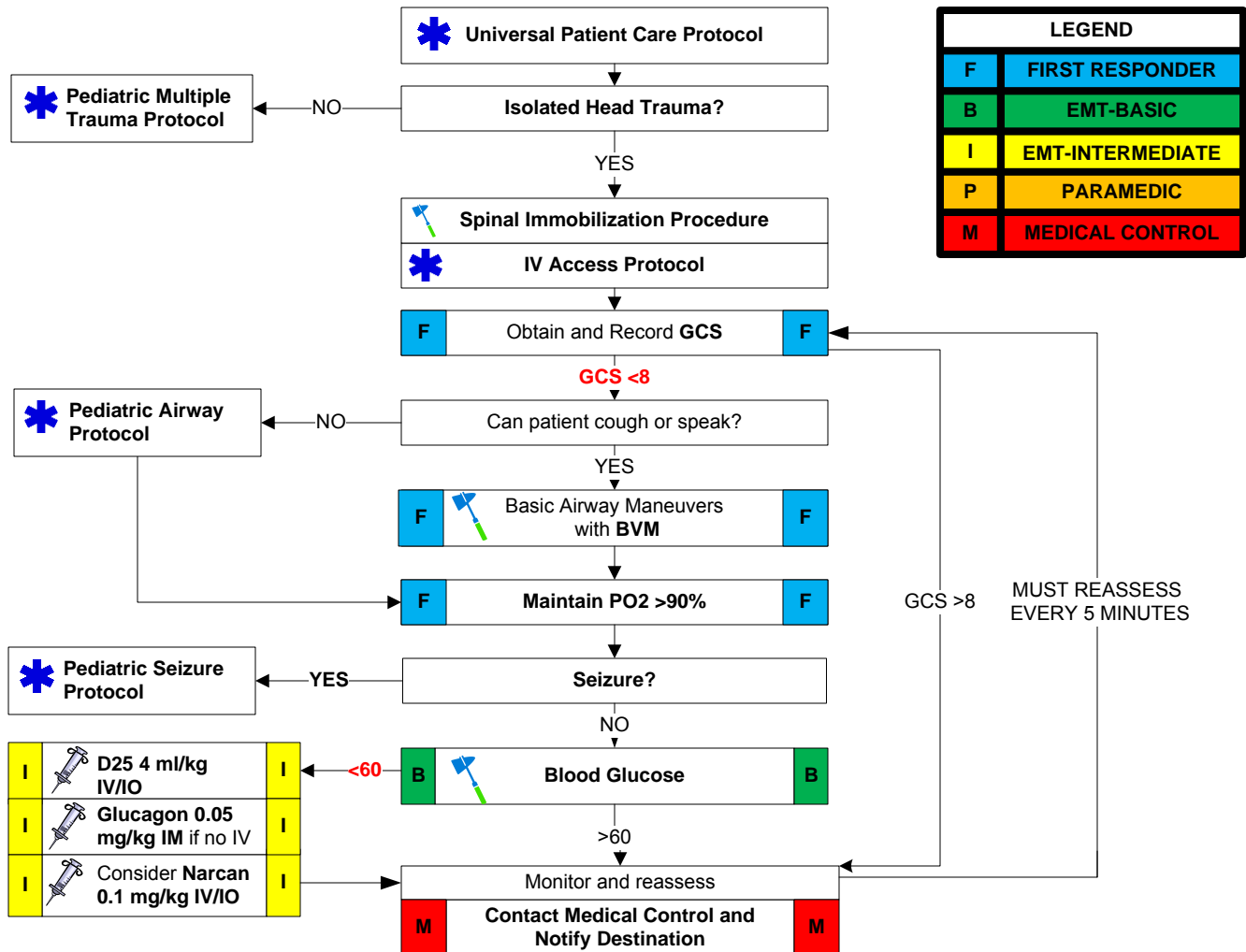
- ✓ Time of injury
- ✓ Mechanism (blunt vs. penetrating)
- ✓ Loss of consciousness
- ✓ Bleeding
- ✓ Past medical history
- ✓ Medications
- ✓ Evidence for multi-trauma

SIGNS AND SYMPTOMS

- ✓ Pain, swelling, bleeding
- ✓ Altered mental status
- ✓ Unconscious
- ✓ Respiratory distress/failure
- ✓ Vomiting
- ✓ Major traumatic mechanism of injury
- ✓ Seizure

DIFFERENTIAL

- ✓ Skull fracture
- ✓ Brain injury (concussion, hemorrhage)
- ✓ Epidural/Subdural hematoma
- ✓ Subarachnoid hemorrhage
- ✓ Spinal injury
- ✓ Abuse



OB/PEDIATRIC PROTOCOL # 4 - 05

PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Heart, Lungs, Abdomen, Extremities, Back, Neuro
- ✓ If GCS < 12, consider air/rapid transport. If GCS < 9, airway control should be anticipated
- ✓ Hyperventilate only if evidence of herniation (blown pupil, decorticate/decerebrate posturing, bradycardia, decreasing GCS). If hyperventilation is needed (35/minute for infants <1year; 25/minute for children >1year)
- ✓ Increased intracranial pressure (ICP) may cause hypertension and bradycardia (Cushing's Response)
- ✓ Hypotension usually indicates injury or shock unrelated to the head injury
- ✓ The most important item to monitor and document is a change in the level of consciousness. Remember the GCS
- ✓ Concussions are periods of confusion or LOC associated with trauma which may have resolved by the time EMS arrives. Any prolonged confusion or mental status abnormality which does not return to normal within 15 minutes or any documented loss of consciousness should be evaluated by a physician ASAP

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC HYPOTENSION OB/PEDIATRIC PROTOCOL # 4 - 06

HISTORY

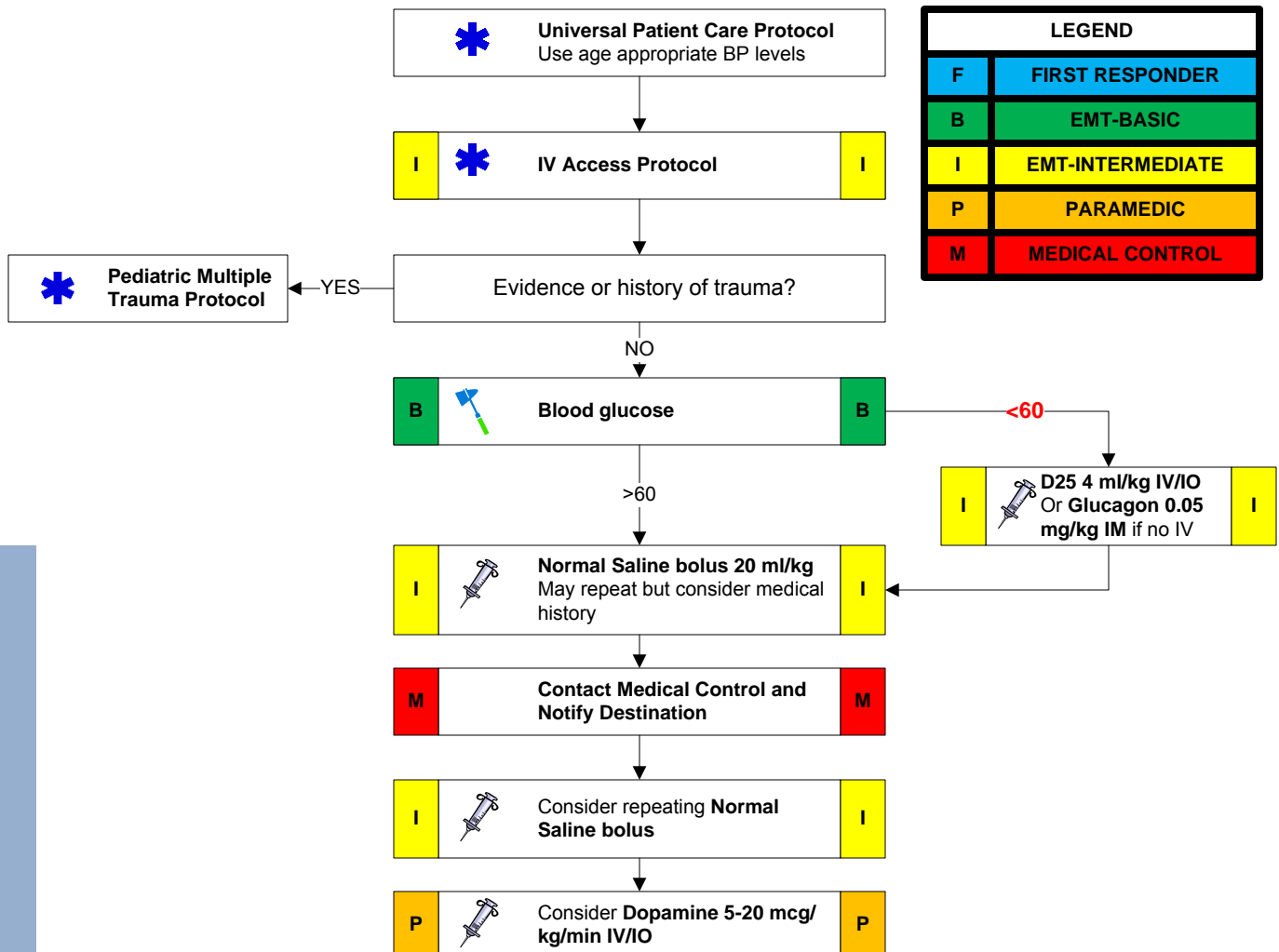
- ✓ Blood loss
- ✓ Fluid loss
 - ✓ Vomiting
 - ✓ Diarrhea
 - ✓ Fever
- ✓ Infection

SIGNS AND SYMPTOMS

- ✓ Restlessness, confusion, weakness
- ✓ Dizziness
- ✓ Increased HR, rapid pulse
- ✓ Decreased BP
- ✓ Pale, cool, clammy skin
- ✓ Delayed capillary refill

DIFFERENTIAL

- ✓ Trauma
- ✓ Infection
- ✓ Dehydration
 - ✓ Vomiting
 - ✓ Diarrhea
 - ✓ Fever
- ✓ Congenital heart disease
- ✓ Medication or toxin
- ✓ Allergic reaction



PEARLS

- ✓ Recommended Exam: Mental Status, Skin, HEENT, Heart, Lung, Abdomen, Extremities, Back, Neuro
- ✓ Consider all possible causes of shock and treat per appropriate protocol
- ✓ Decreasing heart rate and hypotension occur late in children and are signs of imminent cardiac arrest
- ✓ Most maternal medications pass through breast milk to the infant. Examples: Narcotics, Benzodiazepines
- ✓ Consider possible allergic reaction or early anaphylaxis
- ✓ If patient has a history of cardiac disease, chronic lung disease, or renal disease, limit Normal Saline bolus to 10 ml/kg

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC MULTIPLE TRAUMA OB/PEDIATRIC PROTOCOL # 4 - 07

HISTORY

- ✓ Time and mechanism of injury
- ✓ Height of any fall
- ✓ Damage to structure or vehicle
- ✓ Location in structure or vehicle
- ✓ Others injured or dead
- ✓ Speed and details of MVC
- ✓ Restraints/Protective equipment
 - Car seat
 - Helmet
 - Pads
- ✓ Ejection
- ✓ Past medical history
- ✓ Medications

SIGNS AND SYMPTOMS

- ✓ Pain, swelling
- ✓ Deformity, lesions, bleeding
- ✓ Altered mental status
- ✓ Unconscious
- ✓ Hypotension or shock
- ✓ Arrest

DIFFERENTIAL (LIFE THREATENING)

- ✓ Chest
 - Tension pneumothorax
 - Flail chest
 - Pericardial tamponade
 - Open chest wound
 - Hemothorax
- ✓ Intra-abdominal bleeding
- ✓ Pelvis/femur fracture
- ✓ Spine fracture/cord injury
- ✓ Head injury (see Head Trauma)
- ✓ Extremity fracture/dislocation
- ✓ HEENT (airway obstruction)
- ✓ Hypothermia



Universal Patient Care Protocol



Pediatric Assessment Procedure
focusing on initial ABC and level of responsiveness



Spinal Immobilization Procedure



Pediatric Airway Protocol
If appropriate

F

Vital Signs including GCS

F

ABNORMAL

NORMAL

Rapid Transport to appropriate destination using
Trauma Field Criteria Destination Protocol

Limit scene time to 10 minutes
Provide early notification

I	IV Access Protocol Normal Saline Bolus May repeat for hypotension	I
F	Splint suspected fractures Control external hemorrhage	F
P	Tension pneumothorax? Chest decompression	P
Consider Pediatric Head Injury Protocol		

Complete Pediatric Assessment Procedure		
F	Splint suspected fractures Control external hemorrhage	F
Transport to appropriate destination using Trauma Field Criteria Destination Protocol		
F	Continually reassess	F
Contact Medical Control and Notify Destination		

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, HEENT, Heart, Lung, Abdomen, Extremities, Back, Neuro
- ✓ Transport Destination is chosen based on EMS System Trauma Plan with EMS Pre-arrival notification
- ✓ Mechanism is the most reliable indicator of serious injury. Examine all restraints/protective equipment for damage
- ✓ In prolonged extrications or serious trauma, consider air transportation for transport times
- ✓ Do not overlook the possibility of child abuse
- ✓ Scene times should not be delayed for procedures. These should be performed en route when possible
- ✓ Bag-valve-mask is an acceptable method of managing the airway if pulse oximetry can be maintained >90%

OB/PEDIATRIC PROTOCOL # 4 - 07

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC PULSELESS ARREST OB/PEDIATRIC PROTOCOL # 4 - 08

HISTORY

- ✓ Time of arrest
- ✓ Medical history
- ✓ Medications
- ✓ Possibility of foreign body
- ✓ Hypothermia

SIGNS AND SYMPTOMS

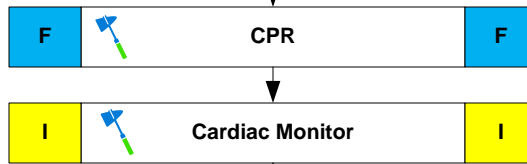
- ✓ Unresponsive
- ✓ Cardiac arrest

DIFFERENTIAL

- ✓ Respiratory failure
- ✓ Foreign body/Secretions
- ✓ Infection (croup, epiglottitis)
- ✓ Hypovolemia (dehydration)
- ✓ Congenital heart disease
- ✓ Tension pneumothorax, cardiac tamponade, pulmonary embolism
- ✓ Hypothermia/glycemia
- ✓ Toxin or medication
- ✓ Electrolyte abnormalities/Acidosis



Universal Patient Care Protocol



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

OB/PEDIATRIC PROTOCOL # 4 - 08

AT ANY TIME
Return of
Spontaneous Circulation



Go to
Post Resuscitation Protocol

Ventricular Fibrillation/Tachycardia

- Give 1 shock - Manual: 2J/kg
- May use AED if > 1 year of age (use pediatric AED if available for ages 1 – 8 years)
- Immediately start CPR, do not check for pulse

Pediatric Airway Protocol
IV Access Protocol

GIVE 5 CYCLES OF CPR

Check rhythm. Check pulse. Shockable rhythm?

YES

- Give 1 shock 4 J/kg or use AED as described above/Resume CPR immediately after shock
- Epinephrine 0.01(1:10,000) mg/kg IV/IO, repeat every 3-5 minutes
- Continue with 5 cycles of CPR after shock

Check rhythm. Check pulse. Shockable rhythm?

YES

- Give 1 shock 4 J/kg or use AED as described above/Resume CPR immediately after shock
- Consider Amiodarone 5 mg/kg IV/IO or Lidocaine 1 mg/kg IV/IO
- Continue with 5 cycles of CPR after shock
- Check rhythm. Check pulse.

Asystole/PEA

Pediatric Airway Protocol
IV Access Protocol

Epinephrine 0.01 (1:10,000) mg/kg IV/IO every 3-5 minutes

Consider D25 4 mg/kg IV/IO
Continue CPR 5 cycles at a time
Check rhythm between cycles of CPR
Only check for pulse between cycles of CPR & there is a perfusing rhythm

If at any time rhythm becomes shockable, then go to left column of this protocol

Try to identify and treat the cause:

Hypoxemia
Acidosis
Volume depletion
Tension pneumothorax
Hypothermia
Hypoglycemia
Hypokalemia
Hyperkalemia

Contact Medical Control and Notify Destination

PEARLS

- ✓ Recommended Exam: Mental Status
- ✓ Monophasic and Biphasic waveform defibrillators should use the same energy levels noted above
- ✓ In order to be successful in pediatric arrests, a cause must be identified and corrected
- ✓ Trinity policy: no intubations under the age of 9. Adequate BVM is key to maintaining oxygenation >90%

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC RESPIRATORY DISTRESS OB/PEDIATRIC PROTOCOL # 4 - 09

HISTORY

- ✓ Time of onset
- ✓ Possibility of foreign body
- ✓ Medical history
- ✓ Medications
- ✓ Fever or respiratory infection
- ✓ Other sick siblings
- ✓ History of trauma

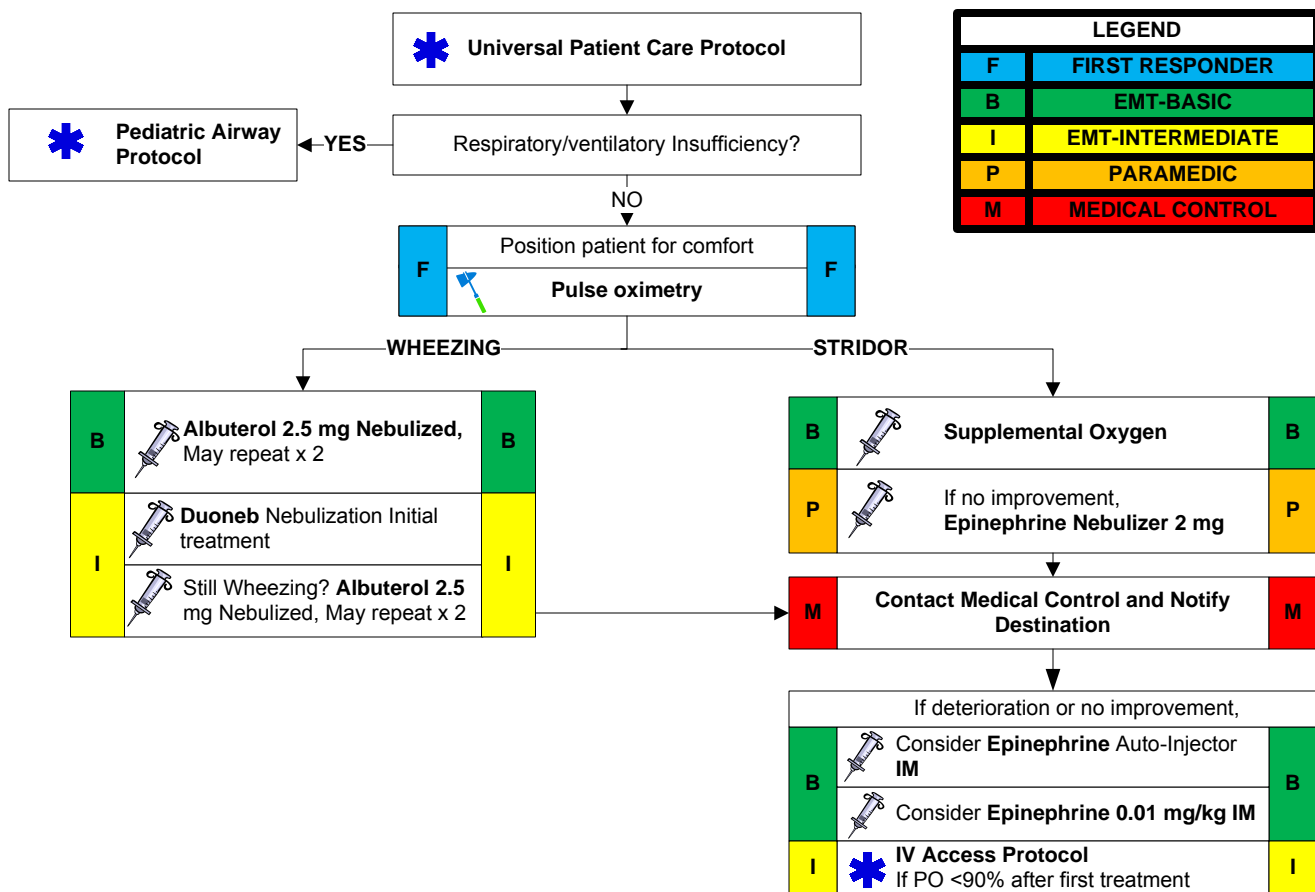
SIGNS AND SYMPTOMS

- ✓ Wheezing or stridor
- ✓ Respiratory retractions
- ✓ Increased heart rate
- ✓ Altered level of consciousness
- ✓ Anxious appearance

DIFFERENTIAL

- ✓ Allergic Reaction
- ✓ Asthma
- ✓ Aspiration
- ✓ Foreign body
- ✓ Infection
 - Pneumonia
 - Croup
 - Epiglottitis
- ✓ Congenital heart disease
- ✓ Medication or toxin
- ✓ Trauma

OB/PEDIATRIC PROTOCOL # 4 - 09



PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Skin, Neck, Heart, Lungs, Abdomen, Extremities, Neuro
- ✓ Pulse oximetry should be monitored continuously if initial saturation is $\leq 96\%$, or there is a decline in patient status despite normal pulse oximetry readings
- ✓ Do not force a child into a position. 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 is <18 months and is 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

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC SEIZURE OB/PEDIATRIC PROTOCOL # 4 - 10

HISTORY

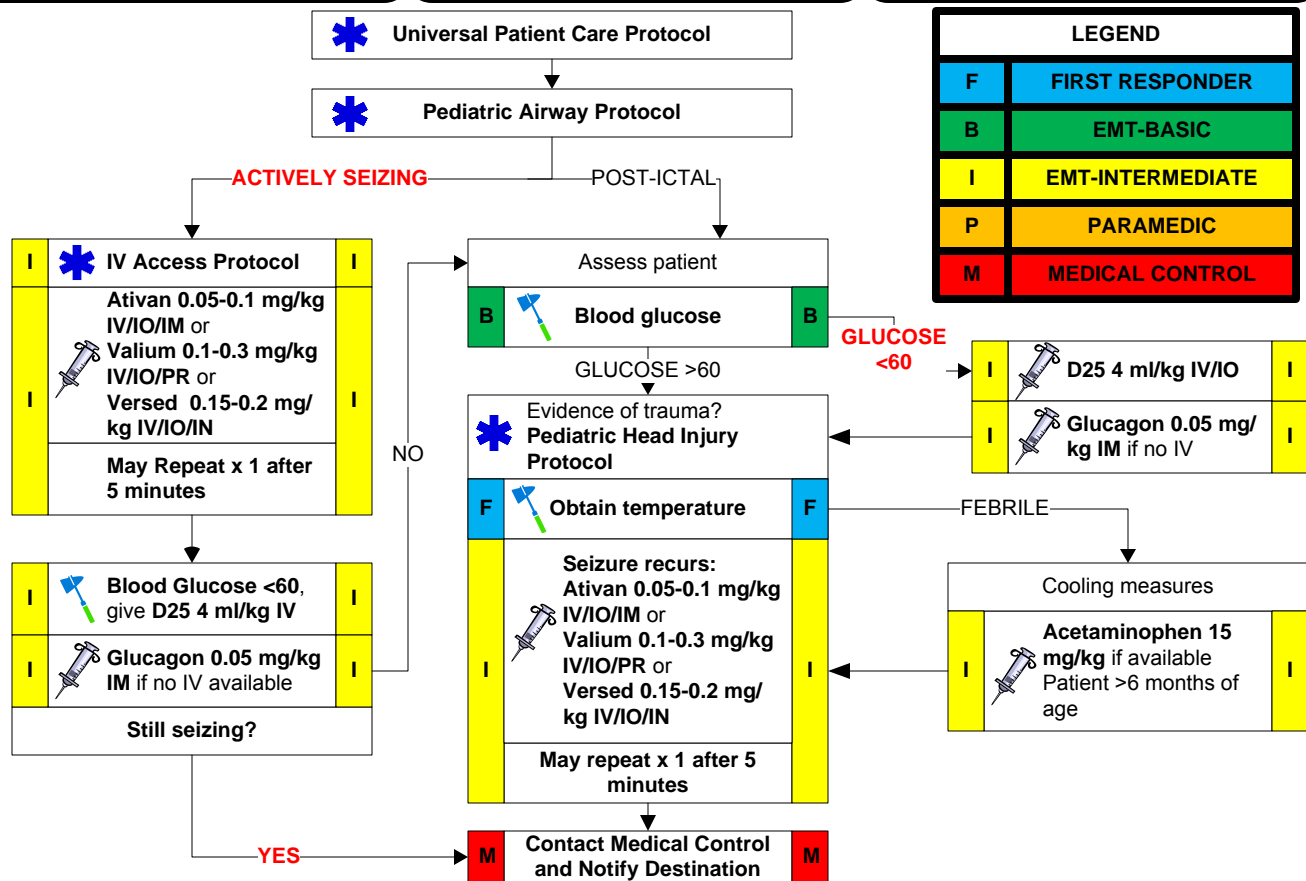
- ✓ Fever
- ✓ Prior history of seizures
- ✓ Seizure medications
- ✓ Reported seizure activity
- ✓ History of recent head trauma
- ✓ Congenital abnormality

SIGNS AND SYMPTOMS

- ✓ Observed seizure activity
- ✓ Altered mental status
- ✓ Hot, dry skin or elevated body temperature

DIFFERENTIAL

- ✓ Fever
- ✓ Infection
- ✓ Head trauma
- ✓ Medication or toxin
- ✓ Hypoxia or Respiratory failure
- ✓ Hypoglycemia
- ✓ Metabolic abnormality/acidosis
- ✓ Tumor



PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Heart, Lungs, Extremities, Neuro
- ✓ Addressing the ABCs and verifying blood glucose is more important than stopping the seizure
- ✓ Avoiding hypoxemia is extremely important
- ✓ Status Epilepticus is defined as two or more successive seizures without a period of consciousness or recovery. This is a true emergency requiring rapid airway control, treatment, and transport
- ✓ 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 do not usually result in a loss of consciousness
- ✓ Jacksonian seizures are seizures which start as a focal seizure and become generalized
- ✓ Be prepared to assist ventilations, especially if a benzodiazepine is used
- ✓ If evidence or suspicion of trauma, spine should be immobilized
- ✓ In an infant, a seizure may be the only evidence of a closed head injury
- ✓ Rectal Valium: Draw dose up in 3 ml syringe. Remove needle from syringe and attached syringe to an IV extension tube. Cut the distal end of the extension tube leaving about 3 or 4 inches of length, Insert tube in rectum and inject drug. Flush extension tube with 3 ml of air and remove

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC SUPRAVENTRICULAR TACHYCARDIA OB/PEDIATRIC PROTOCOL # 4 - 11

HISTORY

- ✓ Past medical history
- ✓ Medications or toxic ingestion
- ✓ 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

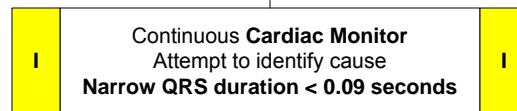
- ✓ Heart disease (congenital)
- ✓ Hypo/hyperthermia
- ✓ Hypovolemia or anemia
- ✓ Electrolyte imbalance
- ✓ Anxiety/pain/emotional stress
- ✓ Fever/infection/sepsis
- ✓ Hypoxia
- ✓ Hypoglycemia
- ✓ Medication/toxin/drugs (see history)
- ✓ Pulmonary embolus
- ✓ Trauma
- ✓ Tension pneumothorax

Unstable/Prearrest Signs and Symptoms:

- ✓ Altered Mental Status
- ✓ Hypotension
- ✓ Chest Pain
- ✓ Syncope
- ✓ Pulmonary Edema



Universal Patient Care Protocol

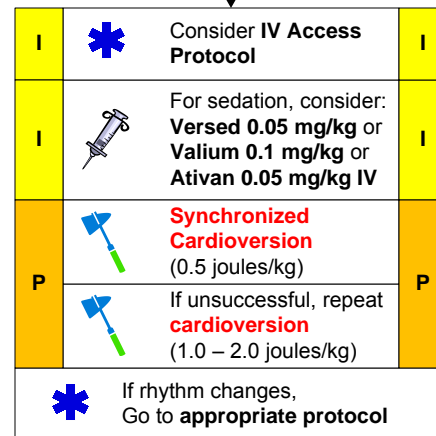
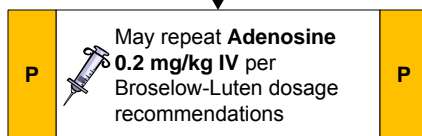
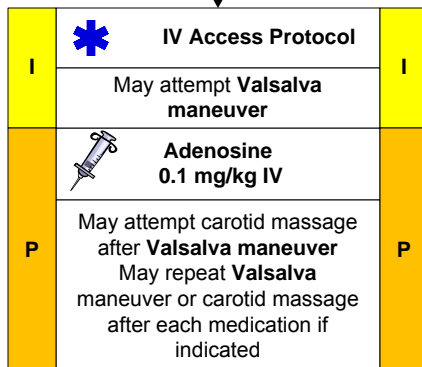


STABLE

UNSTABLE/ PRE-ARREST

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
- ✓ Carefully evaluate the rhythm to distinguish Sinus Tachycardia, Supraventricular Tachycardia, and Ventricular Tachycardia
- ✓ Separating the child from the caregiver may worsen the child's condition
- ✓ Pediatric paddles/pads should be used in children <10 kg or Broselow-Luten color **Purple**
- ✓ Monitor for respiratory depression and hypotension if Diazepam or Lorazepam 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
- ✓ As a rule of thumb, the maximum sinus tachycardia rate is 220 – the patient's age in years

OB/PEDIATRIC PROTOCOL # 4 - 11

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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PEDIATRIC SUSPECTED SEPSIS/SEPSIS ALERT OB/PEDIATRIC PROTOCOL # 4 - 12

HISTORY

- ✓ Past medical /surgical history
- ✓ Fever(onset, duration, elevation)
- ✓ Prior infections(UTI, pneumonia)
- ✓ Recent surgeries/procedures
- ✓ Immune status
- ✓ Implanted devices/prosthetics
- ✓ Immunizations
- ✓ Travel history
- ✓ Menstrual history (pregnancy)

SIGNS AND SYMPTOMS

- ✓ Hypo/Hyperthermia
- ✓ Restlessness, confusion, weakness
- ✓ Tachypnea for age
- ✓ Tachycardia for age
- ✓ Decreased BP for age
- ✓ Pale, cool, clammy skin
- ✓ Delayed capillary refill
- ✓ Decreased urine output
- ✓ Rash/Bruising/Bleeding

DIFFERENTIAL

- ✓ Trauma
- ✓ Infection
- ✓ Dehydration
- ✓ Congenital heart disease
- ✓ Medication or toxin
- ✓ Allergic reaction



Universal Patient Care Protocol
Use age appropriate vital signs



Fever/Infection Control Protocol

Does the patient have **obvious/suspected infection**
AND meet **two (2) SIRS criteria**:

- Hypotension for age
- Tachycardia or Bradycardia for age
- Tachypnea for age
- GCS < 15 or Altered Mental Status
- Temperature $\geq 100.4^{\circ}$ or $\leq 96^{\circ}$ F

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

Go to Appropriate Protocol

YES

I	IV Access Protocol	I
I	Normal Saline Bolus 20 ml/kg May repeat x 1 but consider medical history	I

M	Notify Medical Control of PEDIATRIC SEPSIS ALERT	M
---	---	---

M	Contact Medical Control and Notify Destination	M
---	---	---

AGE	Heart Rate	Respiratory Rate	Blood Pressure
0 d – 1 wk	>180 < 100	>50	<59
1 wk – 1 m	>180 <100	>40	<75
1 m – 1 yr	>180	>34	<75
2 – 5 yr	>140	>22	<75
6 – 12 yr	>130	>18	<83
13 – 18 yr	>110	>14	<90

PEARLS

- ✓ Applies to all patients less than 18 years old, with a suspected/known infection who meet 2 SIRS criteria
- ✓ Recommended Exam: Mental Status, Skin, HEENT, Heart, Lung, Abdomen, Extremities, Back, Neuro
- ✓ Appropriate fluid resuscitation is the most important prehospital treatment for sepsis
- ✓ All pediatric fluids and medications must be dosed appropriately by weight in kilograms
- ✓ Use of age-specific vital signs is recommended

OB/PEDIATRIC PROTOCOL # 4 - 12

Trauma Protocols

Bites and Envenomation's	Protocol 5-01
Burns: Chemical and Electrical	Protocol 5-02
Burns: Thermal	Protocol 5-03
Crush Syndrome	Protocol 5-04
Drowning	Protocol 5-05
Extremity Trauma	Protocol 5-06
Head Trauma	Protocol 5-07
Hyperthermia	Protocol 5-08
Hypothermia	Protocol 5-09
Multi-System Trauma	Protocol 5-10
Sexual Assault	Protocol 5-11
Traumatic Arrest	Protocol 5-12

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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BITES AND ENVENOMATIONS TRAUMA PROTOCOL # 5 - 01

HISTORY

- ✓ Type of bite/sting
- ✓ Description of creature or photograph for identification
- ✓ Time, location, size of bite/sting
- ✓ Previous reaction to bite/sting
- ✓ Domestic v. wild
- ✓ Tetanus and Rabies risk
- ✓ Immunocompromised patient

SIGNS AND SYMPTOMS

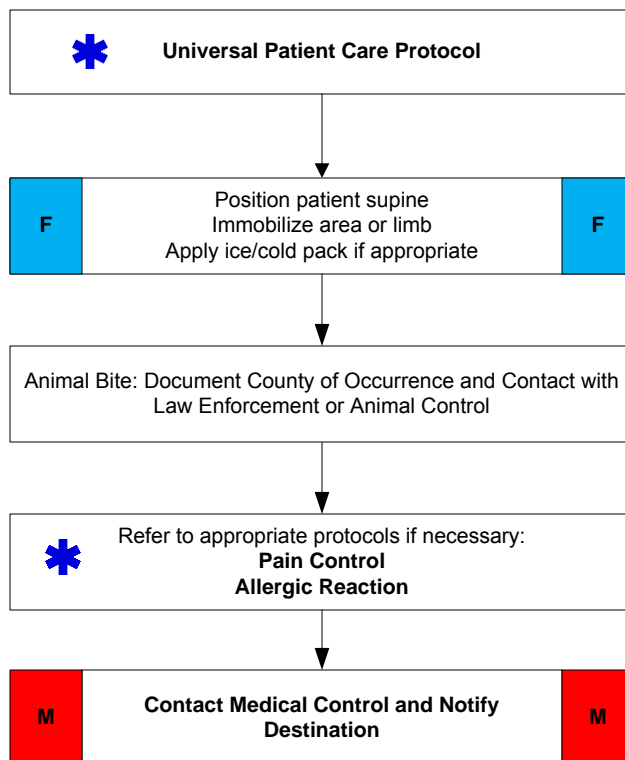
- ✓ Rash, skin break, wound
- ✓ Pain, soft tissue swelling, redness
- ✓ Blood oozing from the bite wound
- ✓ Evidence of infection
- ✓ Shortness of breath, wheezing
- ✓ Allergic reaction, hives, itching
- ✓ Hypotension or shock

DIFFERENTIAL

- ✓ Animal bite
- ✓ Human bite
- ✓ Snake bite (poisonous)
- ✓ Spider bite (poisonous)
- ✓ Insect sting/bite (bee, wasp, ant, tick)
- ✓ Infection risk
- ✓ Rabies risk
- ✓ Tetanus risk

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



PEARLS

- ✓ Recommended Exam: Mental Status, Skin, Extremities (Location of Injury), and a complete Neck, Lung, Heart, Abdomen, Back, and Neuro exam if system effects are noted
- ✓ Human bites have a higher infection rate than animal bites due to normal mouth bacteria
- ✓ Carnivore bites are much more likely to become infected and all have risk of Rabies exposure
- ✓ Cat bites may progress to infection rapidly due to specific bacteria (Pasteurella multocida)
- ✓ Poisonous snakes in the area are rare, but are of the pit viper family: Timber rattlesnakes and water moccasins. If no pain or swelling, envenomation is unlikely
- ✓ Brown Recluse spider bites are minimally painful to painless. Little reaction is noted initially, but tissue necrosis at the site of the bite develops over the next few days (brown spider with fiddle shape on back)
- ✓ Evidence of infection: swelling, redness, drainage, fever, red streaks proximal to wound
- ✓ Immunocompromised patients are at increased risk for infection: diabetes, chemotherapy, transplant patients
- ✓ Consider contacting the Illinois Poison Control Center for guidance: 1 800 222 1222

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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BURNS: CHEMICAL & ELECTRICAL TRAUMA PROTOCOL # 5 - 02

HISTORY

- ✓ Type of exposure (heat, gas, chemical)
- ✓ Inhalation injury
- ✓ Past medical history and medications
- ✓ Other trauma
- ✓ Loss of consciousness
- ✓ Tetanus/immunization status

SIGNS AND SYMPTOMS

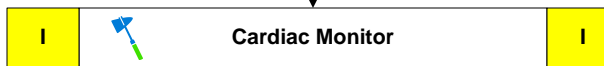
- ✓ Burns, pain, swelling
- ✓ Dizziness
- ✓ Loss of consciousness
- ✓ Hypotension, shock
- ✓ Airway compromise/distress
- ✓ Singed facial hair or nasal hair
- ✓ Hoarseness/wheezing

DIFFERENTIAL

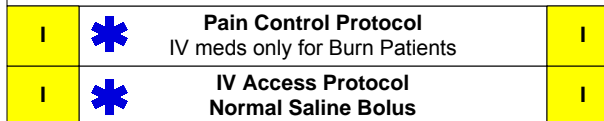
- ✓ Superficial (1st Degree) – red and painful
- ✓ Partial Thickness (2nd Degree) – blistering
- ✓ Full Thickness (3rd Degree) – painless/charred or leathery skin
- ✓ Thermal
- ✓ Chemical
- ✓ Electrical
- ✓ Radiation



Universal Patient Care Protocol



Eye involvement? Continuous saline flush in affected eye.
Flush with water or **Normal Saline** for 10-15 minutes
Remove rings, bracelets, and other constricting items.
Remove clothing or exposed area.
Identify entry and exit sites. Apply sterile dressings.

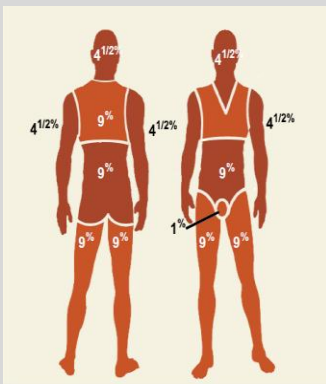


Chemical and Electrical Burn patients must be triaged using the guidelines below and their care must conclude in the **Thermal Burn Protocol**

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

Rule of 9's



CRITICAL (RED)

>15% TBSA 2nd/3rd Degree Burn
Burns with multiple trauma
Burns with definitive airway compromise

SERIOUS (YELLOW)

5-15% TBSA 2nd/3rd Degree Burn
Suspected inhalation injury
or requiring intubation for
airway stabilization
Hypotension or GCS<14

MINOR (GREEN)

<5% TBSA 2nd/3rd Degree Burn
No inhalation injury
Not intubated
Normotensive
GCS>14

PEARLS – CHEMICAL

- ✓ Refer to Decontamination Standard Procedure
- ✓ Certainly 0.9% NaCl or Sterile Water is preferred; however, if it is not readily available, do not delay, use tap water for flushing the affected area or other immediate water sources. Flush the area as soon as possible with the cleanest readily available water or saline solution using copious amounts of fluids

PEARLS – ELECTRICAL

- ✓ Do not contact the patient until you are certain the source of electric shock has been disconnected.
- ✓ Attempt to locate contact points (entry wound where the AC source contacted the patient, an exit at the ground point) both sites will generally be full thickness.
- ✓ Cardiac monitor, anticipate ventricular or atrial irregularity, to include V-tach, V-fib, heart blocks, etc.
- ✓ Attempt to identify the nature of the electrical source (AC v. DC), the amount of voltage, and the amperage the patient may have been exposed to during the electrical shock.

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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BURNS: THERMAL TRAUMA PROTOCOL # 5 - 03

HISTORY

- ✓ Type of exposure (heat, gas, chemical)
- ✓ Inhalation injury
- ✓ Time of injury
- ✓ Past medical history
- ✓ Medications
- ✓ Other trauma
- ✓ Loss of consciousness
- ✓ Tetanus/immunization status

SIGNS AND SYMPTOMS

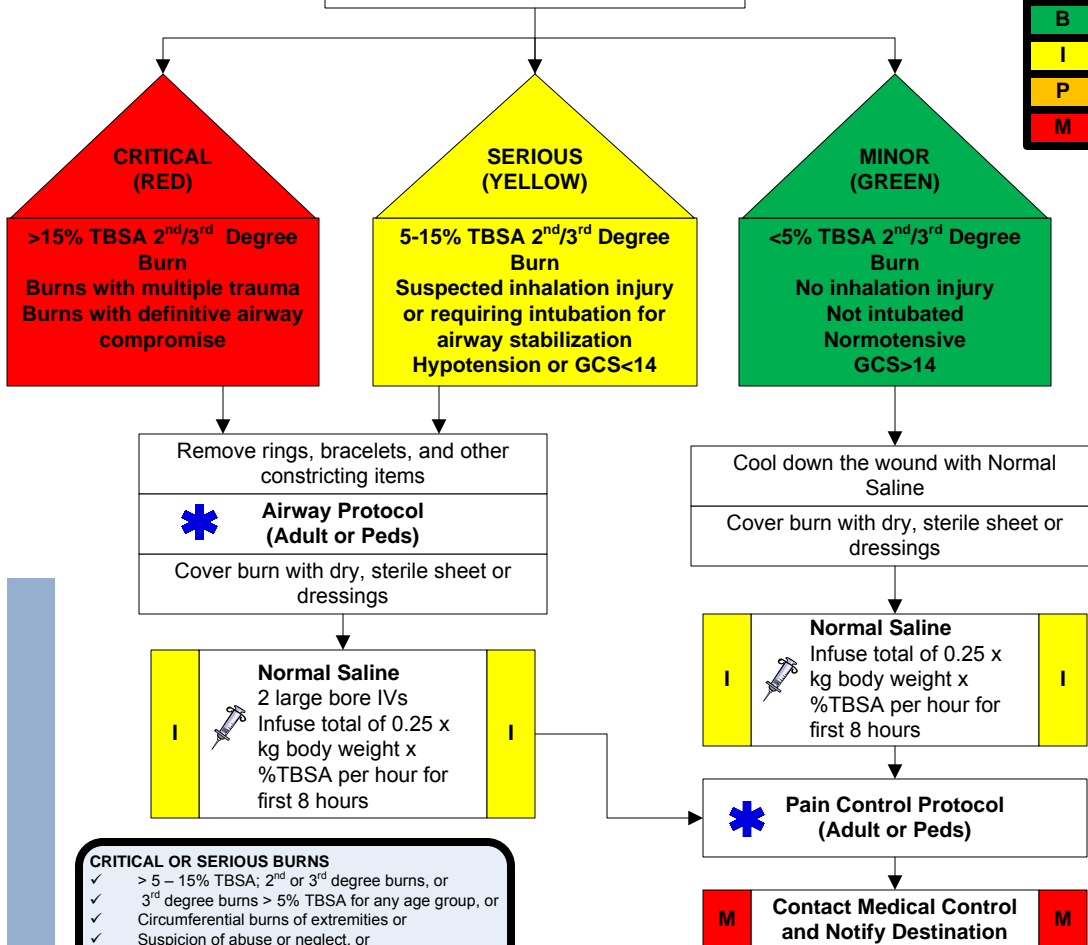
- ✓ Burns, pain, swelling
- ✓ Dizziness
- ✓ Loss of consciousness
- ✓ Hypotension/shock
- ✓ Airway compromise/distress
- ✓ Singed facial hair or nasal hair
- ✓ Hoarseness/wheezing

DIFFERENTIAL

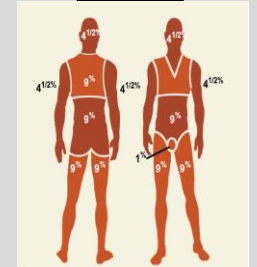
- ✓ Superficial (1st Degree) – red and painful
- ✓ Partial Thickness (2nd Degree) – blistering
- ✓ Full Thickness (3rd Degree) – painless/charred or leathery skin
- ✓ Thermal
- ✓ Chemical
- ✓ Electrical
- ✓ Radiation

Universal Patient Care Protocol

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



Rule of 9's



CRITICAL OR SERIOUS BURNS

- ✓ > 5 – 15% TBSA; 2nd or 3rd degree burns, or
- ✓ Circumferential burns of extremities or
- ✓ Suspicion of abuse or neglect, or
- ✓ Inhalation injury, or
- ✓ Chemical burns, or
- ✓ Burns of face, hands, perineum, or feet, or
- ✓ Any burn requiring hospitalization

PEARLS

- ✓ Burn patients are trauma patients! Evaluate for multisystem trauma
- ✓ Assure whatever has caused the burn is no longer contacting the injury (STOP THE BURNING PROCESS)
- ✓ Recommended Exam: Mental Status, HEENT, Neck, Heart, Lungs, Abdomen, Extremities, Back and Neuro
- ✓ Early intubation is required when the patient experiences significant inhalation injuries
- ✓ Potential CO exposure should be treated with 100% oxygen
- ✓ 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 burns; must maintain normal body temperature
- ✓ Evaluate the possibility of child abuse with children and burn injuries

TRAUMA PROTOCOL # 5 - 03

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CRUSH SYNDROME TRAUMA PROTOCOL # 5 - 04

HISTORY

- ✓ Agricultural injury
- ✓ Industrial accident
- ✓ Construction

SIGNS AND SYMPTOMS

- ✓ Hypothermia
- ✓ Pain, swelling
- ✓ Altered sensation/motor function
- ✓ Diminished pulses/capillary refill

DIFFERENTIAL

- ✓ Abrasion/Contusion
- ✓ Laceration
- ✓ Sprain
- ✓ Dislocation/Fracture
- ✓ Compartment Syndrome



Universal Patient Care Protocol

Consider the 5 Ps:
Pain
Pallor
Paresthesia
Poikilothermia
Pulselessness

Treat for **Hypothermia** if indicated

Apply tourniquets to affected extremity/ extremities prophylactically if appropriate

ALS MUST BE CALLED FOR CRUSH INJURY. IF POSSIBLE, ALS SHOULD BE PRESENT BEFORE RELEASE OF CRUSH INJURY

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

TRAUMA PROTOCOL # 5 - 04

CONTACT MEDICAL CONTROL UPON ARRIVAL TO SCENE

Ensure airway
Oxygen 15L NRB

Vital Signs

Albuterol 2.5 mg Nebulized

Normal Saline Bolus

Sodium Bicarbonate 50 mEq in 1L NS
Administer entire 1L **Normal Saline**

12 Lead EKG if available

EKG Changes

No EKG Changes

Calcium Chloride
1 gram IV with 20 ml flush

RAPID TRANSPORT AND CONTACT MEDICAL CONTROL

Maintain systolic BP > 100

PEARLS

- ✓ EKG changes of hyperkalemia include peaked T waves, loss of P waves, wide QRS
- ✓ Crush injuries lead to rapid release of potassium from cells. Overload of potassium leads to cardiac dysrhythmias
- ✓ Patients who have been trapped can appear hemodynamically stable until released. After release, patient can become unstable very quickly. Do not delay life saving measures for ALS if immediate threat to life exists
- ✓ ALS should be on scene prior to release of any crush injury
- ✓ Monitor lung sounds, patient is at risk for pulmonary edema

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DROWNING TRAUMA PROTOCOL # 5 - 05

HISTORY

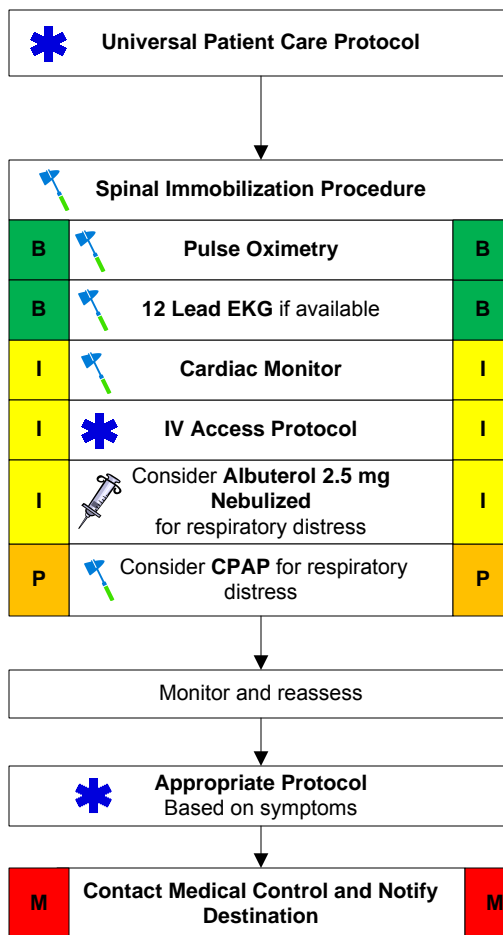
- ✓ Submersion in water regardless of depth
- ✓ Possible trauma to cervical spine
- ✓ Possible history of trauma, e.g., diving board
- ✓ Duration of immersion
- ✓ Temperature of water or possibility of hypothermia

SIGNS AND SYMPTOMS

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

DIFFERENTIAL

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



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

TRAUMA PROTOCOL # 5 - 05

PEARLS

- ✓ Recommended Exam: Trauma Survey, Head, Neck, Chest, Abdomen, Pelvis, Back, Extremities
- ✓ Have a high index of suspicion for possible spinal injuries
- ✓ There is no time limit on cold water drownings. Resuscitate all cold water drownings. Patients have increased chance of survival
- ✓ Some patients may develop delayed respiratory distress
- ✓ All victims should be transported for evaluation due to potential for worsening over the next several hours
- ✓ Drowning is a leading cause of death among would-be rescuers
- ✓ All appropriately trained and certified rescuers to remove victims from areas of danger

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EXTREMITY TRAUMA TRAUMA PROTOCOL # 5 - 06

HISTORY

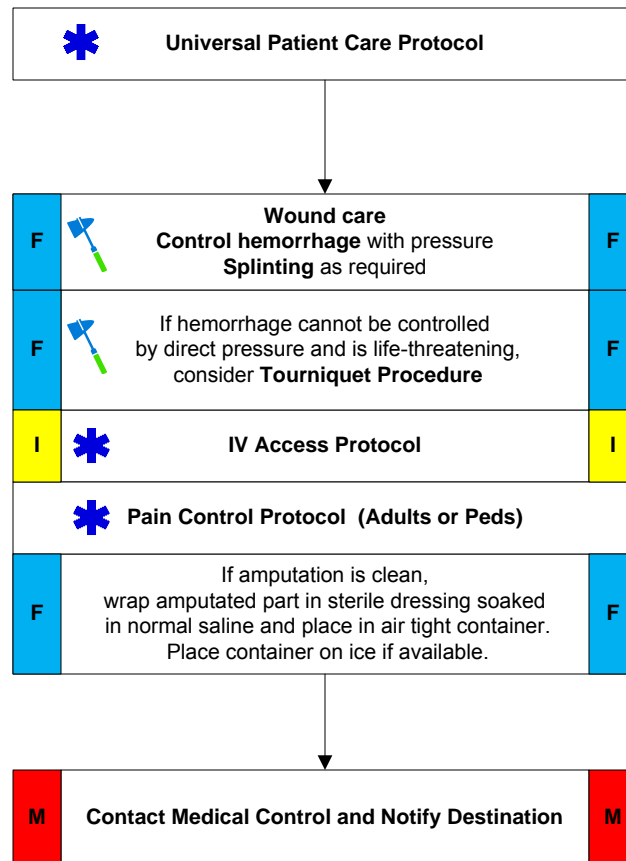
- ✓ Type of injury
- ✓ Mechanism: crush/penetrating/ amputation
- ✓ Time of injury
- ✓ Open vs. closed wound/fracture
- ✓ Wound contamination
- ✓ Medical history
- ✓ Medications

SIGNS AND SYMPTOMS

- ✓ Pain, swelling
- ✓ Deformity
- ✓ Altered sensation/motor function
- ✓ Diminished pulse/capillary refill
- ✓ Decreased extremity temperature

DIFFERENTIAL

- ✓ Abrasion
- ✓ Contusion
- ✓ Laceration
- ✓ Sprain
- ✓ Dislocation
- ✓ Fracture
- ✓ Amputation



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

TRAUMA PROTOCOL # 5 - 06

PEARLS

- ✓ Recommended Exam: Mental Status, Extremity, Neuro
- ✓ Peripheral neurovascular status is important
- ✓ In amputations, time is critical. Transport and notify medical control immediately, so that the appropriate destination can be determined
- ✓ Dislocations/fractures of hip, knee, or elbow have high incidence of vascular compromise
- ✓ Urgently transport any injury with vascular compromise
- ✓ Blood loss may be concealed or not apparent with extremity trauma
- ✓ Lacerations must be evaluated for repair within 6 hours of injury

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HEAD TRAUMA TRAUMA PROTOCOL # 5 - 07

HISTORY

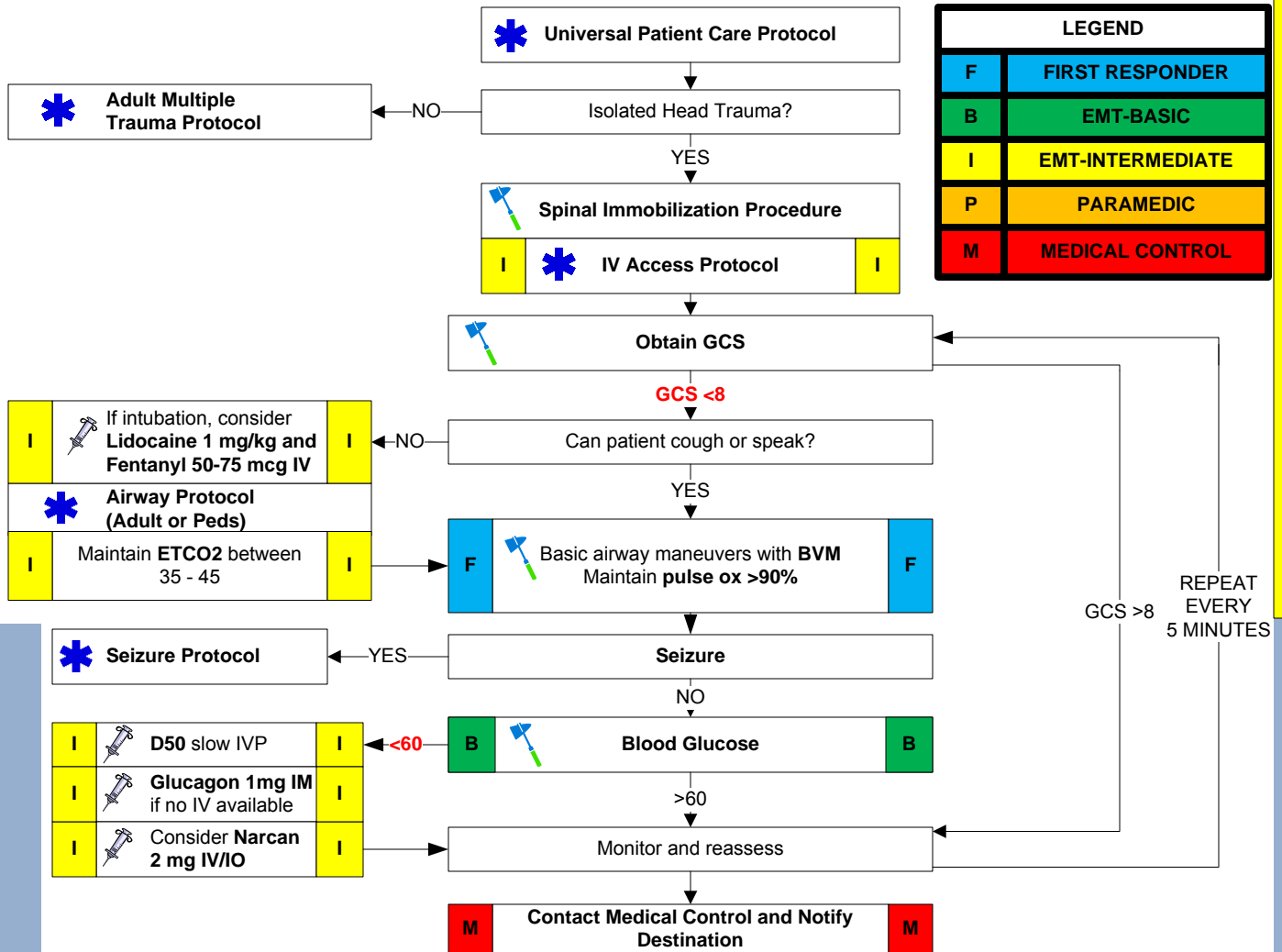
- ✓ Time of injury
- ✓ Mechanism (blunt v. penetrating)
- ✓ Loss of consciousness
- ✓ Bleeding
- ✓ Past medical history
- ✓ Medications
- ✓ Evidence for multi-trauma

SIGNS AND SYMPTOMS

- ✓ Pain, swelling, bleeding
- ✓ Altered mental status
- ✓ Unconsciousness
- ✓ Respiratory distress/failure
- ✓ Vomiting
- ✓ Major traumatic mechanism of injury
- ✓ Seizure

DIFFERENTIAL

- ✓ Skull fracture
- ✓ Brain injury (concussion, contusion, hemorrhage, or laceration)
- ✓ Epidural hematoma
- ✓ Subdural hematoma
- ✓ Subarachnoid bleed
- ✓ Spinal injury
- ✓ Abuse



PEARLS

- ✓ Recommended Exam: Mental Status, HEENT, Heart, Lungs, Abdomen, Extremities, Back, Neuro
- ✓ If GCS < 12 consider air/rapid transport
- ✓ In the absence of capnography, hyperventilate the patient (adult: 20 breaths/minute; child: 30; infant: 35) ONLY if ongoing evidence of brain herniation (blown pupil, decorticate or decerebrate posturing, or bradycardia)
- ✓ Increased intracranial pressure (ICP) may cause hypertension and bradycardia (Cushing's Response)
- ✓ Hypotension usually indicates injury or shock unrelated to the head injury and should be aggressively treated
- ✓ The most important item to monitor and document is a change in the level of consciousness
- ✓ Consider restraints if necessary for patient's and/or personnel's protection per the Restraint Procedure
- ✓ Limit IV fluids unless patient is hypotensive
- ✓ Concussions are periods of confusion or LOC associated with trauma which may have resolved by the time EMS arrives. Any prolonged confusion or mental status abnormality which does not return to normal within 15 minutes or any documented loss of consciousness should be evaluated by a physician ASAP
- ✓ In areas with short transport times, RSI/Drug-Assisted Intubation is not recommended for patients who are spontaneously breathing and who have oxygen saturations > 90% with supplemental oxygen

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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HYPERTHERMIA TRAUMA PROTOCOL # 5 - 08

HISTORY

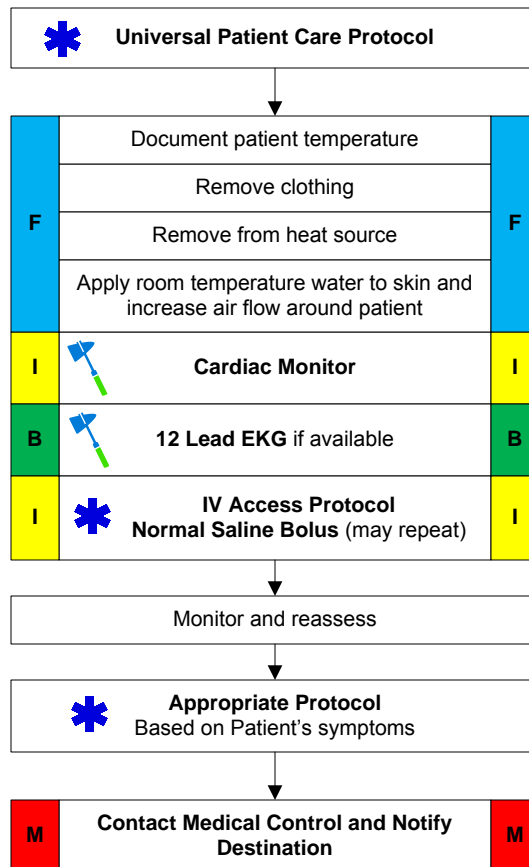
- ✓ Age
- ✓ Exposure to increased temperatures and / or humidity
- ✓ Past medical history
- ✓ Medications
- ✓ Extreme exertion
- ✓ Time and length of exposure
- ✓ Poor PO intake
- ✓ Fatigue/muscle cramping

SIGNS AND SYMPTOMS

- ✓ Altered mental status or unconsciousness
- ✓ Hot, dry, or sweaty skin
- ✓ Hypotension or shock
- ✓ Seizures
- ✓ Nausea

DIFFERENTIAL

- ✓ Fever (infection)
- ✓ Dehydration
- ✓ Medications
- ✓ Hyperthyroidism (Storm)
- ✓ Delirium Tremens (DT's)
- ✓ Heat cramps
- ✓ Heat exhaustion
- ✓ Heat stroke
- ✓ CNS lesions or tumors



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Neuro
- ✓ Extremes of age are more prone to heat emergencies
- ✓ Predisposed by use of: tricyclic antidepressants, phenothiazines, anticholinergic medications
- ✓ Cocaine, amphetamines, and salicylates may elevate body temperature
- ✓ Sweating generally disappears as body temperature rises above 104° F (40° C)
- ✓ Intense shivering may occur as patient is cooled
- ✓ Heat cramps consist of benign muscle cramping secondary 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. Vitals signs usually consist of tachycardia, hypotension, and an elevated temperature
- ✓ Heat stroke consists of dehydration, tachycardia, hypotension, temperature >104° F (40° C) and an altered mental status

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HYPOTHERMIA TRAUMA PROTOCOL # 5 - 09

HISTORY

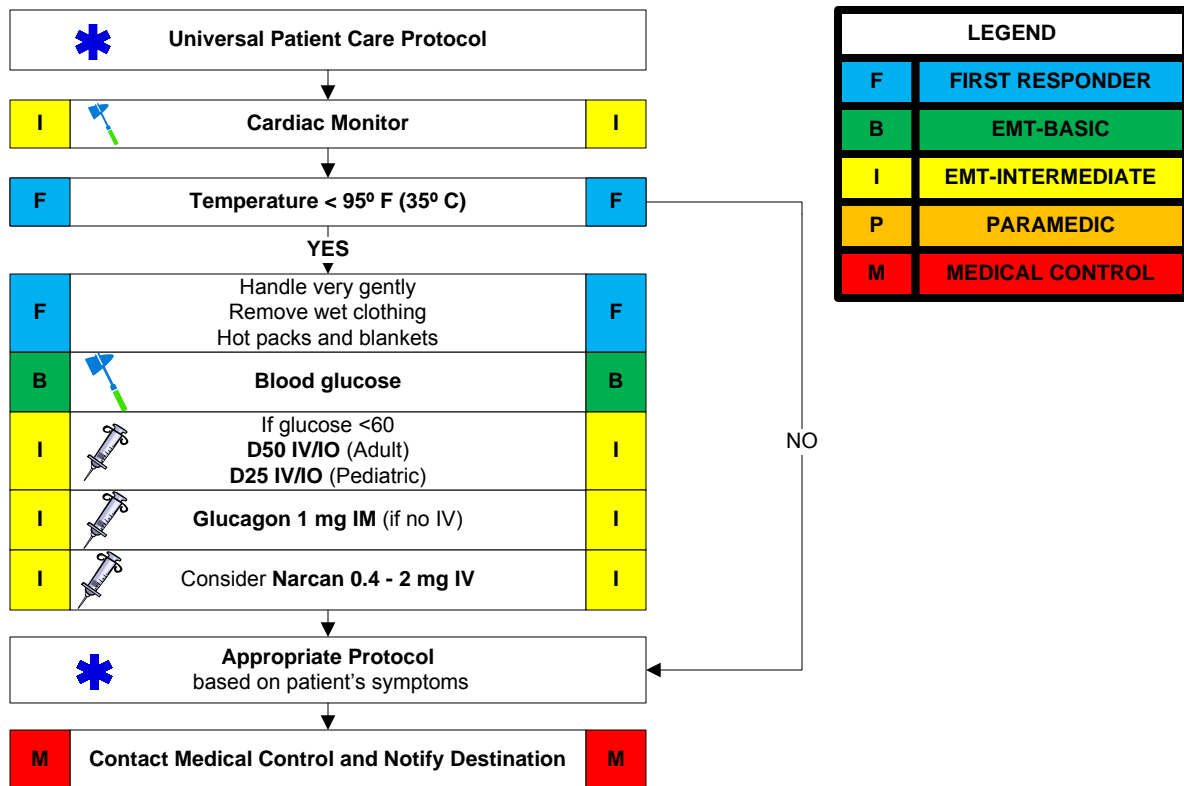
- ✓ Past medical history
- ✓ Medications
- ✓ Exposure to environment even in normal temperatures
- ✓ Exposure to extreme cold
- ✓ Extremes of age
- ✓ Drug use: alcohol, barbiturates
- ✓ Infections/Sepsis
- ✓ Length of exposure/Wetness

SIGNS AND SYMPTOMS

- ✓ Cold, clammy
- ✓ Shivering
- ✓ Mental status changes
- ✓ Extremity pain or sensory abnormality
- ✓ Bradycardia
- ✓ Hypotension or shock

DIFFERENTIAL

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



PEARLS

- ✓ Recommended Exam: Mental Status, Heart, Lungs, Abdomen, Extremities, Neuro
- ✓ NO PATIENT IS DEAD UNTIL WARM AND DEAD (core temperature >95°)
- ✓ Extremes of age are more susceptible to hypothermia
- ✓ With temperatures less than 86° F (30° C), ventricular fibrillation is common cause of death. Handling patients gently may help prevent this
- ✓ If the temperature cannot be measured, treat the patient based on suspected temperature
- ✓ Hypothermia may produce severe bradycardia so take at least 45 seconds to palpate a pulse
- ✓ Hot packs can be activated and placed armpit and groin area if available. Care should be taken not to place packs directly against patient's skin
- ✓ Consider withholding CPR if patient has organized rhythm or other signs of life. Contact Medical Control
- ✓ Intubation can cause ventricular fibrillation; the most proficient person should perform this skill gently
- ✓ Do not hyperventilate the patient as this can cause ventricular fibrillation
- ✓ If the patient is below 86°F (30°C), then defibrillate 1 time if defibrillation is required. Normal defibrillation procedure may resume once patient reaches 86°F (30°C)
- ✓ Anti-arrhythmics may not work below 86°F (30°C), and if given, should be administered at reduced intervals. Contact Medical Control before administering
- ✓ Pacing should not be done below 86°F (30°C)

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



Approved by EMS Medical Director 2014

MULTI-SYSTEM TRAUMA TRAUMA PROTOCOL # 5 - 10

HISTORY

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

SIGNS AND SYMPTOMS

- ✓ Pain, swelling
- ✓ Deformity, lesions, bleeding
- ✓ Altered mental status or unconscious
- ✓ Hypotension or shock
- ✓ Arrest

DIFFERENTIAL (LIFE THREATENING)

- ✓ Chest: Tension pneumothorax, Flail chest, Cardiac tamponade, Open chest wound, Hemothorax
- ✓ Spine Fractures/Spinal Cord Injury
- ✓ Intra-abdominal bleeding
- ✓ Pelvis/femur fracture
- ✓ Head injury (see Head Trauma)
- ✓ Laryngeal fracture/ airway obstruction
- ✓ Hypothermia



Universal Patient Care Protocol



Spinal Immobilization Procedure



Airway Protocol



Vital signs including GCS



LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

TRAUMA PROTOCOL # 5 - 10

ABNORMAL

NORMAL

Rapid Transport to appropriate destination using

Trauma Field Criteria Destination Protocol

LIMIT SCENE TIME TO 10 MINUTES
PROVIDE EARLY NOTIFICATION

I	IV Access Protocol Normal Saline bolus May repeat for hypotension	I
F	Splint suspected fractures Consider pelvic binding Control external hemorrhage	F
P	Tension pneumothorax? Chest decompression	P
P	Consider Tranexamic Acid (TXA) if at risk for significant hemorrhage	P
Consider Head Injury Protocol		

F	Complete assessment	F
F	Splint suspected fractures Consider pelvic binding Control external hemorrhage	F
Transport to appropriate destination using Trauma Field Criteria Destination Protocol		
F	Continually reassess	F
P	Consider Tranexamic Acid (TXA) if at risk for significant hemorrhage	P

Contact Medical Control and
Notify Destination

PEARLS

- ✓ Recommended Exam: Mental Status, Skin, HEENT, Heart, Lung, Abdomen, Extremities, Back, Neuro
- ✓ Transport Destination is based on the EMS System Trauma Plan with EMS pre-arrival notification
- ✓ Geriatric patients should be evaluated with a high index of suspicion. Often occult injuries are more difficult to recognize
- ✓ Mechanism is the most reliable indicator of serious injury
- ✓ In prolonged extrications, serious multi-system trauma, or traumatic brain injury, consider air transport
- ✓ Early administration of **TXA** (less than **1 hour** from injury) provides increased benefit, and must be given within **3 hours** of injury
- ✓ Excessive rapid administration of the **TXA** 1 gram bolus may cause **hypotension**
- ✓ Scene times should not be delayed for procedures and should be performed en route when possible
- ✓ Rapid transport of the unstable trauma patient is the goal
- ✓ BVM is an acceptable method of managing the airway if pulse oximetry can be maintained >90%

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



Approved by EMS Medical Director 2012

SEXUAL ASSAULT TRAUMA PROTOCOL # 5 - 11

HISTORY

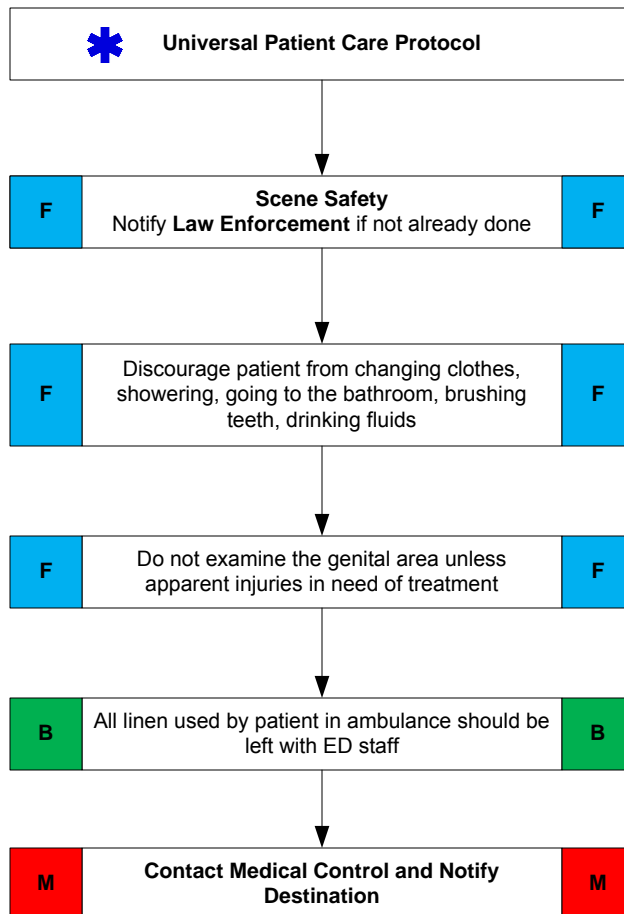
- ✓ Complaint of sexual assault
- ✓ Drugs or alcohol – patient may not be able to recall the assault or events preceding the assault

SIGNS AND SYMPTOMS

- ✓ Unable to recall events
- ✓ Physical signs may or may not be present on initial exam
- ✓ Emotional stress
- ✓ Flat affect

DIFFERENTIAL

- ✓ PTSD/Anxiety
- ✓ Multisystem Trauma
- ✓ Sexually Transmitted Diseases



LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

PEARLS

- ✓ Early notification to trauma center ensures timely notification of Sexual Assault Nurse Examiner
- ✓ Discouraging patient from changing clothes, showering, going to the bathroom, brushing teeth, or drinking fluids helps ensure the quality of evidence
- ✓ Collaborate with the police to determine what articles will be transported with the patient. Police may package evidence on scene or in the ED

TRAUMA PROTOCOL # 5 - 11

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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TRAUMATIC ARREST TRAUMA PROTOCOL # 5 - 12

HISTORY

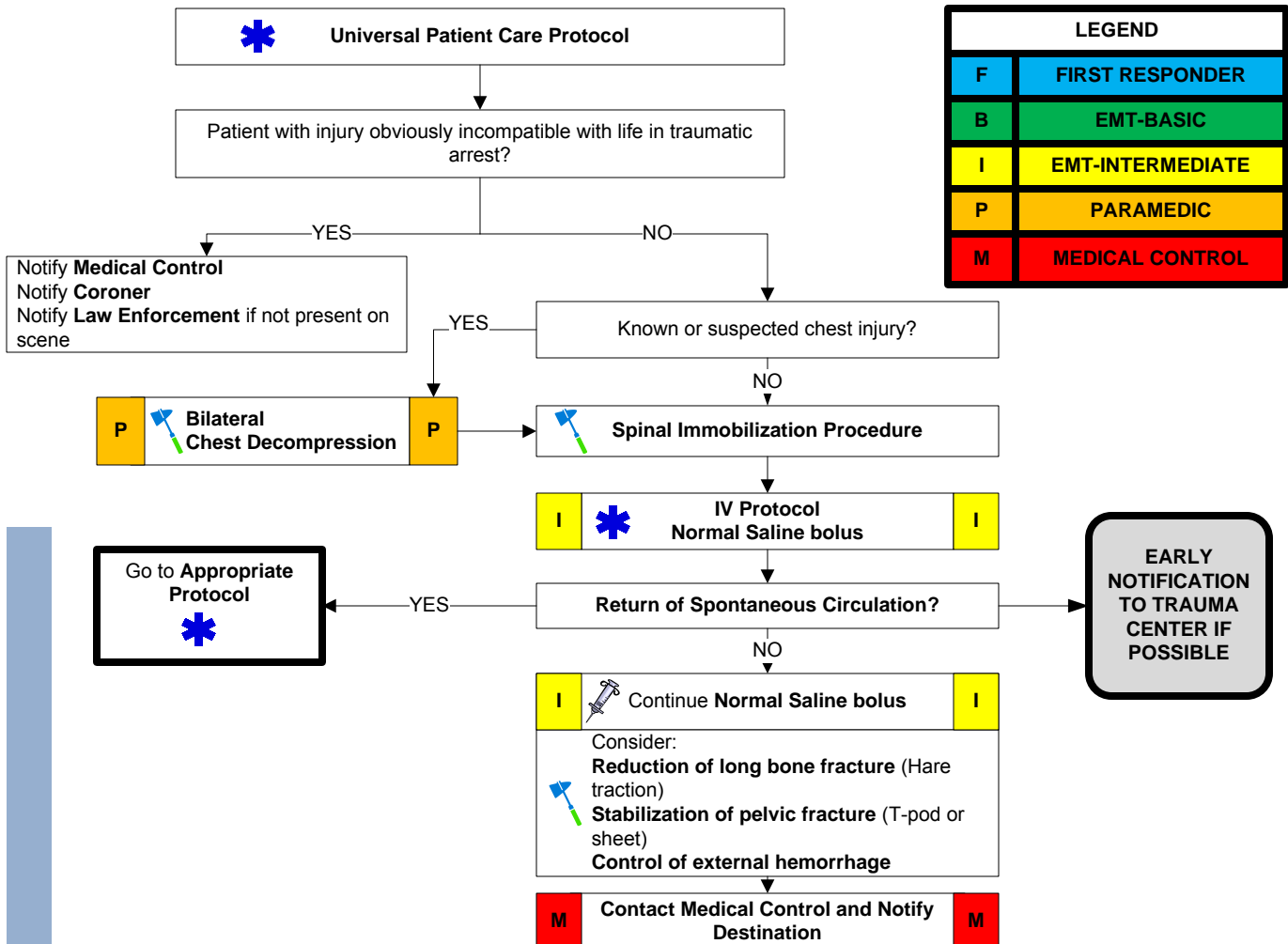
- ✓ Patient who has suffered traumatic injury and is now pulseless

SIGNS AND SYMPTOMS

- ✓ Evidence of penetrating trauma
- ✓ Evidence of blunt trauma

DIFFERENTIAL

- ✓ Medical condition preceding traumatic event as cause of arrest
- ✓ Tension pneumothorax
- ✓ Hypovolemic shock
 - External hemorrhage
 - Unstable pelvic fracture
 - Displaced long bone fracture(s)
 - Hemothorax
 - Intra-abdominal hemorrhage
 - Retroperitoneal hemorrhage



PEARLS

- ✓ Injuries obviously incompatible with human life include decapitation, massively deforming head or chest injuries, or other features of a particular patient encounter that would make resuscitation futile. If in doubt, place patient on monitor and contact Medical Control
- ✓ Consider using cardiac arrest protocols if uncertainty exists regarding medical or traumatic cause of arrest
- ✓ As with all major trauma patients, transport should not be delayed
- ✓ Where use of spinal immobilization interferes with quality CPR, make reasonable efforts to manually limit patient movement

Special Response Protocols

School Bus Accident

Protocol 6-01

Start / JumpStart Algorithm

Protocol 6-02

TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



Approved by EMS Medical Director 2012

SCHOOL BUS ACCIDENT SPECIAL RESPONSE PROTOCOL # 6 - 01

HISTORY

- ✓ Mechanism of injury
- ✓ Number of patients
- ✓ Damage to the vehicle
- ✓ Ages of children
- ✓ Special needs population

SIGNS AND SYMPTOMS

- ✓ Altered mental status
- ✓ Pain, swelling
- ✓ Deformity, lesions, bleeding
- ✓ Hypotension or shock
- ✓ Shortness of breath

DIFFERENTIAL

- ✓ Refer to specific protocols for individual complaints
- ✓ Enlist help of parents with pediatrics, especially special needs population

CATEGORY A

- Significant mechanism of injury (e.g., rollover, high-speed impact, intrusion into bus, etc.)
- School bus occupancy indicates that at least one child may reasonably be expected to have significant injuries or significant injury is present in one or more children

- All children in this category **must** be transferred to an appropriate hospital **unless** an EMS System refusal form is signed by a parent or legal guardian.

CATEGORY B

- Suspicious mechanism of injury (e.g., speed of impact, some intrusion into bus, etc.)
- School bus occupancy indicates that at least one child may reasonably be expected to have minor injuries or minor injury in one or more children exists with no obvious mechanism of injury that could reasonably be expected to cause significant injuries.

- EMS personnel must complete the *EMS Multiple Casualty Release Form* and secure a signature of an appropriate school official.

CATEGORY C

- No obvious mechanism of injury
- School bus occupancy indicates no injuries may be present and that the release of uninjured children may be the only EMS need.
- No injuries are found to be present in any of the children.

- EMS personnel must complete the *EMS Multiple Casualty Release Form* and secure a signature of an appropriate school official.

CATEGORY D

- Pediatric patient(s) have special healthcare needs and/or communication difficulties.

- All of these patients **must** be transported to the hospital for evaluation **unless** approval for release is received from Medical Control or a parent/legal guardian has signed the approved refusal form.

CALL MEDICAL
CONTROL
FOR EARLY
NOTIFICATION OF
MULTIPLE
PEDIATRIC
TRAUMA

PEARLS

- ✓ Utilize START/Jump START triage protocol
- ✓ EMS Multiple Casualty Release Forms found in Appendix - FORMS
- ✓ You may enlist law enforcement to remove anyone obstructing EMS from caring for patients. Work in concert with agency having jurisdiction

SPECIAL RESPONSE PROTOCOL # 6 - 01

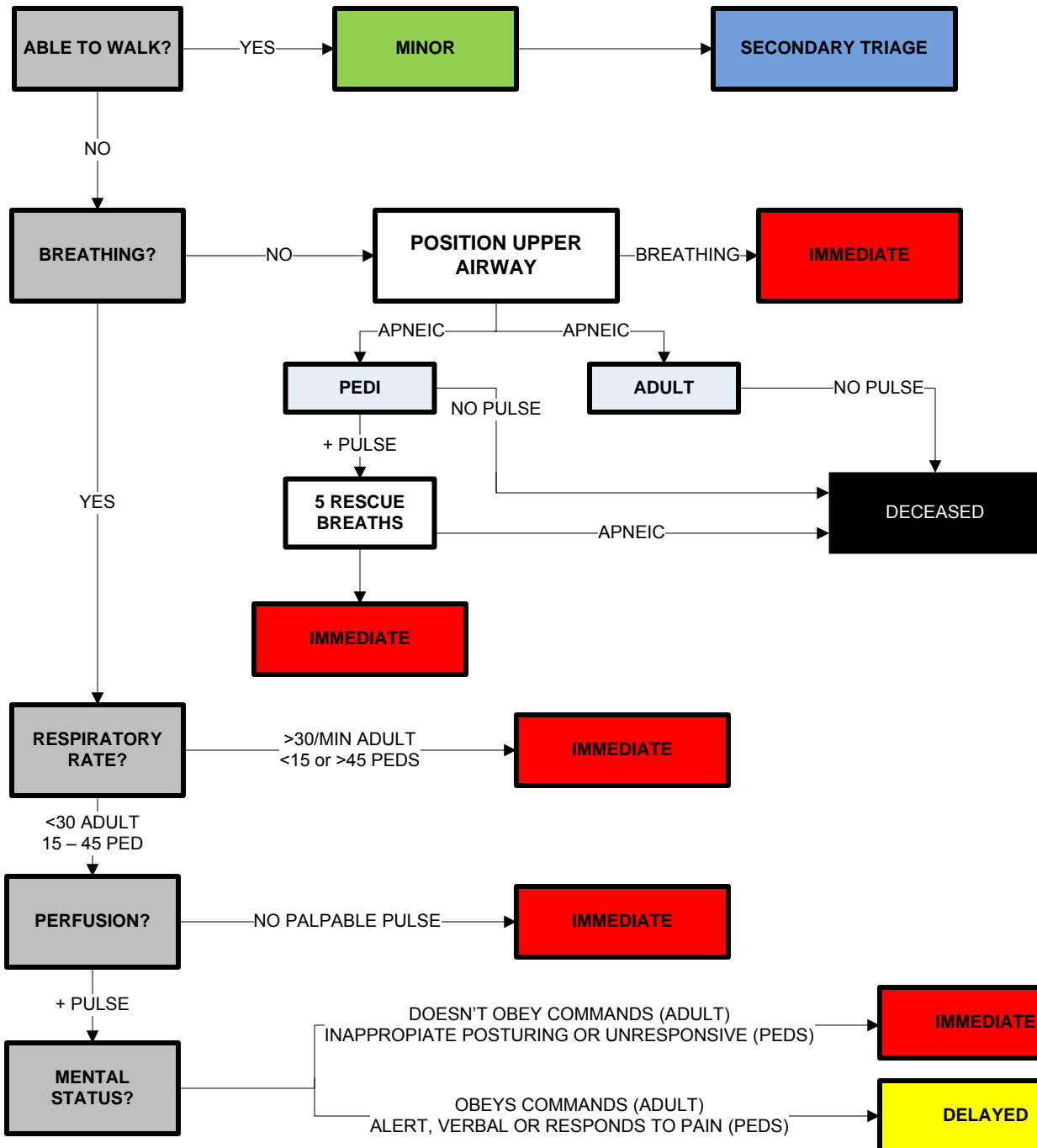
TRINITY EMS SYSTEM PREHOSPITAL GUIDELINES



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START/JUMP START TRIAGE
SPECIAL RESPONSE PROTOCOL # 6 - 02

SPECIAL RESPONSE PROTOCOL # 6 - 02



PEARLS

- ✓ Using the Jump Start Algorithm, first evaluate all children who did not walk under their own power
- ✓ ALL EMS providers are encouraged to use the Triage Algorithm any time there are more than 2 – 3 patients requiring evaluation, treatment, or transport

Triage and Destination Protocols

ROSC / Post-Resuscitation

Protocol 7-01

STEMI

Protocol 7-02

Suspected Stroke

Protocol 7-03

Trauma Criteria

Protocol 7-04

TRINITY EMS TRIAGE AND DESTINATION PLAN



Approved by EMS Medical Director

ROSC/ POST- RESUSCITATION DESTINATION PROTOCOL # 7 - 01

The purpose of this plan is to direct transport of post-cardiac arrest patients to the most appropriate facilities with capabilities to most appropriately handle their care.

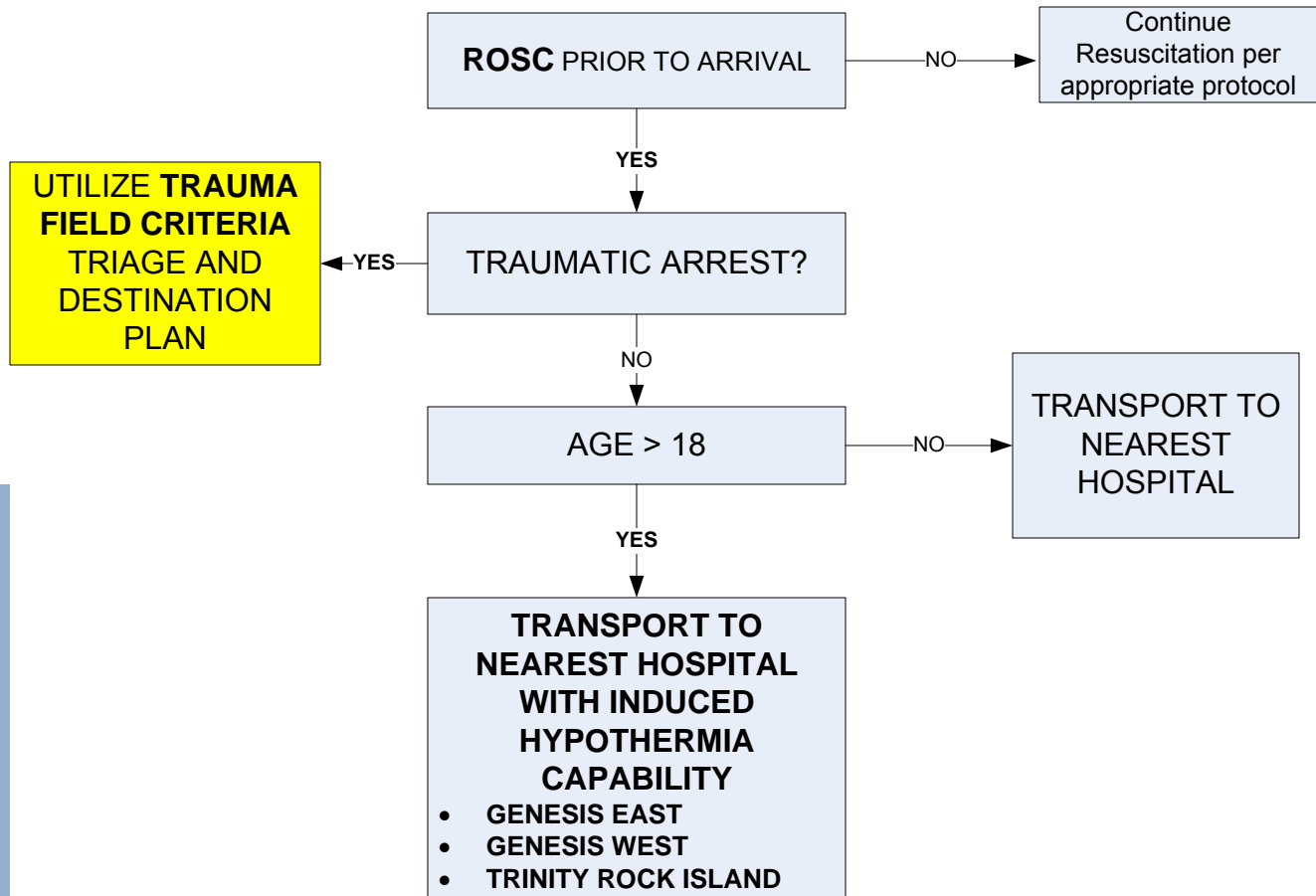
ROSC/ POST – RESUSCITATION PATIENTS:

- CARDIAC ARREST IN THE FIELD
- RESUSCITATION BY EMS RESPONDERS
- ROSC PRIOR TO ARRIVAL

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

TRIAL AND DESTINATION PROTOCOL # 7 - 01



PEARLS

- ✓ Contact Medical Control early and notify them of triage and destination plan
- ✓ If transport times are greater than 30 minutes, proceed to the closest hospital
- ✓ In situations with Re-arrest, proceed to the closest hospital

TRINITY EMS TRIAGE AND DESTINATION PLAN



Approved by EMS Medical Director

STEMI ALERT DESTINATION PROTOCOL # 7 - 02

The purpose of this plan is to:

- Rapidly identify STEMI patients prehospital through 12 lead EKG transmission
- Minimize time to reperfusion through primary Percutaneous Coronary Intervention (PCI)
- Rapidly determine the best hospital destinations based on predicted transport times to PCI hospitals
- Early activation of the hospital personnel and cath labs prior to patient arrival

LEGEND

F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL

Definition of a STEMI Patient:

ST Elevation Myocardial Infarction

- Cardiac symptoms consistent with MI less than 12 hours duration
And
- 12 lead EKG criteria of >1mm of ST elevation in 2 or more contiguous leads
Or
 - New LBBB

Medical Control Confirmation of STEMI Patient
Following 12 lead EKG Transmission

**EARLY STEMI NOTIFICATION/
ACTIVATION
OF NEAREST 24/7 PCI CAPABLE
HOSPITAL**
ILLINI
GENESIS EAST
MERCY MEDICAL CLINTON
TRINITY BETTENDORF
TRINITY ROCK ISLAND

PEARLS

- ✓ Minimize scene times to less than 15 minutes with 12 lead transmission
- ✓ Notify Medical Control of STEMI Destination plan to bypass closer non-PCI hospitals
- ✓ Proceed to nearest hospital if predicted transport time exceeds 30 minutes
- ✓ Patient preference may override destination plans, but informed consent and AMA form should be completed for delays in treatment and non-PCI center destinations

TRIAL AND DESTINATION PROTOCOL # 7 - 02

TRINITY EMS TRIAGE AND DESTINATION PLAN



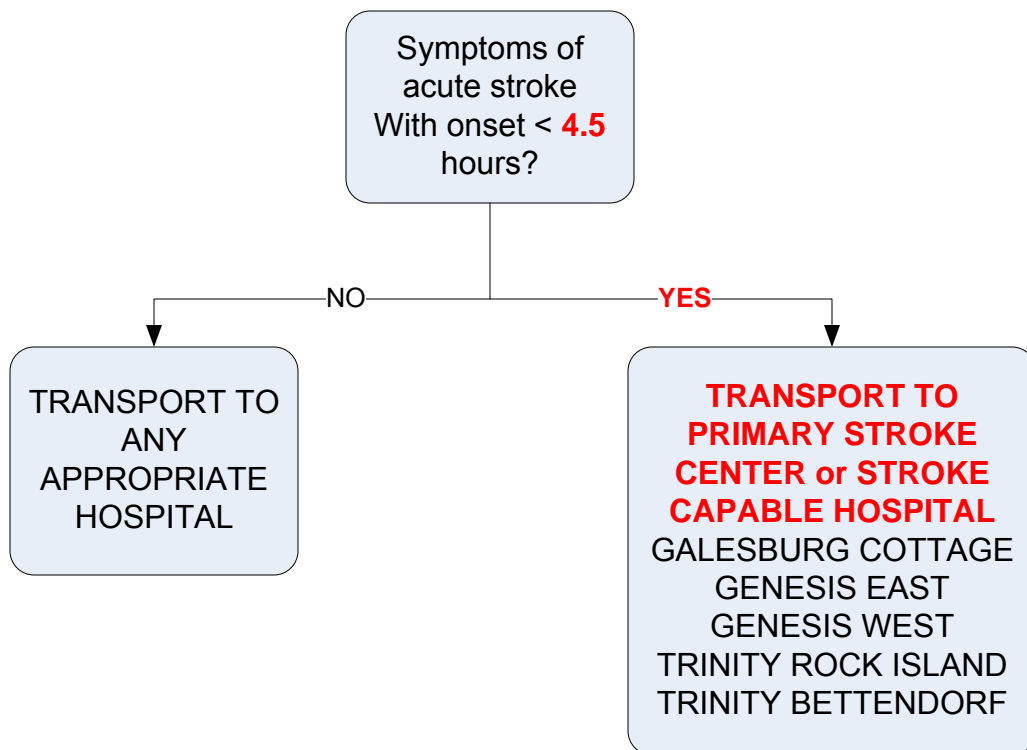
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SUSPECTED STROKE DESTINATION PROTOCOL # 7 - 03

The purpose of the stroke destination plan is to:

- Rapidly identify **acute stroke patients** who present to EMS or utilize 911
- Rapidly apply the **stroke screening tool** utilized by the EMS system
- Attempt to identify the **time of onset** of symptoms or time last normal
- Identify patients potentially eligible for thrombolytic treatment within the **4.5 hour** treatment window
- Rapidly transport to the most appropriate facility for care

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC
M	MEDICAL CONTROL



PEARLS

- ✓ Primary Stroke Centers are certified by the Joint Commission and are able to provide 24/7 CT capabilities, identify acute stroke patients, administer thrombolytics, and provide care for stroke patients
- ✓ Minimize scene times to less than 10 minutes
- ✓ Destination plan should be utilized for transport times predicted to be less than 30 minutes, otherwise proceed to closest hospital
- ✓ Patient preference may override destination plans, but informed consent and AMA form should be completed for delays in treatment to alternate destinations

TRIAL AND DESTINATION PROTOCOL # 7 - 03

TRINITY EMS TRIAGE AND DESTINATION PLAN



Approved by EMS Medical Director

TRAUMA FIELD CRITERIA DESTINATION PROTOCOL # 7 - 04

EMS PRE-HOSPITAL LEVEL I TRAUMA

Patients who are determined to have the following shall be classified in the field:

- Sustained Hypotension/ SBP <90 (Peds <80 SBP) on two consecutive measurements five minutes apart
- Cavity Penetration of the Neck or Torso
- Any other patient as deemed by Medical Control

CATEGORY I TRAUMA ALERT

Blunt or penetrating trauma with unstable vital signs and/or hemodynamic compromise as evidenced by

- **BP systolic <90 adult, BP systolic <80 pediatric**
- Respiratory compromise as evidenced by **Respiratory Rate <10 or > 29**
- Altered mentation as evidenced by **GCS ≤ 10**
- Penetrating injury of head, neck, torso, or groin
- Two or more body regions with potential life or limb threat
- Combination trauma with **20% TBSA burn**
- **Amputation** above wrist or ankle
- **Limb paralysis and/or sensory deficit** above the wrist and ankle
- **Flail chest**
- Two or more proximal long bone fractures

CATEGORY II TRAUMA ALERT

- **Ejection** from motor vehicle
- Death in same passenger compartment
- **Falls >20 feet adult**
- Pediatric falls > 3 times body length
- **Rollover**
- High speed auto crash – initial speed > **40 mph**
- **Motorcycle crash > 20 mph** and/or ejection from the bike
- **Extrication time > 20 minutes**
- Major auto deformity > 20" or Intrusion into passenger compartment > 12"
- Motor vehicle vs pedestrian or bicyclist struck > 5 mph
- Pedestrian thrown or run over

SPECIAL CONSIDERATIONS/RISK FACTORS

- **Pregnancy > 20 weeks**
- **Patient >65 years of age** with multisystem or high energy MOI
- **Anticoagulation and bleeding disorders**
- **Provider judgment**

Trauma Centers:

Iowa (Level II):

Genesis East

Illinois (Level II):

Illini

Trinity Rock Island

PEARLS

- ✓ For Category I patients, transport to nearest Level I/II Trauma Center and consider Air transport early if deemed most appropriate
- ✓ If transport > 30 minutes to Level I/II for category I patients, transport to nearest hospital

TRIAGE AND DESTINATION PROTOCOL # 7 - 04

Procedures

12 Lead EKG	Procedure 01	Cardioversion	Procedure 28
Airway: BPAP	Procedure 02	Chest Decompression Needle	Procedure 29
Airway: CPAP	Procedure 03	Chest Tube Maintenance	Procedure 30
Airway: End-Tidal CO2	Procedure 04	Childbirth	Procedure 31
Airway: ETT Introducer (Bougie)	Procedure 05	Decontamination	Procedure 32
Airway: Foreign Body Obstruction	Procedure 06	Defibrillation: Automated	
Airway: Intubation Nasotracheal	Procedure 07	External Defibrillator (AED)	Procedure 33
Airway: Intubation Orotracheal	Procedure 08	Defibrillation: Manual	Procedure 34
Airway: King LTD	Procedure 09	EKG Monitoring	Procedure 35
Airway: Nebulizer Inhalation		Impedance Threshold Device (ITD)	Procedure 36
Therapy	Procedure 10	Injections: Subcutaneous	
Airway: Rapid Sequence Intubation	Procedure 11	and intramuscular	Procedure 37
Airway: Respirator Operation	Procedure 12	Intranasal Medication	
Airway: Suctioning – Advanced	Procedure 13	Administration	Procedure 38
Airway: Suctioning – Basic	Procedure 14	Pulse Oximetry	Procedure 39
Airway: Surgical Cricothyrotomy	Procedure 15	Restraints: Physical/Chemical	Procedure 40
Airway: Tracheostomy Tube Change	Procedure 16	Spinal Examination	Procedure 41
Airway: Ventilator Operation	Procedure 17	Spinal Immobilization	Procedure 42
Arterial Line Maintenance	Procedure 18	Splinting	Procedure 43
Assessment: Adult	Procedure 19	Stroke Screen: (Cincinnati	
Assessment: Pain	Procedure 20	Pre-hospital)	Procedure 44
Assessment Pediatric	Procedure 21	Temperature Measurement	Procedure 45
Blood Glucose Analysis	Procedure 22	Venous Access: Existing Catheters	Procedure 46
Capnography	Procedure 23	Venous Access: External Jugular	Procedure 47
Cardiac: External Pacing	Procedure 24	Venous Access: Extremity	Procedure 48
Cardiac: Internal Pacemaker		Venous Access: Intraosseous	Procedure 49
Maintenance	Procedure 25	Wellness Check	procedure 50
Cardiopulmonary Resuscitation		Wound Care: General	Procedure 51
(Automation)	Procedure 26	Wound Care: Taser Probe Removal	procedure 52
Cardiopulmonary Resuscitation		Wound Care: Tourniquet	Procedure 53
(Manual)	Procedure 27		

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

12 LEAD EKG PROCEDURE # 1

CLINICAL INDICATIONS

- ✓ Suspected cardiac patient
- ✓ Suspected overdose
- ✓ Electrical injuries
- ✓ Syncope

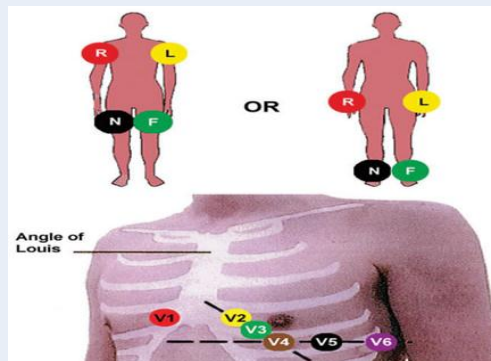
PROCEDURE

1. Assess patient and monitor cardiac status.
2. Administer oxygen as patient condition warrants.
3. If patient is unstable, a definitive treatment is the priority. If patient is stable or stabilized after treatment, perform a 12 lead EKG. In general, a 12 lead should be obtained in the first 10 minutes of the patient encounter.
4. Prepare EKG monitor and connect patient cable with electrodes.
5. Enter the required patient information into the 12 lead EKG device.
6. Expose chest and prep as necessary. Modesty of the patient should be respected.
7. Apply chest leads and extremity leads using the following landmarks:
 - ✓ RA – right arm
 - ✓ LA – left arm
 - ✓ RL – right leg
 - ✓ LL – left leg
 - ✓ V1 – 4th intercostal space at the right sternal border
 - ✓ V2 – 4th intercostal space at the left sternal border
 - ✓ V3 – Directly between V2 and V4
 - ✓ V4 – 5th intercostal space at midclavicular line
 - ✓ V5 – level with V4 at left anterior axillary line
 - ✓ V6 – level with V5 at the left midaxillary line
8. Instruct patient to remain still.
9. Press the appropriate button to acquire the 12 lead EKG.
10. Transmit the 12 lead to Medical Control. **EMT-B's may only transmit 12 lead EKG's and are not permitted to monitor or interpret cardiac monitors or 12 lead EKG's.**
11. Contact the receiving hospital to notify them of 12 lead EKG transmission.
12. Treat the patient per the appropriate treatment protocol.
13. Download data per guidelines and attach copy to PCR.
14. Document procedure, time, and results on 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 Trinity EMS System.

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC



TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: BPAP PROCEDURE # 2

CLINICAL INDICATIONS FOR BILEVEL POSITIVE AIRWAY PRESSURE (CPAP USE):

- ✓ Bilevel Positive Airway Pressure (BPAP) aids in the oxygenation and ventilation of a variety of medical conditions
- ✓ Transport of patients receiving BPAP with a mechanical ventilator

CONTRAINDICATIONS:

- Suspected Pneumothorax
- Inability to maintain own airway
- Altered Mental Status or GCS <8
- Facial Trauma or Burns

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Confirm that the patient is tolerating the BPAP and meets criteria.
2. Assess the BPAP mask for comfort and fit.
3. Document and observe the underlying diagnosis, current settings, physical exam noting cranio-facial abnormalities, pulmonary and cardiac exam, baseline mental status and pulse oximetry.
4. Connect the transport BPAP to suitable oxygen supply.
5. Attach the breathing circuit to BPAP and check adequate function.
6. Apply and secure the circuit to the patient .
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 optimal use of the BPAP device.
10. Confirm settings and physician orders prior to transport.
11. Continuously monitor pulse oximetry.
10. Document time, complications and response on the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: CPAP PROCEDURE # 3

CLINICAL INDICATIONS FOR CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP USE):

- ✓ CPAP is indicated in patients for whom inadequate ventilation is suspected. This could be as a result of pulmonary edema, pneumonia, COPD, asthma, etc. In asthmatic patients, continuous monitoring is required to reduce the risk of respiratory depression or arrest

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Ensure adequate oxygen supply to ventilation device.
2. Explain the procedure to the patient.
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.
5. Secure the mask with provided straps starting with the lower straps until minimal air leak occurs.
6. If the Positive End Expiratory Pressure (PEEP) is adjustable on the CPAP device adjust the PEEP beginning at 0 cm H₂O of pressure and slowly titrate to achieve a positive pressure as follows:
 - 5-10 cm H₂O for Pulmonary Edema, Near Drowning, possible aspiration or pneumonia
 - 3-5 cm H₂O for COPD
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 optimal use of the CPAP device.
10. Document time and response on the 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.

SKILLS PROCEDURE # 3

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: END-TIDAL CO2 DETECTOR PROCEDURE # 4

CLINICAL INDICATORS:

- ✓ The End-Tidal CO2 detector shall be used with any endotracheal tube or Blind Insertion Airway Device use

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Attach End-Tidal CO2 detector to the ETT/BIAD.
2. Note color change. A color change or CO2 detection will be documented on each respiratory failure or cardiac arrest patient.
3. The CO2 detector shall remain in place with the airway and monitored throughout the prehospital car and transport unless continuous capnography is used. Any loss of CO2 detection or color change is to be documented and monitored as procedures are done to verify or correct the airway problem.
4. Tube placement should be verified frequently and always with each patient move or loss of color change in the End-Tidal CO2 detector.
5. Document the procedure and results in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

AIRWAY: ENDOTRACHEAL TUBE INTRODUCER PROCEDURE # 5

CLINICAL INDICATORS:

- ✓ Patients meet clinical requirements for oral intubation
- ✓ Initial intubation attempts are unsuccessful
- ✓ Predicted difficult intubation

LEGEND	
P	PARAMEDIC

CONTRAINDICATIONS:

- ✓ Three failed attempts at orotracheal intubation (use Failed Airway Protocol)
- ✓ Age less than 9 or ETT size less than 6.5 mm

PROCEDURE:

1. Prepare, position and oxygenate the patient with 100% oxygen.
2. Select the proper ETT without stylet, test cuff and prepare suction.
3. Lubricate the distal end and cuff of the ETT and the distal ½ of the ETT Introducer, i.e. Bougie (failure to lubricate may result in the inability to pass the ETT).
4. Using laryngoscope, visualize the vocal cords.
5. Introduce the Bougie with the curved tip anteriorly and visualize the tip passing the vocal cords or above the arytenoids if the cords cannot be seen.
6. Once inserted, gently advance the Bougie until you meet resistance or “hold-up” (if you do not meet resistance you have a probable esophageal intubation and insertion should be reattempted or the Failed Airway Protocol implemented).
7. Withdraw the Bougie ONLY to a depth sufficient to allow loading of the ETT while maintaining proximal control of the Bougie.
8. Gently advance the Bougie and loaded ETT until you have “hold-up” again, thereby assuring tracheal placement and minimizing the risk of accidental displacement of the Bougie.
9. While maintaining a firm grasp on the proximal Bougie, introduce the ETT over the Bougie passing the tube to the appropriate depth.
10. If you are unable to advance the ETT into the trachea and the Bougie and ETT are adequately lubricated, withdrawal the ETT slightly and rotate the ETT 90 degrees counter-clockwise to turn the bevel of the ETT posteriorly.
11. Once the ETT is correctly placed, hold the ETT securely and remove the Bougie.
12. Confirm tracheal placement, inflate the cuff with 3-10 ml of air, auscultate for equal breath sounds and reposition if necessary.
13. When the final position is determined secure the ETT, reassess breath sounds, apply End-Tidal CO2 detector and/or capnography.
14. Document the procedure and the results in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

AIRWAY: FOREIGN BODY OBSTRUCTION PROCEDURE # 6

CLINICAL INDICATIONS:

- ✓ Sudden onset of respiratory distress often with coughing, wheezing, gagging, or stridor due to a foreign-body obstruction of the upper airway
- ✓ Respiratory arrest where ventilation cannot be accomplished after repositioning of airway

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Assess the degree of foreign body obstruction
 - Do not interfere with a mild obstruction allowing the patient to clear their airway by coughing.
 - In severe foreign body obstructions, the patient may not be able to make a sound. The victim may clutch his/her neck in the universal choking sign.
2. **For an infant**, deliver 5 back blows (slaps) followed by 5 chest thrusts repeatedly until the object is expelled or the victim becomes unresponsive.
3. **For a child**, perform a subdiaphragmatic abdominal thrust (Heimlich Maneuver) until the object is expelled or the victim becomes unresponsive.
4. **For adults**, a combination of maneuvers may be required.
 - First, subdiaphragmatic abdominal thrust (Heimlich Maneuver) should be used in rapid sequence until the obstruction is relieved.
 - If abdominal thrusts are ineffective, chest thrusts should be used. Chest thrusts should be used primarily in morbidly obese patients and in the patients who are in the late stages of pregnancy.
5. If the victim becomes unresponsive, begin CPR immediately but look in the mouth before administering any ventilations. If a foreign body is visible, remove it.
6. **Do not perform blind finger sweeps in the mouth and posterior pharynx. This may push the object farther into the airway.**
7. In unresponsive patients, EMT-Paramedic level professionals should visualize the posterior pharynx with a laryngoscope to potentially identify and remove the foreign-body using Magil forceps.
8. Document the methods used and result of these procedures in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

AIRWAY: INTUBATION NASOTRACHEAL PROCEDURE # 7

CLINICAL INDICATIONS:

- ✓ A spontaneously breathing patient in need of intubation (inadequate respiratory effort, evidence of hypoxia or carbon dioxide retention, or need for airway protection)
- ✓ Rigidity or clenched teeth prohibiting other airway procedures

CONTRAINDICATIONS:

- ✓ Non-breathing or near apneic patient
- ✓ Known or likely fracture/instability of mid-face secondary to trauma
- ✓ Relative contraindications:
 - Blood clotting abnormalities
 - Nasal Polyps
 - Upper neck hematomas or infections

LEGEND

P

PARAMEDIC

PROCEDURE:

1. Prepare, position and oxygenate the patient with 100% oxygen.
2. Choose proper ET tube about 1mm less than for oral intubation.
3. Instill nasal spray into appropriate nostril if available.
4. Lubricate ET tube generously with water-soluble lubricant.
5. Pass the tube in the largest nostril with the beveled edge against the nasal septum and perpendicular to the facial plate.
6. Use forward, lateral back and forth rotating motion to advance the tube. **Never force the tube.**
7. Continue to advance the tube noting air movement through it.
8. Apply firm cricoid pressure, advance the tube quickly past the vocal cords during inspiration.
9. Inflate the cuff with 5 to 10cc of air.
10. Auscultate for absence of sounds over epigastrium and presence of equal bilateral breath sounds. If present unilaterally/unequal, adjust tube position and consider whether this may be patient's baseline. If unsure of placement, remove tube and ventilate with bag-valve mask.
11. **Apply end tidal carbon dioxide monitor. After 3 ventilations, ETCO2 must be >10. If less than 10 check for adequate circulation and check equipment. Remove the ET tube if pCO2 remains <10 in the absence of a physiologic explanation.**
12. If ETCO2 equipment failure occurs, use other means for confirmation.
13. Secure the tube to the patient's face.
14. Reassess airway, breath sounds, and ETCO2 after transfer to the stretcher and during transport. These tubes are easily dislodged and require close monitoring and frequent reassessment.
15. Document procedure and complications in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

AIRWAY: INTUBATION OROTRACHEAL PROCEDURE # 8

CLINICAL INDICATIONS:

- ✓ Inability to adequately ventilate a patient with a Bag Valve Mask or longer EMS transport distances require a more advanced airway
- ✓ An unconscious patient without a gag reflex who is apneic or is demonstrating inadequate respiratory effort
- ✓ Risk to benefit ratio of oral tracheal intubation to BIAD insertion

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Prepare, position and oxygenate the patient with 100% Oxygen.
2. If patient is in cardiac arrest, monitor pre-intubation ETCO₂ for post-intubation comparison.
3. Select proper ET tube (and stylette), have suction ready.
4. Using laryngoscope, visualize vocal cords. (Use Sellick maneuver/BURP/bimanual laryngoscopy to assist you).
5. Limit each intubation attempt to 30 seconds with BVM between attempts.
6. Visualize tube passing through vocal cords then inflate the cuff with 3 to 10cc of air.
7. Auscultate for absence of sounds over epigastrium and presence of bilaterally equal breath sounds. If present unilaterally or unequal, adjust tube position or consider whether this may be patient's baseline. If unsure of placement, remove tube and ventilate patient with bag-valve mask.
8. **Apply end tidal carbon dioxide monitor. After 3 ventilations, ETCO₂ should be >10 or comparable to pre-intubation values. If <10 check for adequate circulation, check equipment, and check ventilatory rate. Remove the ET tube and ventilate by bag valve mask if ETCO₂ still <10 and no obvious physiologic explanation.**
9. **Record initial, ongoing, and final ETCO₂ values.**
10. **If ETCO₂ monitor fails, use other means to confirm.**
11. Secure the tube to the patient's face.
12. Consider using BIAD if ET intubation efforts are unsuccessful.
13. Document ETT size, time, result (success), and placement location by the centimeter marks either at the patient's teeth or gums on/with the patient care report (PCR). Document all devices used to confirm initial tube placement. Also document positive or negative breath sounds before and after each movement of the patient.

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 deemed appropriate by the EMS System.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: KING LT-D PROCEDURE # 9

CLINICAL INDICATIONS:

- ✓ Cardiac arrest where initial BLS airway management has been completed per protocol or sufficient personnel are present to perform without interruption in other cardiac arrest care
- ✓ Non-Cardiac arrest patient without a gag reflex for whom at least one failed intubation attempt has occurred OR the King can be placed more rapidly or without less interruption to care
- ✓ Appropriate intubation is impossible due to patient access or difficult airway anatomy
- ✓ A **Blind Insertion Airway Device (BIAD)** utilized and preferred by Trinity EMS System

ABSOLUTE CONTRAINDICATIONS:

- ✓ Deforming facial trauma

RELATIVE CLINICAL CONTRAINDICATIONS:

- ✓ Pulmonary fibrosis
- ✓ Morbid obesity

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

WARNING:

This airway may not prevent aspiration of stomach contents

PROCEDURE:

1. Prepare, position and oxygenate the patient with 100% oxygen.
2. Choose King LT-D size per package recommendations.
3. Check the cuffs for proper inflation and deflation.
4. Apply chin lift and introduce device to corner of mouth.
5. Advance tip between tongue and soft palette rotating tube to midline.
6. Without excessive force, advance tube until base of connector aligns with teeth or gums.
7. Inflate the cuff per the manufacturer's recommendations until a seal is obtained.
8. Connect the LT-D to an ambu bag, ventilate, and slowly withdraw tube until ventilation becomes easy and free flowing (normal tidal volume with minimal airway pressure).
9. **Employ capnography and utilize the Impedance Threshold Device Procedure if appropriate.**
10. If necessary, adjust cuff inflation pressure to maximize seal.
11. Re-verify King LT-D placement after every move and upon arrival in the ED.
12. Document the procedure, time, and result on the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

AIRWAY: NEBULIZER INHALATION THERAPY PROCEDURE # 10

CLINICAL INDICATIONS:

- ✓ Patients experiencing bronchospasm

PROCEDURE:

1. Gather the necessary equipment.
2. Assemble the nebulizer kit.
3. Install the premixed drug(such as Albuterol or other approved drug) into the reservoir well of the nebulizer.
4. Connect the nebulizer device to oxygen at 6 liters per minute or adequate flow to produce a steady, visible mist. When necessary, this may be used in conjunction with CPAP at low positive pressures (less than or equal to 5 cm H2O where measurable), or with BVM ventilations.
5. For the spontaneously breathing patient, instruct them to inhale normally through the mouthpiece of the nebulizer or through the appropriate mask to which it is attached.
6. The treatment should last until the solution is depleted. Tapping the reservoir well near the end of the treatment will assist in utilizing all of the solution.
7. Monitor the patient for medication effects. This should include the patient's assessment of his/her response to the treatment and reassessment of vital signs, EKG, and breath sounds.
8. Document the treatment, dose, and route with the patient care report (PCR).

LEGEND	
B	EMT - BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: RAPID SEQUENCE INTUBATION PROCEDURE # 11

CLINICAL INDICATIONS:

- ✓ Need for advanced airway control in a patient who has a gag reflex or trismus (jaw clenching)
- ✓ **Paramedics must be approved individually by the system Medical Director to perform this procedure**

LEGEND

P

PARAMEDIC

CONTRAINDICATIONS:

- ✓ Significant burns between 24 hours and 2 weeks old
- ✓ Known neuromuscular disease such as myasthenia gravis, amyotrophic lateral sclerosis, muscular dystrophy, Guillain-Barre syndrome
- ✓ Chronic renal failure and on hemodialysis
- ✓ Age less than 12 years
- ✓ Patient or family history of malignant hyperthermia
- ✓ Inadequate personnel to participate in patient care

PROCEDURE:

1. Prepare, position and oxygenate the patient with 100% oxygen via BVM or NRB mask.
2. Monitor oxygen saturation with pulse oximetry and heart rhythm with EKG.
3. Ensure functioning IV access.
4. Evaluate for difficult airway (LEMON).
5. Prepare equipment (laryngoscope, endotracheal tube, BVM, suction, medications, BIAD, cricothyrotomy kit, waveform capnography, ETCO2 detector).
6. Administer **Etomidate**.
7. Stroke/Head trauma suspected? If yes, **Lidocaine** 1mg/kg and consider **Fentanyl**.
8. Inline C-spine stabilization by second caregiver in trauma settings.
9. Apply cricoid pressure by third caregiver.
10. Administer **Succinylcholine/Rocuronium** and await paralysis as observed by fasciculations or muscle relaxation, generally 45 to 60 seconds.
11. Perform direct laryngoscopy and intubate trachea with visualization of tube passing through vocal cords with possible aid of Sellick's/BURP Maneuver or bimanual laryngoscopy.
12. Inflate balloon of ETT, verify placement with auscultation, fogging, capnography, ETCO2, and pulse oximetry.
13. Release cricoid pressure and secure the tube to the patient's face.
14. Reassess airway, breath sounds, and ETCO2 after transfer to the stretcher and during transport. Continuous capnography and pulse oximetry is recommended with pre-intubation, minimum levels during intubation, and post-intubation levels documented.
15. Document ETT size, results, placement in cm at the teeth and submit with 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: RESPIRATOR OPERATION # 12

CLINICAL INDICATIONS:

- ✓ Transport of an intubated patient

LEGEND

P

PARAMEDIC

PROCEDURE:

1. Confirm the placement of the endotracheal tube.
2. Ensure adequate oxygen delivery to the respirator device.
3. Preoxygenate the patient with a BVM.
4. Remove the BVM and attach the ETT to the respirator.
5. Per the device instructions, set initial respiration values. For example, set an inspiratory/expiratory ratio of 1:2 (for every 1 second of inspiration, allow 2 seconds of expiration) with a rate of 12-20, FiO₂ 40-100%, and PEEP 5-10.
6. Assess breath sounds. Allow for adequate expiratory time. Adjust respirator setting as clinically indicated.
7. Patient must be monitored with continuous pulse oximetry. It is strongly recommended the airway be monitored with continuous capnography. The ideal pulse oximetry should be >94% and a pCO₂ of 30-35.
8. If the patient condition worsens, deteriorates, or there is a question about respirator function, disconnect from the respirator and resume BVM ventilation.
9. Document time, complications, and patient response in the 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.

SKILLS PROCEDURE # 12

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: SUCTIONING- ADVANCED PROCEDURE # 13

CLINICAL INDICATORS:

- ✓ Obstruction of the airway (secondary to secretions, blood, or any other substance) in a patient currently being assisted by an airway adjunct such as a nasotracheal tube, endotracheal tube, combitube, tracheostomy tube, or a cricothyrotomy tube

LEGEND	
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Ensure suction device is in proper working order.
2. Preoxygenate the patient as is possible.
3. Attach suction catheter to suction device, keeping sterile plastic covering over catheter.
4. Using the suprasternal notch and the end of the airway into the catheter will be placed as guides, measure the depth desired for the catheter (judgement must be used regarding the depth of suctioning with cricothyrotomy and tracheostomy tubes).
5. If applicable, remove ventilation devices from the airway.
6. With the thumb port of the catheter uncovered, insert the catheter through the airway device.
7. Once the desired depth (measured in #4 above) has been reached, occlude the thumb port and remove the suction catheter slowly.
8. A small amount of Normal Saline (10ml) may be used if needed to loosen secretions for suctioning.
9. Reattach ventilation device (e.g., bag-valve mask) and ventilate the patient.
10. Document time and result in the 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.

SKILLS PROCEDURE # 13

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: SUCTIONING-BASIC PROCEDURE # 14

CLINICAL INDICATORS:

- ✓ Obstruction of the airway (secondary to secretions, blood, or any other substance) in a patient who cannot maintain or keep the airway clear

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Ensure suction device is in proper working order with suction tip in place.
2. Preoxygenate the patient as is possible.
3. Explain the procedure to the patient if they are coherent.
4. Examine the oropharynx and remove any potential foreign bodies or material which may occlude the airway if dislodged by the suction device.
5. If applicable, remove ventilation devices from the airway.
6. Use the suction device to remove any secretions, blood, or other substance.
7. The alert patient may assist with this procedure.
8. Reattach ventilation device (e.g., bag-valve mask) and ventilate or assist the patient.
9. Record the time and result of the suctioning in the 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.

SKILLS PROCEDURE # 14

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

AIRWAY: SURGICAL CRICO- THYROTOMY PROCEDURE # 15

CLINICAL INDICATIONS:

- Surgical Airway as indicated by the Failed Airway Protocol using Rusch QuickTrach

PROCEDURE:

1. Pre-oxygenate patient when possible.
2. Assemble all available additional personnel.
3. Locate cricothyroid membrane at the inferior portion of the thyroid cartilage (with head in neutral position, membrane is approximately 3 finger widths above the sternal notch).
4. Have assistant hold skin taut over membrane and locate the midline.
5. Prep area with betadine if possible.
6. Hold the needle bevel up at 90 degree angle, aimed inferiorly as you approach the skin.
7. Puncture the skin with the needle and continue with firm, steady pressure while aspirating for air with the syringe.
8. As soon as air is aspirated freely, stop advancing the needle/airway assembly.
9. Modify the angle to 60 degrees from the head and advance to level of the stopper.
10. Remove the stopper while holding the needle/airway assembly firmly in place. Do not advance the needle further. (NOTE: if the patient is obese and no air can be aspirated with the stopper in place, you may remove the stopper and continue advancing until air is aspirated. Be aware that without the stopper, risk of perforating the posterior aspect of the trachea is greatly increased.)
11. Hold the needle and syringe firmly and slide only the plastic cannula along the needle into the trachea until the flange rests on the neck. Carefully remove the needle and syringe.
12. Secure the cannula with the neck strap.
13. Apply the EtCO₂ detector, then the connecting tube to the EtCO₂ detector and connect the other end to the BVM.
14. Confirm placement with the use of breath sounds, pulse oximetry, and EtCO₂.
15. Ensure 100% FiO₂ to BVM via supplemental O₂.

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.

LEGEND	
P	PARAMEDIC

SKILLS PROCEDURE # 15

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

AIRWAY: TRACHEOSTOMY TUBE CHANGE PROCEDURE # 16

CLINICAL INDICATIONS:

- ✓ Presence of Tracheostomy site
- ✓ Urgent or emergent indication to change the tube, such as obstruction that will not clear with suction, dislodgement, or inability to oxygenate/ventilate the patient without other obvious explanation

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Have all airway equipment prepared for standard airway management, including equipment for oral tracheal intubation and failed airway.
2. Have airway device (endotracheal tube or tracheostomy tube) of the same size as the tracheostomy tube currently in place as well as 0.5 size smaller available (e.g., if the patient has a #6.0 Shiley, then have a 6.0 and a 5.5 tube).
3. Lubricate the replacement tube(s) and check the cuff.
4. Remove the tracheostomy tube from mechanical ventilation devices and use a bag-valve apparatus to pre-oxygenate the patient as much as possible.
5. Once all equipment is in place, remove devices securing the tracheostomy tube, including sutures and/or supporting bandages.
6. If applicable, deflate the cuff on the tube. If unable to aspirate air with a syringe, cut the balloon off to allow the cuff to lose pressure.
7. Remove the tracheostomy tube.
8. Insert the replacement tube. Confirm placement via standard measures.
9. If there is any difficulty placing the tube, re-attempt procedure with the smaller tube.
10. If difficulty is still encountered, use standard airway procedures such as oral bag-valve mask or endotracheal intubation (as per protocol). **More difficulty with tube changing can be anticipated for tracheostomy sites that are immature, i.e. less than two weeks old. Great caution should be exercised in attempts to change immature tracheostomy sites**
11. Document procedure, patient response, and any complications in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

AIRWAY: VENTILATOR OPERATION PROCEDURE # 17

CLINICAL INDICATORS:

- ✓ Management of the ventilation of a patient during prolonged or interfacility transport of a patient

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Transporting personnel should review the ventilation of the patient with the treating personnel (physician, nurse, or respiratory therapy) in the referring facility prior to transport.
2. All ventilator setting, including respiratory rate, FiO₂, mode of ventilation, PEEP/ PIP, and tidal volumes should be recorded prior to initiating transport. Additionally, recent trends in the oxygen saturations experienced by the patient should be noted.
3. Prior to transport, specific orders regarding any anticipated changes to ventilator settings as well as causes for significant alarm should be reviewed with the referring medical personnel.
4. Once in the ambulance, confirm adequate oxygen delivery to the ventilator.
5. Frequently assess breath sounds to assess for possible tube dislodgment during transfer.
6. Frequently assess the patient's respiratory status, noting any decreases in oxygen saturation or changes in tidal volume, peak pressure, etc.
7. Note any changes in the ventilator setting or patient condition in the PCR.
8. It is required that the patient be continuously monitored with pulse oximetry and strongly recommended that the patient be continuously monitored with capnography.
9. If any significant change in patient condition, including vital signs or oxygen saturation or there is a concern regarding ventilator performance/alarms, disconnect the ventilator and use BVM with 100% O₂ to ventilate.
10. Document time and result in the 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.

SKILLS PROCEDURE # 17

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

ARTERIAL LINE MAINTENANCE PROCEDURE # 18

CLINICAL INDICATORS:

- ✓ Transport of a patient with an existing arterial line

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Make certain arterial line is secured prior to transport, including intersection of arterial catheter and IV/monitoring lines.
2. Use available equipment for monitoring of arterial pressures via arterial line.
3. Do not use the arterial line for administration of any fluids or medications.
4. If there is any question regarding dislodgement of the arterial line and bleeding results, remove the line and apply direct pressure over the site for at least five minutes before checking to ensure hemostasis.
5. Document the procedure, results, and complications in the 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.

SKILLS PROCEDURE # 18

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

ASSESSMENT: ADULT PROCEDURE # 19

CLINICAL INDICATIONS:

- ✓ Any patient requesting a medical evaluation that is too large to be measured with a Broselow-Luten Resuscitation Tape

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Scene size-up, including universal precautions, scene safety, environmental hazards assessment, need for additional resources, by-stander safety, and patient/caregiver interaction.
2. Initial assessment includes a general impression as well as the status of a patient's airway, breathing, and circulation.
3. Assess mental status (e.g., AVPU) and disability (e.g., GCS).
4. Control major hemorrhage and assess overall priority of patient.
5. Perform a focused history and physical based on patient's chief complaint making efforts to protect patient privacy and modesty.
6. Assess need for critical interventions. If none are anticipated, downgrade or cancel additional responding units as appropriate.
7. Complete critical interventions and perform a complete secondary exam to include a baseline set of vital signs as directed by protocol.
8. Maintain an on-going assessment throughout transport; to include patient response/possible complications of interventions, need for additional interventions, and assessment of evolving patient complaints/conditions.
9. Document all findings and information associated with the assessment, performed procedures, and any administration of medications on the 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, skill stations, or other mechanisms as deemed appropriate by the EMS System.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

ASSESSMENT AND DOCUMENTATION: PAIN PROCEDURE # 20

SKILLS PROCEDURE # 20

CLINICAL INDICATIONS

- ✓ Any patient

DEFINITIONS

- ✓ Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage.
- ✓ Pain is subjective (whatever the patient says it is).

PROCEDURE

1. Initial and ongoing assessment of pain intensity and character is accomplished through the patient's self-report.
2. Pain should be assessed and documented in the PCR during the initial assessment, before starting pain control treatment, with each set of vitals after a pharmaceutical pain intervention, and until resolved or the last vital set for non-drug therapies.
3. Three pain scales are available 0 – 10, the Wong Baker "faces," and the FLACC:

- ✓ **0 – 10 Scale:** The most familiar scale used by EMS for rating pain with patients. It is primarily for adults and is based on the patient being able to express their perception of the pain as related to numbers. Avoid coaching the patient; simply ask them to rate their pain on a scale of 0 – 10, where 0 is no pain at all and 10 is the worst pain ever.
- ✓ **Wong-Baker "FACES" scale:** this scale is primarily for use with pediatrics but may also be used with geriatrics or any patient with a language barrier. The faces correspond to numeric values from 0 – 10. This scale can be documented with the numeric value.



- ✓ **FLACC scale:** this scale has been validated for measuring pain in children with mild to severe cognitive impairment and in pre-verbal children (including infants).

CATEGORIES	SCORING		
	0	1	2
FACE	No particular expression or smile.	Occasional grimace or frown, withdrawn, disinterested.	Frequent to constant quivering chin, clenched jaw.
LEGS	Normal position or relaxed.	Uneasy, restless, tense.	Kicking or legs drawn up
ACTIVITY	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arched, rigid or jerking
CRY	No cry (awake or asleep)	Moans or whimpers; occasional complaints	Crying steadily, screams, or sobs; frequent complaints
CONSOLABILITY	Content, relaxed	Reassured by occasional touching, hugging or being talked to; distractible	Difficult to console or comfort

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, skill stations, or other mechanisms as deemed appropriate by the Trinity EMS System.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

ASSESSMENT: PEDIATRIC PROCEDURE # 21

CLINICAL INDICATIONS:

- ✓ Any child that can be measured with the Broselow
-Luten Resuscitation Tape

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Scene size-up, including universal precautions, scene safety, environmental hazards assessment, need for additional resources, by-stander safety, and patient/caregiver interaction. Take reasonable steps to protect patient privacy and modesty.
2. Assess patient using the pediatric triangle of ABC's:
 - Airway and appearance: speech/cry, muscle tone, inter-activeness, look/gaze, movement of extremities
 - Work of breathing: absent or abnormal airway sounds, use of accessory muscles, nasal flaring, body positioning
 - Circulation to skin: pallor, mottling, cyanosis
3. Establish spinal immobilization if suspicion of spinal injury.
4. Establish responsiveness appropriate for age (AVPU, GCS, etc.).
5. Color code using Broselow-Luten tape.
6. Assess disability (pulse, motor function, sensory function, pupillary reaction).
7. Perform a focused history and physical exam. Recall that pediatric patients easily experience hypothermia and thus should not be left uncovered any longer than necessary to perform an exam. Concurrently, remember that pediatric patients unable to verbalize their own complaint should be fully exposed for assessment.
8. Record vital signs (BP >3 years of age, cap refill <3 years of age).
9. Include immunizations, allergies, medications, past medical history, last meal, and events leading up to injury or illness where appropriate.
10. Treat chief complaint as per protocol.
11. Document assessment, treatments, any complications, and medications administered in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

BLOOD GLUCOSE ANALYSIS PROCEDURE # 22

CLINICAL INDICATIONS:

- ✓ Patients with suspected hypoglycemia (diabetic emergencies, change in mental status, bizarre behavior, etc.)

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Gather and prepare equipment.
2. Blood samples for performing glucose analysis should be obtained through a finger-stick. Venous blood samples may produce artificially high blood glucose values and should be avoided due to this and the increased risk of needle stick.
3. Place correct amount of blood on reagent strip or site on glucometer per the manufacturer's instructions.
4. Time the analysis as instructed by the manufacturer.
5. Document the glucometer reading and treat the patient as indicated by the analysis and protocol.
6. Repeat glucose analysis as indicated for reassessment after treatment and as per protocol.
7. Perform Quality Assurance on glucometers at least once every 7 days, if any clinically suspicious readings are noted, and/or as recommended by the manufacturer and document in the log.

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.

SKILLS PROCEDURE # 22

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

CAPNOGRAPHY PROCEDURE # 23

CLINICAL INDICATIONS:

- ✓ Capnography shall be used as soon as possible in conjunction with any airway management adjunct, including endotracheal, nasotracheal, cricothyrotomy, Blind Insertion Airway Devices (BIAD) or BVM
- ✓ Capnography should also be used on all patients treated with CPAP, Magnesium, and/or epinephrine for respiratory distress

LEGEND	
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Attach capnography sensor to the BIAD, endotracheal tube, or oxygen delivery device.
2. Note CO₂ level and waveform changes. These will be documented on each respiratory failure, cardiac arrest, or respiratory distress patient.
3. The capnometer shall remain in place with the airway and be monitored throughout the pre-hospital care and transport.
4. Any loss of CO₂ detection or waveform indicates an airway problem and should be documented.
5. The capnogram should be monitored as procedures are performed to verify or correct the airway problem.
6. Document the procedure and results in the Patient Care Report (PCR).
7. In all patients with a pulse, an ETCO₂ >20 is anticipated. In the post-resuscitation patient, no effort should be made to lower ETCO₂ by modification of the ventilatory rate. Further, in post-resuscitation patients without evidence of ongoing, severe bronchospasm, ventilatory rate should never be <6 breaths per minute.
8. In the pulseless patient, and ETCO₂ waveform with a ETCO₂ value >10 may be utilized to confirm the adequacy of an airway to include BVM and advanced devices when SpO₂ will not register.

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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

CARDIAC: EXTERNAL PACING PROCEDURE # 24

CLINICAL INDICATIONS:

- ✓ Patients with symptomatic bradycardia (less than 60 beats per minute) with signs and symptoms of inadequate cerebral or cardiac perfusion such as:
 - Chest Pain
 - Hypotension
 - Pulmonary Edema
 - Altered mental status, confusion, etc.
 - Ventricular ectopy

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Attach standard three-lead monitor.
2. Apply defibrillation/pacing pads to sternal/apical(antero/lateral) or antero/posterior positions:
 - One pad right infraclavicular chest and one pad left apical/inferior-lateral chest wall, lateral to the breast
 - One pad to left mid-chest next to sternum, one pad to upper left back next to spine
3. Rotate selector switch to pacing option.
4. Adjust heart rate to 70 BPM for adult and 100 BPM for a child.
5. Note pacer spikes on EKG screen.
6. Slowly increase output until capture of electrical rhythm on the monitor.
7. If unable to capture while at maximum current output, stop pacing immediately.
8. If capture observed on monitor, check for corresponding pulse and assess vital signs.
9. Consider the use of sedation or analgesia if patient is uncomfortable.
10. Document the dysrhythmia and the response to external pacing with EKG strips in the PCR.

CERTIFICATION REQUIREMENTS:

Maintain knowledge of the indication, 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.

SKILLS PROCEDURE # 24

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

CARDIAC: INTERNAL PACEMAKER MAINTANENCE PROCEDURE # 25

CLINICAL INDICATIONS:

- ✓ Patients with a cardiac internal pacemaker and pulse generator device

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Document and note the reason for pacemaker, goal of therapy, patient's underlying rhythm, date of insertion, current status of pacemaker and settings.
2. Review and document type of pacemaker and transferring physician's orders.
3. Assess the patient's current cardiac rhythm, blood pressure, and distal pulses.
4. Assess the insertion site; dressing should be dry and pacing wires taped securely; assure the battery is charged and an extra battery is also charged and available.
5. Assess that all connections are secure and connected correctly, avoiding any tangling wires and tension on pacing catheter.
6. Patient shall be maintained on cardiac and pulse oximetry monitors throughout transport.
7. Obtain an initial rhythm strip and continually assess the mental, neurologic and hemodynamic status of the patient.
8. If problems with the pacemaker occurs (pericardial perforation, lead dislodgement or fracture) or there is a change in the cardiac, neurologic, or mental status from suspected pacing or sensing problems, contact Medical Control for further instruction.
9. If the device is shut off by order of Medical Control or fails to operate, appropriate ACLS protocols should be initiated.
10. Document the procedure, results, and complications in the PCR.

CERTIFICATION REQUIREMENTS:

Maintain knowledge of the indication, 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.

SKILLS PROCEDURE # 25

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

CARDIOPULMONARY RESUSCITATION AUTOMATED PROCEDURE # 26

CLINICAL INDICATORS:

- ✓ Cardiac arrest in patients 8 years of age and older, where manual CPR may otherwise be used

CONTRAINDICATIONS:

- ✓ Patient less than eight(8) years of age
- ✓ Patients suffering obvious signs of penetrating injury directly beneath the device
- ✓ Patients who do not fit within the device
- ✓ Patients suffering traumatic arrest

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Initiate resuscitative measures following the current AHA guidelines and treatment protocols.
2. Manual CPR should be initiated and continued while the automated CPR device such as the Lucas Device or AutoPulse are prepared and placed.
3. Remove the clothing from the upper torso.
4. Apply defibrillation pads and electrodes.
5. Place the device per the manufacturer's recommendations and follow instructions on its use following appropriate prompts
 - A. For the AutoPulse, place the patient on the AutoPulse board.
 - B. Place the life belt across the chest.
 - C. Turn on the AutoPulse.
 - D. Press the green button. The lifebelt will adjust to the patient.
 - E. Press the green button a second time. Compressions begin automatically.
6. Secure the patient and the automated CPR device to a long spine board but do not place a strap over the device.
7. Follow appropriate protocols for airway and cardiac rhythms.
8. After arrival in the ER, leave the device with the patient until no longer utilized.
9. Document the procedure, complications, and results in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

CARDIOPULMONARY RESUSCITATION MANUAL PROCEDURE # 27

CLINICAL INDICATIONS:

- ✓ Basic life support for the patient in cardiac arrest

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

- ✓ 2010 AHA Guidelines now emphasize a C-A-B approach to CPR. AHA stresses quality compressions, and recommends deeper compressions than previous Guidelines.
 1. Scan the patient for responsiveness and breathing for approximately 6 -10 sec.
 2. Check a pulse for 10 sec (May be done simultaneously with scan for breathing)
 3. Begin compressions at 30:2 ratio. Be sure to complete **at least** 100 compressions per minute.

AGE	COMPRESSIONS/ VENTILATIONS	DEPTH	RATE
INFANT	15:2	About 1½ (1/3 the anterior- posterior chest dimension)	At least 100/minute
CHILD	15:2	About 2 inches (1/3 the anterior- posterior chest dimension)	At least 100/minute
ADULT	30:2	At least 2 inches	At least 100/minute

4. Go to Cardiac Arrest Protocol. Begin ventilations in the adult as directed in the Cardiac Arrest Protocol. In this protocol, and all cardiac arrest protocols, 5 cycles of compressions means 2 minutes of uninterrupted chest compressions.
5. Provide no more than 12 breaths per minute with BVM. Use ETCO₂ to guide your ventilations as directed in the Cardiac Arrest Protocol.
6. Chest compressions should be provided in an uninterrupted manner.
7. Document time and procedure in your PCR.

CERTIFICATIONS:

Maintain knowledge of the indications, contraindications, technique, and possible complications of this procedure. Assessment of this knowledge may be accomplished by quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanism as deemed appropriate by the Trinity EMS System. Caregivers are expected to have knowledge of current AHA guidelines.

SKILLS PROCEDURE # 27

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

CARDIOVERSION – SYNCHRONIZED PROCEDURE # 28

CLINICAL INDICATIONS:

- ✓ Unstable patient with tachydysrhythmia (rapid atrial fibrillation, supraventricular tachycardia, ventricular tachycardia)
- ✓ Patient is not pulseless (the pulseless patient requires unsynchronized cardioversion, i.e., defibrillation)

LEGEND

P

PARAMEDIC

PROCEDURE:

1. Ensure the patient is attached properly to a monitor/defibrillator capable of synchronized cardioversion.
2. Have all equipment prepared for unsynchronized cardioversion/defibrillation if the patient fails synchronized cardioversion and the condition worsens.
3. Consider the use of pain or sedating medications.
4. Set energy selection to the appropriate setting. Recommended doses are:
 - **Atrial Fibrillation:** 120 - 200 joules
 - **Atrial Flutter:** 50 - 100 joules
 - **Supraventricular Tachycardia:** 50 - 100 joules
 - **Ventricular Tachycardia:** 100 - 200 joules
5. Set monitor/defibrillator to synchronized cardioversion mode.
6. Make certain all personnel are clear of patient.
7. Press and hold the shock button to cardiovert. Stay clear of the patient until you are certain the energy has been delivered. NOTE: It may take the monitor/defibrillator several cardiac cycles to “synchronize”, so there may be a delay between activating the cardioversion and the actual delivery of energy.
8. Note patient response and perform immediate unsynchronized cardioversion/defibrillation if the patient's rhythm has deteriorated into pulseless ventricular tachycardia/ventricular fibrillation, following the procedure for Defibrillation-Manual.
9. If the patient's condition is unchanged, repeat steps 2-8 above, using escalating energy settings.
10. Repeat until maximum setting or until efforts succeed. Consider discussion with medical control if cardioversion is unsuccessful after 2 attempts.
11. Note procedure, response, and time in the 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.

SKILLS PROCEDURE # 28

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2016

CHEST DECOMPRESSION/ NEEDLE PROCEDURE # 29

CLINICAL INDICATIONS:

- ✓ Peri-arrest patients with hypotension (SBP <90), clinical signs of shock, and at least one of the following signs:
 - Jugular vein distention
 - Tracheal deviation away from the side of the injury (often a late sign)
 - Absent or decreased breath sounds on the affected side
 - Hyper-resonance to percussion on the affected side
 - Increased resistance when ventilating a patient: intubated patients with a pneumothorax will develop tension pneumothoraces
- ✓ Patients in traumatic arrest with chest or abdominal trauma for whom resuscitation is indicated, or Barotrauma due to positive pressure ventilations. These patients may require bilateral chest decompression even in the absence of the signs above

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Don personal protective equipment (gloves, eye protection, etc.)
2. Administer high flow of oxygen
3. Identify and prep the site:
 - Locate the **4th or 5th intercostal space at the Anterior Axillary Line (4/5IC-AAL)** on the same side as the pneumothorax.
 - As an alternative, use the **2nd intercostal space in the midclavicular line(2IC-MCL)**
 - Prepare the site with povidone-iodine or chlorhexidine ointment or solution
4. Insert the catheter (**12 or 14 gauge 8 cm for adults/ 14 gauge 5 cm for children**) into the skin over the rib and direct it just over the top of the rib (superior border) into the interspace. Longer catheters have a higher success rate(90%)
5. Advance the catheter through the parietal pleura until a “pop” is felt and air or blood exits under pressure through the catheter, then advance catheter only to chest wall
6. Remove the needle, leaving the plastic catheter in place
7. Secure the catheter hub to the chest wall with dressings and tape
8. Consider placing a finger cut from an exam glove over the catheter hub. Cut a small hole in the end of the finger to make a flutter valve. Secure the glove finger with tape or a rubber band. (Note-don't waste much time preparing the flutter valve; if necessary control the air flow through the catheter hub with your gloved thumb)

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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

CHEST TUBE MAINTANENCE PROCEDURE # 30

CLINICAL INDICATORS:

- ✓ Transport of a patient with an existing chest thoracostomy tube

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Document the location of the chest tube, breath sounds, tracheal position, and soft tissue exam at the chest tube site prior to transfer.
2. Pulse oximetry trends and current readings should be reviewed and documented and monitored throughout transport.
3. Review and document the chest tube is draining, and the current status of the tube in regards to clamped, place to gravity, or connected to suction(with special attention to the centimeter of water of suction).
4. All relevant chest X-rays and radiologic studies should accompany the patient.
5. The collection device must remain below the level of the chest to prevent drained fluid from re-entering the pleural space. Do not allow the collection receptacle to tip over.
6. If hemorrhage occurs through the tube, observe for signs and symptoms of respiratory distress or hypovolemia/shock and treat according to appropriate protocols.
7. If the thoracostomy tube is partially pulled out, do not push the tube back into the chest. Reassess the patient and secure the tube at the current position.
8. If the thoracostomy tube is completely pulled out, place a three sided occlusive dressing over the insertion site with the liberal application of lubricating jelly.
9. If an air leak occurs, reassess all connections and continually assess patency of entire system.
10. If patient becomes increasingly dyspneic, repeat the physical exam with attention to breath sounds and tracheal deviation. Contact Medical Control.
11. Document the procedure, complications, and results in the 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.

SKILLS PROCEDURE # 30

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

CHILDBIRTH PROCEDURE # 31

CLINICAL INDICATIONS:

- ✓ Imminent delivery with crowning

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Delivery should be controlled so as to allow a slow, controlled delivery of the infant. This will prevent injury to the mother and infant.
2. Consider additional resources as there will be two potential patients.
3. Support the infant's head as needed.
4. If the umbilical cord is surrounding the neck, slip it over the head. If unable to free the cord from the neck, double clamp the cord and cut between the clamps.
5. Suction the airway with a bulb syringe, mouth first then nares.
6. Grasping the head with hands over the ears, gently pull down to allow delivery of the anterior shoulder.
7. Gently pull up on the head to allow delivery of the posterior shoulder.
8. Slowly deliver the remainder of the infant.
9. Clamp the cord 2 inches from the abdomen with 2 clamps and cut the cord between the clamps.
10. Record APGAR scores at 1 and 5 minutes.
11. Follow the **Newly Born Protocol** for further treatment.
12. The placenta will deliver spontaneously, usually within 5 minutes of the infant. Do not force the placenta to deliver.
13. Massaging the uterus may facilitate the delivery of the placenta and decrease bleeding by facilitating uterine contractions. Uncontrolled bleeding is addressed in the childbirth protocol.
14. Document the procedure, time, and complications in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

DECONTAMINATION PROCEDURE # 32

CLINICAL INDICATIONS:

- ✓ Any patient who may have been exposed to significant hazardous materials, including chemical, biological, or radiological weapons

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. In coordination with HazMAT and other Emergency Management personnel, establish hot, warm and cold zones of operation.
2. Ensure that personnel assigned to operate within each zone have proper personal protective equipment.
3. In coordination with other public safety personnel, assure each patient from the Hot Zone undergoes appropriate initial decontamination. This is specific to each incident; such decontamination may include:
 - Removal of patients from Hot Zone
 - Simple removal of clothing
 - Irrigation of eyes
 - Passage through high-volume water bath (e.g., between two fire apparatus) for patients contaminated with liquids or certain solids. Patients exposed to gases, vapors, and powders often will not require this step as it may unnecessarily delay treatment and/or increase dermal absorption of the agent(s).
4. Initial triage of patients should occur after step #3. Immediate life threats should be addressed prior to technical decontamination.
5. Assist patients with technical decontamination (unless contraindicated based on #3 above). This may include removal of all clothing and gentle cleansing with soap and water. All body areas should be thoroughly cleansed, although overly harsh scrubbing which could break the skin should be avoided.
6. Place triage identification on each patient. Match triage information with each patient's personal belongings which were removed during technical decontamination. Preserve these personnel affects for law enforcement.
7. Monitor all patients for environmental illness.
8. Transport patients per EMS protocol.

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.

SKILLS PROCEDURE # 32

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

DEFIBRILLATION: AUTOMATED AED PROCEDURE # 33

CLINICAL INDICATIONS:

- ✓ Patients in cardiac arrest (pulseless, non-breathing)
- ✓ Age <8 years, use Pediatric Pads if available

CONTRAINDICATION:

- ✓ Pediatric patients who are so small that the pads cannot be placed without touching one another

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

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. Use alternate placement when implanted devices (pacemakers, AICD's) occupy preferred pad positions.
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. Keep interruption in CPR as brief as possible.**
7. Defibrillate if appropriate by depressing the "shock" button. **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 2 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 please use the Post-Resuscitation Protocol.**

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.

SKILLS PROCEDURE # 33

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

DEFIBRILLATION: MANUAL PROCEDURE # 34

CLINICAL INDICATIONS:

- ✓ Cardiac arrest with ventricular fibrillation or pulseless ventricular tachycardia

LEGEND	
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. **Ensure that Chest Compressions are adequate and interrupted only when absolutely necessary.**
2. Clinically confirm the diagnosis of cardiac arrest and identify the need for defibrillation.
3. Apply hands-free therapy pads per manufacturer's instructions.
4. Set the appropriate energy level per protocol.
5. Charge the defibrillator to the selected energy level. **Continue chest compressions while the defibrillator is charging.**
6. **Hold compressions, assertively state, "CLEAR" and visualize that no one, including yourself, is in contact with the patient.**
7. Deliver the countershock by depressing the *Shock Button* for hands free operation.
8. Immediately resume chest compressions and ventilations for 2 minutes. After 2 minutes of CPR, analyze rhythm and check for pulse only if appropriate for rhythm.
9. Repeat the procedure every 2 minutes as indicated by patient response and EKG rhythm.
10. Keep interruption of CPR compressions as brief as possible. Adequate CPR is a key to successful resuscitation.
11. Document the procedure, time, and complications in the 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.

SKILLS PROCEDURE # 34

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

EKG MONITORING PROCEDURE # 35

CLINICAL INDICATIONS:

- ✓ Patients with cardiac related symptoms, syncope, neurological complaints, cardiac arrest, shortness of breath, altered consciousness, abnormal vital signs, electrical injuries, hypothermia or any other symptom deemed significant

LEGEND	
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Attach the patient to a 3 Lead EKG monitor, utilizing either Lead I, II, or III.
2. Assess and document the rhythm interpretation and rate.
3. Obtain a six (6) second strip and attach to the PCR with documentation of the patient's name, date of birth (DOB) and interpretation.
4. Additional strips should be obtained with rhythm changes, before and after antiarrhythmic medications or cardioversion/defibrillation.
5. Document time and response on the 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.

SKILLS PROCEDURE # 35

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

IMPEDANCE THRESHOLD DEVICE PROCEDURE # 36

CLINICAL INDICATIONS:

- ✓ The ITD should be utilized to assist with control of ventilatory rate and improve cardiac preload for patients who are receiving CPR
- ✓ It may be utilized with an endotracheal tube, BIAD, or with a BVM

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

CONTRAINDICATIONS:

- ✓ The ITD should not be utilized for patients who have spontaneous respirations. It should be removed from the endotracheal tube/BVM once spontaneous respirations have returned

PROCEDURE:

1. Ensure airway is adequate per airway/failed airway protocol.
2. If available, place an elbow O2 device in the top of the ITD.
3. Place the ITD between the bag and the EtCO2 detector (for intubated/BIAD patients) or between the bag and mask (for patients ventilated with the BVM). The elbow O2 device should be between the ITD and the bag.
4. Flip the red switch to the "on" position so that the respiratory timing lights flash.
5. Provide a rapid breath after each flash of the LED timing lights.
6. Perform chest compression per the CPR procedure.
7. Once there is return of spontaneous circulation and the EtCO2 climbs above 40, remove the ITD. Place the device near the patients head so that it may be replaced if the patient rearrests, and can be used to guide ventilations once removed. The ITD should also be removed if the patient has spontaneous respirations.
8. Carefully monitor the placement of the endotracheal tube after movement of the patient, placement of the ITD, and/or removal of the ITD.
9. Document the procedure and results in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

INJECTIONS: SUBCUTANEOUS & INTRAMUSCULAR PROCEDURE # 37

CLINICAL INDICATIONS:

- ✓ When medication administration is necessary and the medication must be given via the SQ (not auto-injector) or IM route, or as an alternative route in selected medications

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Receive and confirm medication order or perform according to standing orders.
2. Prepare equipment and medication expelling air from the syringe.
3. Explain the procedure to the patient and reconfirm patient allergies.
4. The most common site for subcutaneous injection is in the arm
 - Injection volume should not exceed 1 mL
5. The possible injection sites for intramuscular injections include the arm, buttock and thigh
 - Injection volume should not exceed 1 mL for the arm
 - Injection volume should not exceed 2 mL in the thigh or buttock
6. The thigh should be used for injections in pediatric patients and injection volume should not exceed 1 mL.
7. Expose the selected area and cleanse the injection site with alcohol.
8. Insert the needle into the skin with a smooth, steady motion.

SQ: 45-degree angle
skin pinched

IM: 90-degree angle
skin flattened
9. Aspirate for blood.
10. Inject the medication.
11. Withdraw the needle quickly, activate needle stick prevention systems, and dispose of properly without recapping.
12. Apply pressure to the site.
13. Monitor the patient for the desired therapeutic effects as well as any possible side effects.
14. Document the medication, dose, route, and time in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

INTRANASAL MEDICATION ADMINISTRATION PROCEDURE # 38

CLINICAL INDICATIONS:

- ✓ When medication administration is necessary and preferred or available route is intranasal
- ✓ Common uses include reversal of narcotic overdose with **Narcan**, treatment of seizures or status epilepticus with **Versed**, or treatment of pain with **Fentanyl**

LEGEND	
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Receive and confirm medication order or perform according to standing orders.
2. Prepare the medication and the mucosal atomization device(MAD Nasal®) for use. Have patient clear nostrils with blowing or suctioning of mucus/blood.
3. Remove and discard the green vial adapter cap.
4. Pierce the medication vial with the syringe vial adapter.
5. Aspirate the proper volume of medication and an extra 0.1mL of medication for dead space in the device.
6. Remove (twist off) the syringe from the vial adapter.
7. Attach the MAD device to the syringe vial the luer-lock connector.
8. Using the free hand to hold the crown of the head stable, place the tip of the MAD snugly against the nostril aiming slightly up and outward (towards the top of the ear).
9. Briskly compress the syringe plunger to deliver half the medication into the nostril.
10. Move the device over to the opposite nostril and repeat delivery of the other half.
11. Use a maximum of 1mL per nostril, using the highest concentration of the drug available.
12. Monitor the patient for the desired therapeutic effects as well as any possible side effects.
13. Document the medication, dose, route, and time on/with the 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.

SKILLS PROCEDURE # 38

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

PULSE OXIMETRY PROCEDURE # 39

CLINICAL INDICATIONS:

- ✓ Recommended with all patients as a routine part of vital signs
- ✓ Patients with suspected hypoxemia

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Apply probe to patient's finger or any other site as recommended by the device manufacturer.
2. Allow machine to register saturation level.
3. Record time and initial saturation percent on room air if possible on/with the patient care report (PCR).
4. Verify pulse rate on machine with actual pulse of the patient.
5. Monitor critical patients continuously until arrival at the hospital. If recording a one-time reading, monitor patients for a few minutes as oxygen saturation may vary.
6. Document percent of oxygen saturation every time vital signs are recorded and in response to therapy to correct hypoxemia.
7. In general, normal saturation is 97-99%. Below 94%, suspect a respiratory compromise.
8. Use the pulse oximetry as an added tool for patient evaluation. Treat the patient, not the data provided by the device.
9. The pulse oximeter reading should never be used to withhold oxygen from a patient in respiratory distress or when it is the standard of care to apply oxygen despite good pulse oximetry readings, such as chest pain.
10. Factors which may reduce the reliability of the pulse oximetry reading include:
 - Poor peripheral circulation (blood volume, hypotension, hypothermia)
 - Excessive pulse oximeter sensor motion
 - Fingernail polish (may be removed with acetone pad)
 - Carbon monoxide bound to hemoglobin
 - Irregular heart rhythms (atrial fibrillation, SVT, etc.)
 - Jaundice
 - Placement of BP cuff on same extremity as pulse ox probe.

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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

RESTRAINTS: PHYSICAL/ CHEMICAL PROCEDURE # 40

CLINICAL INDICATIONS:

- ✓ Any patient who may harm himself, herself, or others may be gently restrained to prevent injury to the patient or crew. This restraint must be in a humane manner and used only as a last resort. Other means to prevent injury to the patient or crew must be attempted first. These efforts could include reality orientation, distraction techniques, or other less restrictive therapeutic means. Physical or chemical restraint should be a last resort technique

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Attempt less restrictive means of managing the patient.
2. Request law enforcement assistance.
3. Ensure that there are sufficient personnel available to physically restrain the patient safely.
4. Restrain the patient in a lateral or supine position. No devices such as backboards, splints, or other devices will be on top of the patient. The patient will never be restrained in the prone position.
5. The patient must be under constant observation by the EMS crew at all times. This includes direct visualization of the patient as well as cardiac and pulse oximetry monitoring.
6. The extremities that are restrained will have a circulation check at least every 15 minutes. The first of these checks should occur as soon after placement of the restraints as possible. This MUST be documented on the PCR.
7. Documentation in the PCR should include the reason for the use of restraints, the type of restraints used, and the time restraints were placed.
8. If the above actions are unsuccessful, or if the patient is resisting the restraints, consider administering medications per protocol. (Chemical restraint may be considered earlier).
9. If a patient is restrained by law enforcement personnel with handcuffs or other devices EMS personnel can not remove, a law enforcement officer must accompany the patient to the hospital in the transporting EMS vehicle

CERTIFICATION REQUIREMENTS:

Maintain knowledge of the indications, contraindication, 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.

SKILLS PROCEDURE # 40

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

SPINAL EXAMINATION PROCEDURE # 41

CLINICAL INDICATIONS:

- ✓ Suspicion of spinal/neurological injury
- ✓ Provider decision to utilize the Spinal Immobilization Clearance Protocol

LEGEND	
P	PARAMEDIC

- This procedure details the spinal examination process and must be used in conjunction with the Spinal Immobilization Clearance Protocol. It is not intended as a replacement for that protocol

PROCEDURE:

1. Explain to the patient the actions that you are going to take. Ask the patient to immediately report any pain, and to answer questions with a “yes” or “no” rather than shaking the head.
2. With the patient’s spine supported to limit movement, begin palpation at the base of the skull at the midline of the spine.
3. Palpate the vertebrae individually from the base of the skull to the bottom of the sacrum.
4. On palpation of each vertebral body, look for evidence of pain and ask the patient if they are experiencing pain. If evidence of pain along the spinal column is encountered, the patient should be immobilized.
5. If the capable patient is found to be pain free, ask the patient to turn their head first to one side (so that the chin is pointing toward the shoulder on the same side as the head is rotating) then, if pain free, to the other. If there is evidence of pain the patient should be immobilized.
6. With the head rotated back to its normal position, ask the patient to flex and extend their neck. If there is evidence of pain the patient should be immobilized.

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.

SKILLS PROCEDURE # 41

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2016

SPINAL IMMOBILIZATION PROCEDURE # 42

CLINICAL INDICATIONS:

- ✓ Need for spinal immobilization as determined by protocol
- ✓ Long spine boards(LSB) or scoop stretchers should only be used for extrication/ movement of the patient or during CPR as a firm surface, and patients placed directly on the cot maintaining in-line stabilization and minimal movement
- ✓ Spinal precautions should be maintained with the placement of a cervical collar, head blocks/towels, securing the patient tightly to the stretcher, manual inline-stabilization, and the log-roll technique, and use of slider boards or sheets
- ✓ Ambulatory patients who require spine precautions or patients who can self-extricate should be placed in a cervical collar and placed on the cot limiting spinal movement, and secured flat to the stretcher
- ✓ Patients with a **penetrating injury *should not be immobilized*** unless a hard focal neurologic deficit(numbsness/weakness) is noted on exam
- ✓ Selective Spinal Immobilization with LSB may be used for:
 - 1. **Altered Mental Status, GCS<15**
 - 2. **Spinal deformity/tenderness**
 - 3. **Neurologic Deficits(Numbness/Weakness)**
 - 4. **Intoxication**

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Gather a LSB, equipment, and C-collar appropriate for patient's size
2. Explain the procedure to the patient
3. Place the patient in an appropriately sized C-collar while maintaining in-line stabilization of the C-Spine. This stabilization, to be provided by a second rescuer, should not involve traction or tension but rather simply maintaining the head in a neutral, midline position while the first rescuer applies the collar
4. Once the collar is secure, the second rescuer should still maintain their position to ensure stabilization (the collar is helpful but will not do the job by itself)
5. First Responder shall place patient on long spine board if patient meets trauma criteria or for extrication purposes. For all, if the patient is supine or prone, consider the log roll technique. For the patient in a vehicle or otherwise unable to be placed prone or supine, place them on a backboard by the safest method available that maximized maintenance of in-line stability
6. Stabilize the patient with straps and head rolls/tape or other similar device. Once the head is secured to the backboard, the second rescuer may release manual in-line stabilization. Extricate/move the patient to the cot, transferring the patient with minimal spinal movement and inline stabilization and secured to the cot with seatbelts/straps in a position of comfort
7. NOTE: Some patients, due to size or age, will not be able to be immobilized through in-line stabilization with standard backboards and C-collars. Never force a patient into a non-neutral position to immobilize them. Such situations may require a second rescuer to maintain manual stabilizations throughout the transport to the hospital
8. Document the time of the procedure in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

SPLINTING PROCEDURE # 43

CLINICAL INDICATIONS:

- ✓ Immobilization of an extremity for transport, either due to suspected fracture, sprain or injury
- ✓ Immobilization of an extremity for transport to secure medically necessary devices such as intravenous catheters

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Assess and document pulses, sensation, and motor function prior to placement of the splint. If no pulses are present and a fracture is suspected, consider reduction of the fracture prior to placement of the splint.
2. Remove all clothing from the extremity.
3. Select a site to secure the splint both proximal and distal to the area of suspected injury, or the area where the medical device will be placed.
4. Do not secure the splint directly over the injury or device.
5. Place the splint and secure with velcro straps, or bandage material (e.g., kling, kerlex, cloth bandage, etc.) depending on the splint manufacturer and design.
6. Document pulses, sensation, and motor function after placement of the splint. If there has been a deterioration in any of these 3 parameters, remove the splint and reassess.
7. If a femur fracture is suspected and there is no evidence of pelvic fracture or instability, the following procedure may be followed for placement of a femoral traction splint:
 - Assess neurovascular function as in #1 above.
 - Place the ankle device over the ankle.
 - Place the proximal end of the traction splint on the posterior side of the affected extremity, being careful to avoid placing too much pressure on genitalia or open wounds. Make certain the splint extends proximal to the suspected fracture. If the splint will not extend in such a manner, reassess possible involvement of the pelvis.
 - Extend the distal end of the splint at least 6 inches beyond the foot.
 - Attach the ankle device to the traction crank.
 - Twist until moderate resistance is met.
 - Reassess alignment, pulses, sensation, and motor function. If there has been deterioration in any of these 3 parameters, release traction and reassess.
8. Document the time, type of splint, and the pre and post assessment of pulse, sensation, and motor function in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

STROKE SCREEN: CINCINNATI PRE-HOSPITAL PROCEDURE # 44

CLINICAL INDICATIONS:

- ✓ Suspected Stroke Patient

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Assess and treat suspected stroke patients as per protocol.
2. The Cincinnati Stroke Screen should be completed for all suspected stroke patients, consisting of **Facial Droop, Arm Drift, and Abnormal Speech**.
3. Establish the "Time Last Normal" for the patient. This will be the presumed time of onset.
4. Perform the screen through physical exam:
 - Look for Facial Droop by asking the patient to smile
 - Have patient, while sitting upright or standing, extend both arms parallel to floor, close eyes, and turn their palms upward. Assess for unilateral drift of an arm
 - Assess Speech for inappropriate words, slurring, or mute
5. If one of these exam components is abnormal, it is considered a positive stroke screen. Document the finding on exam.
6. Evaluate **blood glucose** level results.
7. **If the "Time Last Normal" is less than 24 hours, blood glucose is between 60 and 400, and at least one of the physical exam elements is positive, follow the EMS System Suspected Stroke Triage and Destination Plan, alerting the receiving hospital of a possible stroke patient as early as possible.**
8. All sections of the Cincinnati screen must be completed (Facial Droop, Arm Drift, and Speech)
9. Document the exam, results, and destination in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

TEMPERATURE MEASUREMENT PROCEDURE # 45

CLINICAL INDICATIONS:

- ✓ Monitoring body temperature in a patient with suspected infection, hypothermia, hyperthermia, or to assist in evaluating resuscitation efforts

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. If clinically appropriate, allow the patient to reach equilibrium with the surrounding environment.
2. For adult patients that are conscious, cooperative, and in no respiratory distress, an oral temperature is preferred (steps 3 to 5 below). For infants or adults that do not meet the criteria above, a rectal temperature is preferred (steps 6 to 8 below).
3. To obtain an oral temperature, ensure the patient has no significant oral trauma and place the thermometer under the patient's tongue with appropriate sterile covering.
4. Have the patient seal their mouth closed around the thermometer.
5. If using an electric thermometer, leave the device in place until there is indication an accurate temperature has been recorded (per the "beep" or other indicator specific to the device). If using a traditional thermometer, leave it in place until there is no change in the reading for at least 30 seconds (usually 2 to 3 minutes). Proceed to step 9.
6. Prior to obtaining a rectal temperature, assess whether the patient has suffered any rectal trauma by history and/or brief examination as appropriate for patient's complaint.
7. To obtain a rectal temperature, cover the thermometer with an appropriate sterile cover, apply lubricant, and insert into rectum no more than 1 to 2 cm beyond the external anal sphincter.
8. Follow guidelines in step 5 above to obtain temperature.
9. Record time, temperature, method (oral, rectal), and scale (C° or F°) in Patient Care Report (PCR).

CETERFICATION 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 local EMS system.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

VENOUS ACCESS: EXISTING CATHETERS PROCEDURE # 46

CLINICAL INDICATIONS:

- ✓ Inability to obtain adequate peripheral access
- ✓ Access of an existing venous catheter for medication or fluid administration
- ✓ Central venous access in a patient in cardiac arrest

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Clean the port of the catheter with alcohol wipe.
2. Using sterile technique, withdraw 5-10 ml of blood and discard syringe in sharps container.
3. Using 5 cc of normal saline, access the port with sterile technique and gently attempt to flush the saline.
4. If there is no resistance, no evidence of infiltration (e.g., no subcutaneous collection of fluid), and no pain experienced by the patient, then proceed to step 5. If there is resistance, evidence of infiltration, pain experienced by the patient, or any concern that the catheter may be clotted or dislodged, do not use the catheter.
5. Begin administration of medications or IV fluids slowly and observe for any signs of infiltration. If difficulties are encountered, stop the infusion and reassess.
6. Record procedure, any complications, and fluids/medications administered in the 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 local EMS system.

SKILLS PROCEDURE # 46

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

VENOUS ACCESS: EXTERNAL JUGULAR PROCEDURE # 47

CLINICAL INDICATIONS:

- ✓ External jugular vein cannulation is indicated in a critically ill patient ≥ 8 years of age who requires intravenous access for fluid or medication administration and in whom an extremity vein is not obtainable

LEGEND	
P	PARAMEDIC

PROCEDURE:

1. Place the patient in a supine head down position. This helps distend the vein and prevents air embolism.
2. Turn the patient's head toward the opposite side if no risk of cervical injury exists.
3. Prep the site as per peripheral IV site.
4. Align the catheter with the vein and aim toward the same side shoulder.
5. "Tourniqueting" the vein lightly with one finger above the clavicle, puncture the vein midway between the angle of the jaw and the clavicle and cannulate the vein in the usual method.
6. Attach the IV and secure the catheter avoiding circumferential dressing or taping.
7. Document the procedure, time, and result (success) on/with the 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 local EMS system.

SKILLS PROCEDURE # 47

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2014

VENOUS ACCESS: EXTREMITY PROCEDURE # 48

CLINICAL INDICATIONS:

- ✓ Any patient where intravenous access is indicated (significant trauma or mechanism, emergent or potentially emergent medical condition)

LEGEND	
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Saline locks may be used as an alternative to an IV tubing and IV fluid in every protocol at the discretion of the ALS professional.
2. Providers can use intraosseous access where threat to life exists as provided for in the Venous Access: Intraosseous procedure.
3. Use the largest catheter bore necessary based upon the patient's condition and size of veins.
4. Fluid and setup choice is preferable:
 - Normal Saline with a macro drip (10 gtts/cc) for trauma or hypovolemia
 - Normal Saline with a macro drip (10 gtts/cc) for medical conditions, and
 - Normal Saline with micro drip (60 gtts/cc) for medication infusions
5. Inspect the IV solution for expiration date, cloudiness, discoloration, leaks, or the presence of particles.
6. Connect IV tubing to the solution in a sterile manner. Fill the drip chamber half full and then flush the tubing bleeding all air bubbles from the line.
7. Place a tourniquet around the patient's extremity to restrict venous flow only.
8. Select a vein and an appropriate gauge catheter for the vein and the patient's condition.
9. Prep the skin with an antiseptic solution.
10. Insert the needle with the bevel up into the skin in a steady, deliberate motion until the bloody flashback is visualized in the catheter.
11. Advance the catheter into the vein. **Never** reinsert the needle through the catheter. Dispose of the needle into the proper container without recapping.
12. Remove the tourniquet and connect the IV tubing or saline lock.
13. Open the IV to assure free flow of the fluid and then adjust the flow rate as per protocol or as clinically indicated.
 - Rates are preferably:**
 - Adult: KVO: 60 cc/hr (1 gtts/ 6 sec for a macro drip set)
 - Pediatric: KVO: 30 cc/hr (1 gtts/ 12 sec for a macro drip set)
 - If Shock is present:**
 - Adult: 500 cc fluid boluses repeated as long as lungs are dry and BP <90. Consider a second IV line.
 - Pediatric: 20 cc/kg boluses repeated PRN for poor perfusion up to three.
14. Cover the site with a sterile dressing and secure the IV and tubing.
15. Label the IV with date and time if able.
16. Document the procedure, time and result (success) on/with the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

VENOUS ACCESS: INTRAOSSEOUS PROCEDURE # 49

CLINICAL INDICATIONS:

- ✓ As the initial means of circulatory access in cardiac arrest
- ✓ Patients where rapid, regular IV access is unavailable with any of the following:
 1. Multisystem trauma with severe hypovolemia
 2. Severe dehydration with vascular collapse and/or loss of consciousness
 3. Respiratory failure/ Respiratory arrest

CONTRAINDICATIONS:

- ✓ Fracture proximal to proposed intraosseous site
- ✓ History of Osteogenesis Imperfecta
- ✓ Current or prior infection at proposed intraosseous site
- ✓ Previous intraosseous insertion or joint replacement at the selected site

LEGEND	
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Don personal protective equipment (gloves, eye protection, etc.).
2. **Humeral Head:** Place the patient palm on the umbilicus and elbow on the ground or stretcher. Use your thumb to identify humeral shaft, slide thumb towards humeral head with firm pressure. Locate tubercle by prominent bulge. Use the opposite hand to pinch inferior and anterior humerus ensuring that you are midline on the humerus.
Proximal Tibia: Identify anteromedial aspect of the proximal tibia (bony prominence below the knee cap). The insertion location will be 1-2cm (2 finger widths) below this.
Distal Tibia: If patient >12 years of age, identify the anteromedial aspect of the distal tibia (2cm proximal to the medial malleolus).
3. Prep the site with povidone-iodine or a chlorhexidine solution.
4. For manual pediatric devices, hold the intraosseous needle at a 60 to 90 degree angle, aimed away from the nearby joint and epiphyseal plate, twist the needle handle with a rotating grinding motion applying controlled downward force until a "pop" or "give" is felt indicating loss of resistance. Do not advance the needle any further.
5. For the EZ-IO intraosseous device, hold the intraosseous needle at a 60 to 90 degree angle, aimed away from the nearby joint and epiphyseal plate, power the driver until a "pop" or "give" is felt indicating loss of resistance. Do not advance the needle any further.
6. Remove the stylette and place in an approved sharps container.
7. Attach a syringe filled with at least 5 cc NS; aspirate bone marrow for manual devices only, to verify placement; then inject at least 5 cc of NS to clear the lumen of the needle.
8. Attach the IV line and adjust flow rate. A pressure bag may enhance flows.
9. Stabilize and secure the needle with dressings and tape.
10. You may administer 10 to 20 mg of lidocaine in adult patients who experience infusion-related pain. This may be repeated prn to a maximum of 60 mg.
11. Following administration of any other IO medications, flush the IO line with 10 cc of IV fluid.
12. Document the procedure, time, and result (success) on/ with the 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.

SKILLS PROCEDURE # 49

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

WELLNESS CHECK PROCEDURE # 50

CLINICAL INDICATORS:

- ✓ When patient safety needs to be ensured for presumed non-urgent situations. These patients may be referred by other EMS providers or external entities

CONTRAINDICATIONS:

- ✓ Any patient for whom an emergency medical condition exists that would normally be treated under Trinity EMS System protocols

LEGEND	
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Ensure scene safety and notify dispatch of location. When possible, remain available for high acuity calls.
2. Politely introduce yourself to the patient and family.
3. Determine the nature of the visit and record in PCR (diabetes, CHF, fall prevention, pediatric asthma, high-risk refusal follow-up, other).
4. Determine the name of the primary care physician.
5. Assist all patients with medication compliance. If pill minders or refills are needed, note this in the PCR. It is appropriate to communicate these needs to the primary care physician.
6. If the patient is diabetic, ensure daily blood glucose logs are being maintained. Asymptomatic patients with more than 2 consecutive blood glucose measurements above 350 should make contact with the primary care within 24 hours. If the blood glucose is above 500 or below 50, transport to the emergency department shall be recommended.
7. If the patient has CHF, ensure the patient has a scale and is performing weight checks. Asymptomatic patients with unexplained weight gain of more than 4 pounds should make contact with their primary care physician within 24 hours.
8. For patients with concern over fall prevention, ensure there are no loose rugs, handrails are present on all steps, and restrooms have hand rails and slip resistant surfaces in showers/tubs and communicate these issues to the patient/family.
9. For pediatric asthma patients, assure medications are available. If smoking in the home, encourage smoking cessation or outdoor smoking with the family.
10. For recently discharged patients or patients needing follow-up, review and verify needed appointments noting provider and specialty, date and time.

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.

SKILLS PROCEDURE # 50

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

WOUND CARE-GENERAL PROCEDURE # 51

CLINICAL INDICATIONS:

- ✓ Protection and care for open wounds prior to and during transport

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

PROCEDURE:

1. Use personal protective equipment, including gloves, gown, and mask as indicated.
2. If active bleeding, elevate the affected area if possible and hold direct pressure. Do not rely on “compression” bandage to control bleeding. Direct pressure is much more effective.
3. Once bleeding is controlled, irrigate contaminated wounds with saline as appropriate (this may have to be avoided if bleeding was difficult to control). Consider analgesia per protocol prior to irrigation.
4. Cover wounds with sterile gauze/dressings. Check distal pulses, sensation, and motor function to ensure the bandage is not too tight.
5. Monitor wounds and/or dressings throughout transport for bleeding.
6. Document the wound and assessment and care in the 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.

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director

WOUND CARE-TASER® PROBE REMOVAL PROCEDURE # 52

CLINICAL INDICATIONS:

- ✓ Patient with uncomplicated conducted electrical weapon (Taser®) probes embedded subcutaneously in non-sensitive areas of skin
- ✓ Taser probes are barbed metal projectiles that may embed themselves up to 13 mm into the skin

LEGEND	
B	EMT - BASIC
I	EMT - INTERMEDIATE
P	PARAMEDIC

CONTRAINDICATIONS:

- ✓ Patients with conducted electrical weapon (Taser®) probe penetration in vulnerable areas of body as mentioned below should be transported for further evaluation and probe removal
- ✓ Probes embedded in skin above level of clavicles, female breasts, or genitalia
- ✓ Suspicion that probe might be embedded in bone, blood vessel, or other sensitive structure

PROCEDURE:

1. Ensure wires are disconnected from weapon.
2. Stabilize skin around probe using non-dominant hand.
3. Grasp probe by metal body using dominant hand.
4. Remove probe in single quick motion.
5. Wipe wound with antiseptic wipe and apply dressing.

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.

SKILLS PROCEDURE # 52

TRINITY EMS SYSTEM SKILLS PROCEDURES



Approved by EMS Medical Director 2012

WOUND CARE-TOURNIQUET PROCEDURE # 53

CLINICAL INDICATIONS:

- ✓ Life threatening extremity hemorrhage that can not be controlled by other means
- ✓ Serious or life threatening extremity hemorrhage and tactical considerations prevent the use of standard hemorrhage control techniques

LEGEND	
F	FIRST RESPONDER
B	EMT-BASIC
I	EMT-INTERMEDIATE
P	PARAMEDIC

CONTRAINDICATIONS:

- ✓ Non-extremity hemorrhage
- ✓ Proximal extremity location where tourniquet application is not practical

PROCEDURE:

1. Place tourniquet proximal to wound.
2. Tighten per manufacturer instructions until hemorrhage stops and/or distal pulses in affected extremity disappear.
3. Secure tourniquet per manufacturer instructions.
4. Note time of tourniquet application and communicate this to receiving care providers.
5. Dress wounds per standard wound care protocol.
6. If delayed/prolonged transport or prolonged extrication and tourniquet application time over 2 hours contact medical control.
7. If the patient remains stable after 30 minutes of tourniquet time, EMS personnel may attempt to release the tourniquet (but leave in place in case reapplication is necessary). A pressure dressing should be applied to the wound prior to release.
8. Reassess bleeding and need for reapplication of tourniquet.
9. Document procedure, time, and complications in the 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.

Appendix A (General Reference Documents)

Illinois DNR Form

Scope of Practice – Medications

Scope of Practice – Procedures

Approved Medical Abbreviations

APGAR score

Burn Resources / Guidelines

Difficult Airway Evaluation

RSI Audit Form

RSI Flow Chart

Follow these orders until changed. These medical orders are based on the patient's medical condition and preferences. Any section not completed does not invalidate the form and implies initiating all treatment for that section. With significant change of condition, new orders may need to be written. See also Guidance for Health Care Professionals at <http://www.idph.state.il.us/public/books/advin.htm>.

Patient Last Name	Patient First Name	MI
Date of Birth (mm/dd/yy)	Gender <input type="checkbox"/> M <input type="checkbox"/> F	
Address (street/city/state/ZIPcode)		

<div style="text-align: center;"> A Check One </div>	CARDIOPULMONARY RESUSCITATION (CPR) Patient has no pulse <i>and</i> is not breathing.
	<input type="checkbox"/> Attempt Resuscitation/CPR (<i>Selecting CPR means Intubation and Mechanical Ventilation in Section B is selected</i>) <input type="checkbox"/> Do Not Attempt Resuscitation/DNR

B Check One	MEDICAL INTERVENTIONS Patient has pulse and/or is breathing.
	<ul style="list-style-type: none"> <input type="checkbox"/> Comfort Measures Only (Allow Natural Death). Relieve pain and suffering through the use of medication by appropriate route, positioning, wound care and other measures. Use oxygen, suction and manual treatment of airway obstruction as needed for comfort. <i>Patient prefers no transfer to hospital for life-sustaining treatments. Transfer if comfort needs cannot be met in current location. Treatment Plan: Maximize comfort through symptom management.</i> <input type="checkbox"/> Limited Additional Interventions In addition to care described in Comfort Measures Only, use medical treatment, antibiotics, IV fluids and cardiac monitor as indicated. No intubation or mechanical ventilation. May consider less invasive airway support (e.g., CPAP, BiPAP). <i>Transfer to hospital if indicated. Generally avoid the intensive care unit. Treatment Plan: Provide basic medical treatments.</i> <input type="checkbox"/> Intubation and Mechanical Ventilation In addition to care described in Comfort Measures Only and Limited Additional Interventions, use intubation and mechanical ventilation as indicated. <i>Transfer to hospital and/or intensive care unit if indicated. Treatment Plan: Life support measures, including intubation, in the intensive care unit.</i> <input type="checkbox"/> Additional Orders _____

C Check One (optional)	ARTIFICIALLY ADMINISTERED NUTRITION Offer food by mouth, if feasible and as desired.
	<div> <input type="checkbox"/> No artificial nutrition by tube. <input type="checkbox"/> Defined trial period of artificial nutrition by tube. <input type="checkbox"/> Long-term artificial nutrition by tube. </div> <div> Additional Instructions (e.g., length of trial period) <hr/> </div>

D	DOCUMENTATION OF DISCUSSION (Check all appropriate boxes below)		
	<input type="checkbox"/> Patient	<input type="checkbox"/> Agent under health care power of attorney	
	<input type="checkbox"/> Parent of minor	<input type="checkbox"/> Health care surrogate decision maker (See Page 2 for priority list)	
	Signature of Patient or Legal Representative		
	Signature <i>(required)</i> _____	Name (print) _____	Date _____

Signature of Witness to Consent (Witness required for a valid form)		
I am 18 years of age or older and acknowledge the above person has had an opportunity to read this form and have witnessed the giving of consent by the above person or the above person has acknowledged his/her signature or mark on this form in my presence.		
Signature <i>(required)</i> _____	Name (print) _____	Date _____

SIGNATURE OF ATTENDING PHYSICIAN My signature below indicates to the best of my knowledge and belief that these orders are consistent with the patient's medical condition and preferences.	
Print Attending Physician Name (required) _____	Phone () _____ - _____
Attending Physician Signature (required) _____	Date (required) _____

The Illinois Department of Public Health (IDPH) Uniform Do Not Resuscitate (DNR) Advance Directive is **always voluntary** and is for persons with advanced or serious illness or frailty. This order records your wishes for medical treatment in your current state of health. Once initial medical treatment is begun and the risks and benefits of further therapy are clear, your treatment wishes may change. Your medical care and this form can be changed to reflect your new wishes at any time. However, no form can address all the medical treatment decisions that may need to be made. The Power of Attorney for Health Care Advance Directive form (POAHC) is recommended for all capable adults, regardless of their health status. A POAHC allows you to document, in detail, your future health care instructions and name a Legal Representative to speak for you if you are unable to speak for yourself.

Advance Directive Information

I also have the following advance directives (OPTIONAL)

Contact Person Name	Contact Phone Number
---------------------	----------------------

Health Care Professional Information

Completing the IDPH Uniform Do Not Resuscitate (DNR) Advance Directive Form

- **The completion of a DNR form is always voluntary, cannot be mandated and may be changed at any time.**
- A DNR form should reflect current preferences of persons with advanced or serious illness or frailty. Also, encourage completion of a POAHC.
- Verbal/phone orders are acceptable with follow-up signature by attending physician in accordance with facility/community policy.
- Use of original form is encouraged. Photocopies and faxes on any color of paper also are legal and valid forms.

Reviewing a Do Not Resuscitate (DNR) Advance Directive Form

This DNR form should be reviewed periodically and if:

- The patient is transferred from one care setting or care level to another,
- or there is a substantial change in the patient's health status,
- or the patient's treatment preferences change,
- or the patient's primary care professional changes.

Voiding or revoking a Do Not Resuscitate (DNR) Advance Directive Form

- A patient with capacity can void or revoke the form, and/or request alternative treatment.
- Changing, modifying or revising a DNR form requires completion of a new DNR form.
- Draw line through sections A through E and write "VOID" in large letters if any DNR form is replaced or becomes invalid. Beneath the written "VOID" write in the date of change and re-sign.
- If included in an electronic medical record, follow all voiding procedures of facility.

Illinois Health Care Surrogate Act (755 ILCS 40/25) Priority Order

1. Patient's guardian of person
2. Patient's spouse or partner of a registered civil union
3. Adult child
4. Parent
5. Adult sibling
6. Adult grandchild
7. A close friend of the patient
8. The patient's guardian of the estate

For more information, visit the IDPH Statement of Illinois law at <http://www.idph.state.il.us/public/books/advin.htm>

HIPAA (HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT of 1996) PERMITS DISCLOSURE TO HEALTH CARE PROFESSIONALS AS NECESSARY FOR TREATMENT

Trinity EMS Medication Scope of Practice for Credentialed Personnel

Medication	First Responder	EMT-Basic	EMT-Intermediate	EMT-Paramedic
Acetaminophen			X	X
Adenosine				X
Albuterol		X	X	X
Amiodarone				X
Aspirin		X	X	X
Atropine			X	X
Calcium Chloride				X
Dextrose 25%			X	X
Dextrose 50%			X	X
Diazepam			X	X
Diphenhydramine			X	X
Dopamine				X
DuoDote®		X	X	X
DuoNeb®			X	X
Epinephrine 1:1,000		X ¹	X	X
Epinephrine 1:10,000			X	X
Etomidate				X ³
Fentanyl			X	X
Glucagon			X	X
Glucose Oral		X	X	X
Lidocaine			X	X
Lorazepam			X	X
Magnesium Sulfate				X
Methylprednisolone				X
Midazolam			X	X
Morphine Sulfate			X	X
Naloxone			X	X
Nitroglycerin		X ²	X	X
Normal Saline			X	X
Ondansetron			X	X
Oxygen	X	X	X	X
Rocuronium				X ³
Sodium Bicarbonate				X
Succinylcholine				X ³
Tranexamic Acid				X

EMS personnel at any level who administer medications must do so within an EMS system that provides medical oversight. Personnel must follow written treatment protocols and must complete appropriate medical education. All Trinity EMS System Guidelines, Procedures, and Policies are reviewed and approved by the Medical Director.

X¹ – EMT-B's may only administer Epinephrine 1:1,000 with auto-injector only

X² – EMT-B's may administer Nitroglycerin with IV in place only

X³ – Only Paramedics approved by the system for RSI may direct administration of **Etomidate**, **Rocuronium** and **Succinylcholine**

Trinity EMS Procedure Scope of Practice for Credentialed Personnel

Procedure	First Responder	EMT-Basic	EMT-Intermediate	EMT-Paramedic
12 Lead EKG		X ¹	X	X
Airway: BIPAP				X
Airway: CPAP				X
Airway: ETCO2 Detector		X	X	X
Airway: Bougie				X ²
Airway: Foreign Body	X	X	X	X
Airway: Intubation Nasotracheal				X
Airway: Intubation Orotracheal				X
Airway: King LTD		X	X	X
Airway: Nebulizer Therapy		X	X	X
Airway: RSI				X ²
Airway: Respirator				X
Airway: Suctioning Advanced			X	X
Airway: Suctioning Basic		X	X	X
Airway: Surgical Cricothyrotomy				X
Airway: Tracheostomy Tube Change				X
Airway: Ventilator Operation				X
Arterial Line Maintenance				X
Assessment: Adult	X	X	X	X
Assessment: Pain	X	X	X	X
Assessment: Pediatric	X	X	X	X
Blood Glucose Analysis		X	X	X
Capnography			X	X
Cardiac: External Pacing				X
Cardiac: Internal Pacemaker Maintenance				X
CPR Automated		X	X	X
CPR Manual	X	X	X	X
Cardioversion				X
Chest Decompression/Needle				X
Chest Tube Maintenance				X
Childbirth	X	X	X	X

Trinity EMS Procedure Scope of Practice for Credentialed Personnel

Procedure	First Responder	EMT-Basic	EMT-Intermediate	EMT-Paramedic
Decontamination	X	X	X	X
Defibrillation: AED	X	X	X	X
Defibrillation: Manual			X	X
EKG Monitoring			X	X
Impedance Threshold Device		X	X	X
Injections: SQ and IM			X	X
IN Medication Administration			X	X
Pulse Oximetry	X	X	X	X
Restraints: Physical/ Chemical		X	X	X
Spinal Examination				X ³
Spinal Immobilization	X	X	X	X
Splinting	X	X	X	X
Stroke Screen: Cincinnati		X	X	X
Temperature Measurement	X	X	X	X
Venous Access: Existing Catheters				X
Venous Access: External Jugular				X
Venous Access: Extremity			X	X
Venous Access: Intraosseous			X	X
Wellness Check		X	X	X
Wound Care - General	X	X	X	X
Wound Care - Taser®		X	X	X
Wound Care - Tourniquet	X	X	X	X

EMS personnel at any level who perform these skills must do so within an EMS system that provides medical oversight. Personnel must follow written treatment protocols and must complete appropriate medical education. All Trinity EMS System Guidelines, Procedures, and Policies are reviewed and approved by the Medical Director.

X¹ – EMT- B's may not monitor or interpret cardiac monitors or 12 lead EKG's

X² – Paramedics with approval from Trinity EMS System for Drug Assisted Intubation/RSI

X³ – Paramedics with approval from Trinity EMS System may perform only in conjunction with the Spinal Immobilization Clearance Protocol

TRINITY EMS SYSTEM APPENDIX

APPROVED MEDICAL ABBREVIATIONS

A&O x 3	- alert and oriented to person, place, time
A&O x 4	- alert and oriented to person, place, time, event
A-FIB	- atrial fibrillation
AAA	- abdominal aortic aneurysm
ABD	- abdomen (abdominal)
ACLS	- advanced cardiac life support
AKA	- above the knee amputation
ALS	- advanced life support
AMA	- against medical advice
APPROX	- approximately
ASA	- aspirin
ASSOC	- associated
BIAD	- blind insertion airway device
BG	- blood glucose
BILAT	- bilateral
BKA	- below the knee amputation
BLS	- basic life support
BM	- bowel movement
BP	- blood pressure
BS	- breath sounds
BTLS	- burns, tenderness, lacerations, swelling
BVM	- bag-valve-mask
C-SECTION	- caesarean section
C-SPINE	- cervical spine
C/O	- complains of (complaint of)
CA	- cancer
CABG	- coronary artery bypass graft
CAD	- coronary artery disease
CATH	- catheter
CC	- chief complaint
CHF	- congestive heart failure
CNS	- central nervous system
COPD	- chronic obstructive pulmonary disease
CP	- chest pain

CPR	- cardiopulmonary resuscitation
CSF	- cerebrospinal fluid
CT	- computed tomography
CVA	- cerebrovascular accident (stroke)
D5W	- 5% dextrose in water
DCAP	- deformities, contusions, abrasions, penetrations
DKA	- diabetic ketoacidosis
DNR	- do not resuscitate
DOA	- dead on arrival
DT	- delirium tremens
Dx	- diagnosis
ECG or EKG	- electrocardiogram
EEG	- electroencephalogram
ET	- endotracheal
ETA	- estimated time of arrival
ETOH	- ethanol (alcohol)
ETT	- endotracheal tube
EXT	- external or extension
FB	- foreign body
FLEX	- flexion
Fx	- fracture
g	- gram
GCS	- Glasgow Coma Scale
GI	- gastrointestinal
GSW	- gunshot wound
gtts	- drops
GU	- genitourinary
GYN	- gynecology (gynecological)

HA	- headache
HEENT	- head, eyes, ear, nose, throat
HR	- heart rate or hour
HTN	- hypertension
Hx	- history
ICP	- intracranial pressure
ICU	- intensive care unit
IM	- intramuscular
IV	- intravenous
JVD	- jugular vein distension
kg	- kilogram
KVO	- keep vein open
L-SPINE	- lumbar spine
L/S SPINE	- lumbosacral spine
L&D	- labor and delivery
LAT	- lateral
lb	- pound
LLQ	- left lower quadrant
LOC	- level of consciousness /loss of consciousness
LR	- lactated ringers
LUQ	- left upper quadrant
MAST	- military anti-shock trousers
MCA	- motorcycle accident
mcg	- microgram
MCI	- mass casualty incident
MED	- medicine
mg	- milligram
MI	- myocardial infarction (heart attack)
min	- minimum/minute

MVA/MVC	- motor vehicle accident/motor vehicle collision
N/V	- nausea/vomiting
N/V/D	- nausea/vomiting/diarrhea
NAD	- no apparent distress
NC	- nasal cannula
NEB	- nebulizer
NKDA (NKA)	- no known drug allergies (no known allergies)
NRB	- non-rebreather
NS	- normal saline
NSR	- normal sinus rhythm
OB/GYN	- obstetrics/gynecology
PALP	- palpation
PAC	- premature atrial contraction
PE	- pulmonary embolus/physical exam
PERRL	- pupils equal, round, reactive to light
PERRLA	- pupils, equal, round, and reactive to light & accommodation
PMHx	- personal medical history
PO	- oral
PRB	- partial re-breather
PRN	- as needed
PT	- patient
PVC	- premature ventricular contraction
RLQ	- right lower quadrant
ROSC	- return of spontaneous circulation
RSI	- rapid sequence intubation
RUQ	- right upper quadrant
Rx	- prescription
S/P	- status post
SOB	- shortness of breath
SPO2	- pulse oximeter oxygen saturation

SQ	- subcutaneous
ST	- sinus tachycardia
SVT	-supraventricular tachycardia
S/S	- signs and symptoms
SZ	- seizure
T-SPINE	- thoracic spine
T	- temperature
TIA	- transient ischemic attack
TKO	- to keep open (IVs – may also use KVO)
Tx	- treatment
URI	- upper respiratory infection
UTI	- urinary tract infection
VF/Vfib	- ventricular fibrillation
VS	- vital signs
VT/Vtach	- ventricular tachycardia
WAP	- wandering atrial pacemaker
WNL	- within normal limits
YO/YOA	- years old/years of age
M or ♂	- male
F or ♀	- female
Ø	- none
+	- positive
-	- negative
?	- questionable
ψ	-psychiatric

\sim	- approximately
$>$	- greater than
\geq	- greater than or equal to
$<$	- less than
\leq	- less than or equal to
$=$	- equal

\uparrow	- increased (upper)
\downarrow	- decreased (lower)
Δ	- change

L	- left
R	- right
1°	- primary
2°	- secondary

TRINITY EMS SYSTEM APPENDIX

APGAR SCORE

The Apgar score should be obtained and recorded at 1 and at 5 minutes with the birth of delivery of any infant.

- ✓ Each of the 5 parameters should be scored and then totaled
- ✓ The Minimum score is 0
- ✓ The Maximum score is 10

APGAR is the acronym for **A**pppearance, **P**ulse, **G**rimace, **A**ctivity, and **R**espiration

SIGN	0	1	2
HEART RATE	ABSENT	< 100	> 100
RESPIRATORY RATE	ABSENT	WEAK CRY	STRONG CRY
MUSCLE TONE	LIMP	SOME FLEXION	GOOD FLEXION
REFLEX IRRITABILITY (WHEN FEET STIMULATED)	NO RESPONSE	SOME MOTION	CRY
COLOR	BLUE/PALE	BODY PINK/ EXT BLUE	PINK

TRINITY EMS SYSTEM APPENDIX

BURN RESOURCES/GUIDELINES

FORMULA FOR FLUID RESUSCITATION OF THE BURN PATIENT (ALSO KNOWN AS THE PARKLAND FORMULA)

Patient's weight x TBSA x 4 ml NS infused over 24 hours
with half given in the first 8 hours

(For the equation, the abbreviations are PW x TBSA x 4 ml)

EMS focuses on the care given during the first hour or several hours following the event. Thus the formula as adapted for EMS and the first 8 hours is:

$$PW \times TBSA \times 4 \text{ ML} \div 2$$

To take this hourly rate, divided the solution by 8 and the equation becomes:

$PW \times TBSA \times 4 \div 2 \div 8 = \text{total to be infused for each of the first 8 hours}$

Another way to state the equation is to use:

$PW \times TBSA \times 0.25 \text{ ml} = \text{total to be infused for each hour of the first 8 hours}$

Example: 80 kg patient with 50% TBSA x 0.25 ml = 1000 ml

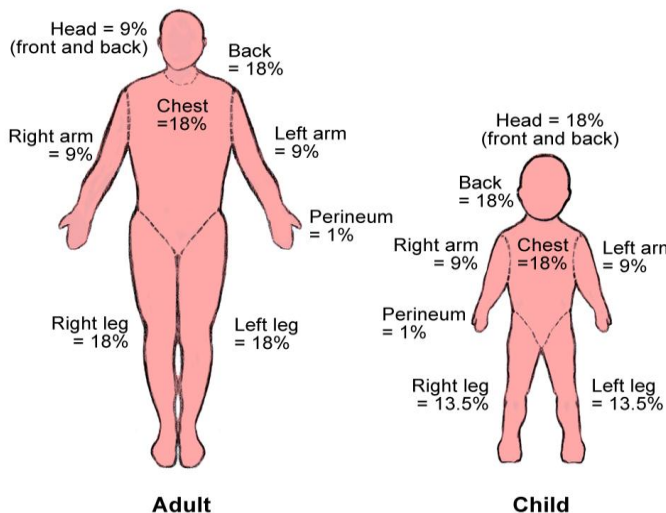
Remember:

Patient's weight in kg (2.2 lbs. = 1 kg)
220 lb. adult = 100 kg

%TBSA = Rule of Nine Total Body Surface Area

Factor for 1st hour and each hour for the first 8 hours = 0.25

Reminder: If two IVs are running, divide the total amount to be infused each hour by 2



Wt (kg)	% TBSA	Factor	/Hr for 1st 8 Hrs of Care	60 gtt set, gtt/min	20 gtt set, gtt/min	15 gtt set, gtt/min	10 gtt set, gtt/min
10	10	0.25	25	25	8.3	6.3	4.2
10	20	0.25	50	50	16.7	12.5	8.3
10	30	0.25	75	75	25.0	18.8	12.5
10	40	0.25	100	100	33.3	25.0	16.7
10	50	0.25	125	125	41.7	31.3	20.8
20	10	0.25	50	50	16.7	12.5	8.3
20	20	0.25	100	100	33.3	25.0	16.7
20	30	0.25	150	150	50.0	37.5	25.0
20	40	0.25	200	200	66.7	50.0	33.3
20	50	0.25	250	250	83.3	62.5	41.7
30	10	0.25	75	75	25.0	18.8	12.5
30	20	0.25	150	150	50.0	37.5	25.0
30	30	0.25	225	225	75.0	56.3	37.5
30	40	0.25	300	300	100.0	75.0	50.0
30	50	0.25	375	375	125.0	93.8	62.5
40	10	0.25	100	100	33.3	25.0	16.7
40	20	0.25	200	200	66.7	50.0	33.3
40	30	0.25	300	300	100.0	75.0	50.0
40	40	0.25	400	400	133.3	100.0	66.7
40	50	0.25	500	500	166.7	125.0	83.3
50	10	0.25	125	125	41.7	31.3	20.8
50	20	0.25	250	250	83.3	62.5	41.7
50	30	0.25	375	375	125.0	93.8	62.5
50	40	0.25	500	500	166.7	125.0	83.3
50	50	0.25	625	625	208.3	156.3	104.2
60	10	0.25	150	150	50.0	37.5	25.0
60	20	0.25	300	300	100.0	75.0	50.0
60	30	0.25	450	450	150.0	112.5	75.0
60	40	0.25	600	600	200.0	150.0	100.0
60	50	0.25	750	750	250.0	187.5	125.0
70	10	0.25	175	175	58.3	43.8	29.2
70	20	0.25	350	350	116.7	87.5	58.3
70	30	0.25	525	525	175.0	131.3	87.5
70	40	0.25	700	700	233.3	175.0	116.7
70	50	0.25	875	875	291.7	218.8	145.8
80	10	0.25	200	200	66.7	50.0	33.3
80	20	0.25	400	400	133.3	100.0	66.7
80	30	0.25	600	600	200.0	150.0	100.0
80	40	0.25	800	800	266.7	200.0	133.3
80	50	0.25	1000	1000	333.3	250.0	166.7
90	10	0.25	225	225	75.0	56.3	37.5
90	20	0.25	450	450	150.0	112.5	75.0
90	30	0.25	675	675	225.0	168.8	112.5
90	40	0.25	900	900	300.0	225.0	150.0
90	50	0.25	1125	1125	375.0	281.3	187.5
100	10	0.25	250	250	83.3	62.5	41.7
100	20	0.25	500	500	166.7	125.0	83.3
100	30	0.25	750	750	250.0	187.5	125.0
100	40	0.25	1000	1000	333.3	250.0	166.7
100	50	0.25	1250	1250	416.7	312.5	208.3

CRITICAL (RED)

>15% TBSA 2nd/3rd Degree Burn
Burns with multiple trauma
Burns with definitive airway compromise
2/2017

SERIOUS (YELLOW)

5-15% TBSA 2nd/3rd Degree Burn
Suspected inhalation injury or requiring intubation for airway stabilization
Hypotension or GCS<14

MINOR (GREEN)

<5% TBSA 2nd/3rd Degree Burn
No inhalation injury
Not intubated
Normotensive
GCS>14

TRINITY EMS SYSTEM APPENDIX

DIFFICULT AIRWAY EVALUATION

Evaluating for the difficult airway

Nearly 1% of patients who require endotracheal intubation have airways that make intubation difficult, and around 1% will have failed intubation attempts. Recognizing those patients who may have a difficult airway allows the paramedic to proceed with systematic approach and prevent foreseeable complications. It also allows the paramedic to prepare additional equipment (such as a cricothyrotomy kit or BIAD). The mnemonic **LEMON** is useful in evaluating patients for signs that may be consistent with a difficult airway and should raise the paramedic's index of suspicion, and the use of RSI may be discouraged if the airway is predicted to pose difficulty in intubation.

Look externally

External indicators of either difficult intubation or difficult ventilation include: presence of a beard or moustache, abnormal facial shape, extreme cachexia, edentulous mouth, facial trauma, obesity, large front teeth or "buck teeth", high arching palate, receding mandible, short bull neck.

Evaluate 3-3-2 Rule

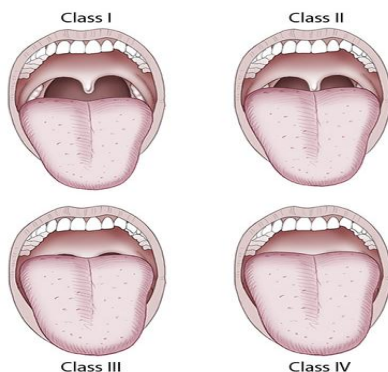
3 fingers between the patient's teeth (patient's mouth should open adequately to permit three fingers to be placed between the upper and lower teeth)

3 fingers between the tip of the jaw and the beginning of the neck (under the chin)

2 fingers between the thyroid notch and the floor of the mandible (top of the neck)

Mallampati

This scoring system is based on the work of Mallampati et al published in the Canadian Anaesthesia Society Journal in 1985. The system takes into account the anatomy of the mouth and the view of various anatomical structures when the patient opens his mouth as wide as possible. This test is performed with the patient in the sitting position, the head held in a neutral position, the mouth wide open, and the tongue protruding to the maximum. Inappropriate scoring may occur if the patient is in the supine position (instead of sitting), if the patient phonates or if the patient arches his or her tongue.



Class 1: Full visibility of tonsils, uvula and soft palate

Class 2: Visibility of hard and soft palate, upper portion of tonsils and uvula

Class 3: Soft and hard palate and base of the uvula are visible

Class 4: Only Hard Palate visible

Obstruction?

Besides the obvious difficulty if the airway is obstructed with a foreign body, the paramedic should also consider other obstructers such as tumor, abscess, epiglottitis, or expanding hematoma.

Neck Mobility

Ask the patient to place their chin on their chest and to tilt their head backward as far as possible. Obviously, this will not be possible in the immobilized trauma patient.

TRINITY EMS SYSTEM APPENDIX

RAPID SEQUENCE INTUBATION AUDIT FORM

THE RAPID SEQUENCE INTUBATION FORM IS TO BE COMPLETED FOR ALL RAPID SEQUENCE INTUBATIONS/ DRUG ASSISTED INTUBATIONS EITHER SUCCESSFUL OR UNSUCCESSFUL. IT IS A PEER REVIEW, CONFIDENTIAL DOCUMENT THAT MUST BE COMPLETED AND SUBMITTED TO MAINTAIN APPROVAL FOR RSI IN THE TRINITY EMS SYSTEM.

PATIENT DEMOGRAPHICS:

DATE: _____
 EMS AGENCY _____
 PARAMEDIC _____
 PATIENT AGE: _____
 CHIEF COMPLAINT: _____

MAY PLACE PATIENT STICKER HERE

INDICATION FOR INTUBATION:

- ☐ APNEA/AGONAL RESPIRATIONS
- ☐ ABSENT GAG REFLEX/PROTECTIVE AIRWAY MECHANISMS
- ☐ INADEQUATE VENTILATION/OXYGENATION
- ☐ INJURY OR ILLNESS INVOLVING AIRWAY
- ☐ OTHER _____

PRE-RSI VITAL SIGNS:

BLOOD PRESSURE: _____
 HEART RATE: _____
 RESPIRATORY RATE: _____
 PULSE OXIMETRY: _____

GCS: EYE: O (1) NONE O (2) PAIN O (3) VOICE O (4) SPONTANEOUS

VERBAL: O (1) NONE O (2) INCOMPREHENSIBLE O (3) INAPPROPRIATE O (4) CONFUSED O (5) ORIENTED

MOTOR: O (1) NONE O (2) EXTENSION O (3) FLEXION O (4) WITHDRAWALS O (5) LOCALIZES O (6) OBEYS

MEDICATIONS ADMINISTERED:

- ☐ LIDOCAINE
- ☐ FENTANYL
- ☐ ETOMIDATE
- ☐ SUCCINYLCHOLINE
- ☐ ROCURONIUM
- ☐ OTHER _____

ADJUVANT THERAPY:

- ☐ HIGH FLOW NASAL CANNULA O2
- ☐ SELICK'S MANEUVER
- ☐ BOUGIE
- ☐ BURP MANEUVER
- ☐ BIMANUAL LARYNGOSCOPY
- ☐ IN-LINE C-SPINE IMMOBILIZATION

INTUBATION:

BLADE: MACINTOSH (CURVED) / MILLER (STRAIGHT)
 ENDOTRACHEAL TUBE SIZE: _____
 NUMBER OF ATTEMPTS (INSERTION PAST TEETH): _____
 DEPTH AT TEETH: _____
 CONFIRMATION: BREATH SOUNDS/ ETCO2

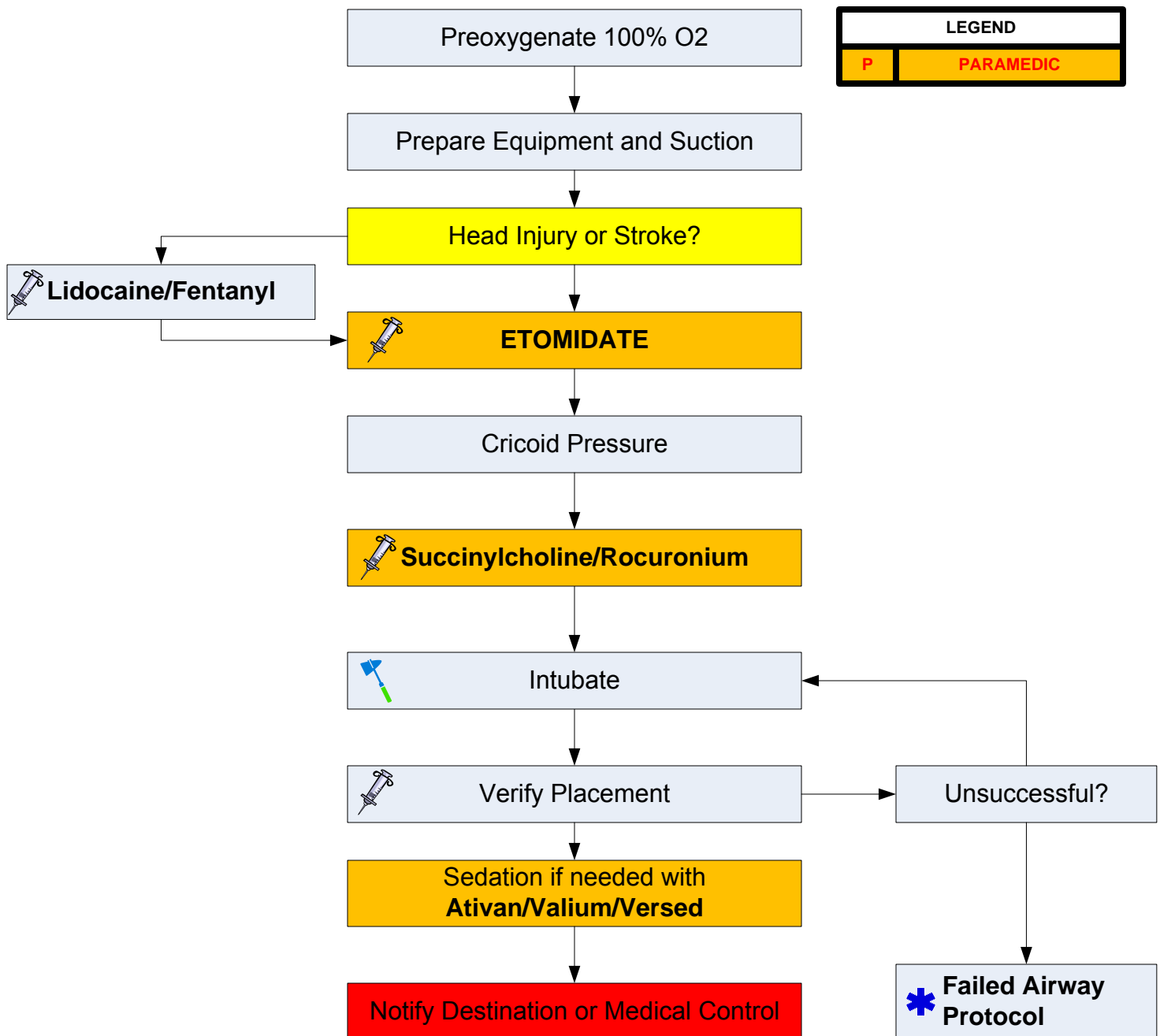
COMPLICATIONS:

- ☐ FAILED INTUBATION ATTEMPTS
- ☐ INJURY OR TRAUMA TO PATIENT
- ☐ ESOPHAGEAL INTUBATION
- ☐ ADVERSE DRUG REACTION
- ☐ DISLODGED TUBE
- ☐ RESCUE: BIAD/ CRICOTHYROTOMY
- ☐ OTHER _____

SUGGESTIONS FOR IMPROVEMENT: _____

TRINITY EMS SYSTEM APPENDIX

RAPID SEQUENCE INTUBATION FLOW CHART



PEARLS

- ✓ This flow chart is a visual aid for the RSI Procedure
- ✓ Intubations are only allowed in patients 9 years of age and older, on average 4 ft. and 50 lbs.
- ✓ Paralysis means you are responsible for the airway...Be Cautious at all times!!!
- ✓ Continuous wave form capnography is strongly recommended for all intubated patients
- ✓ Continuous pulse oximetry is required for all intubated patients
- ✓ At least two EMT-Paramedics are required for this procedure, with one being RSI certified by the Medical Director and Trinity EMS System
- ✓ Secure the ETT and patient to prevent dislodgement of ETT
- ✓ All RSI's performed must have an Audit form completed and submitted to the Trinity EMS System

Appendix B (Medication Delivery)

Trinity EMS System Medication List

Pediatric Color-coded Medication List

Standardized Medication Delivery Guide:

Amiodarone

Dopamine

Etomidate

Rocuronium

Succinylcholine

Versed (Pediatric)



ACETAMINOPHEN

(Tylenol)

Trinity EMS Protocols:

- 1 – 07 Fever/Infection Control
- 1 – 10 Pain Control (Pediatric)

Indications:

- Pain and fever control
- Analgesic and antipyretic

Contraindications:

- Avoid in patients with liver disease or chronic alcohol use

Adult Dosages:

- 650 mg to 1000 mg po

Pediatric Dosages:

See color-coded list

- 15 mg/kg po

Side effects:

- Hepatotoxicity
- Nausea
- Rash
- Headache

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ADENOSINE

(Adenocard)

Trinity EMS Protocols:

- 3 – 02 Atrial Fibrillation
- 3 – 12 Supraventricular Tachycardia
- 4 – 11 Pediatric Supraventricular Tachycardia

Indications:

- Specifically for treatment/diagnosis of SVT

Contraindications:

- 2ND OR 3rd degree AV block without pacemaker
- Acute bronchospasm
- Caution with severe COPD

Adult Dosages:

- 6 mg IV push over 1-3 seconds
- If no effect after 1-2 minutes, repeat with 12 mg IV push over 1-3 seconds
- Repeat 12 mg once if necessary
- Use stopcock and 10 ml Normal Saline flush with each dose

Pediatric Dosages:

- 0.1 mg/kg IV (Max 6 mg) push over 1-3 seconds.
- If no effect after 1-2 minutes, repeat with 0.2 mg/kg IV (Max 12 mg) push over 1-3 seconds
- Repeat with 0.3 mg/kg IV (Max 12mg) push over 1-3 seconds
- Use stopcock and 5 ml Normal Saline flush with each dose

Side effects(Serious):

- Severe bradycardia
- Ventricular fibrillation/tachycardia
- Atrial fibrillation
- Asystole
- Complete heart block
- Bronchospasm

Common:

- Flushing
- Dyspnea
- Chest pressure
- Nausea
- Lightheaded
- Headache

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ALBUTEROL

Trinity EMS Protocols:

- 2 – 09 Respiratory Distress
- 4 – 09 Pediatric Respiratory Distress
- 5 – 04 Crush Syndrome
- 5 – 05 Drowning

Indications:

- Beta-agonist used for treatment of bronchospasm

Contraindications:

- Caution with ischemic heart disease, arrhythmias, hypokalemia

Adult Dosages:

- 2.5 mg in nebulizer up to 3 doses if no history of cardiac disease and heart rate ≤ 150

Pediatric Dosages:

See color-coded list

- 2.5 mg (3ml) in nebulizer up to 3 doses continuously if no history of cardiac disease and heart rate < 200

Side effects(Serious):

- Hypertension
- Angina/Myocardial Infarction
- Hypokalemia
- Arrhythmias

Common:

- Tremor
- Nervousness
- Headache
- Nausea
- Tachycardia
- Muscle Cramps
- Palpitations
- Dizziness

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AMIODARONE

(Cordarone)

Trinity EMS Protocols:

- 3 – 15 Ventricular Fibrillation/Pulseless Ventricular Tachycardia
- 3 – 16 Wide Complex Tachycardia
- 4 – 08 Pediatric Pulseless Arrest

Indications:

- Antiarrhythmic used in ventricular dysrhythmias(Class 3)

Contraindications:

- Avoid in patients with 2nd or 3rd degree heart block or profound bradycardia

Adult Dosages:

Vfib/Pulseless Vtach:

- 300 mg IV push
- Repeat dose of 150 mg IV push for recurrent episodes

Wide complex tachycardia:

- 150 mg in 100 ml D5W over 10 minutes

Pediatric Dosages:

Vfib/Pulseless Vtach:

- 5 mg/kg IV/IO push over 5 minutes; may repeat one dose; Maximum dose 300 mg

Wide complex tachycardia:

- 5 mg/kg IV/IO in 100 ml D5W over 10 minutes
- Avoid in <6 month/**Pink**

Use Trinity EMS Standardized Medication Delivery Table

Side effects(Serious):

- Severe bradycardia
- Torsades de pointes
- CHF
- Hypotension/shock

Common:

- Tremor
- Ataxia
- Nausea/vomiting
- Dizziness
- Ventricular Tachycardia
- Bradycardia

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ASPIRIN

Trinity EMS Protocols:

- 2 – 08 Pulmonary Edema
- 3 – 05 Chest Pain/STEMI

Indications:

- An antiplatelet drug for use in cardiac chest pain/stroke
- Analgesic, anti-inflammatory, and antipyretic effects

Contraindications:

- Allergy or hypersensitivity
- NSAID-induced asthma or urticaria
- GI bleeding or coagulopathy

Adult Dosages:

- 81 mg chewable (baby) Aspirin. Give 4 tablets equal to usual adult dosage and chew tablets
- 162-324 mg po chewed

Pediatric Dosages:



Side effects(Serious):

- Anaphylaxis
- Angioedema
- Bronchospasm
- Bleeding

Common:

- Dyspepsia
- Nausea/vomiting
- Rash
- Dizziness

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ATROPINE

Trinity EMS Protocols:

- 2 – 07 Overdose/Toxicity
- 3 – 03 Bradycardia
- 4 – 04 Pediatric Bradycardia

Indications:

- Anticholinergic drug used in bradycardias
- Antagonizes acetylcholine receptors in organophosphate poisonings

Contraindications:

- Caution in asthma, paralytic ileus, myasthenia gravis, and the elderly

Adult Dosages:

Bradycardia:

- 0.5 mg - 1 mg IV/IO every 3-5 minutes up to 3 mg

Organophosphate:

- 1 - 2 mg IM or IV/IO, otherwise per Medical Control
- In organophosphate toxicity, large doses may be required (> 10 mg)

Pediatric Dosages:

See color-coded list

Bradycardia:

- 0.02 mg/kg IV or IO (max 1 mg per dose)
- Minimum 0.1 mg per dose

Organophosphate:

- 0.02 mg/kg IM or IV/IO (otherwise per Medical Control)

Side effects:

- Severe bradycardia
- Headache
- Dry mouth
- Nausea

- Tachycardia
- Palpitations
- Ataxia
- Tremor

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CALCIUM CHLORIDE

Trinity EMS Protocols:

- 2 – 07 Overdose/Toxicity
- 3 – 03 Bradycardia
- 3 – 10 Pulseless Electrical Activity
- 4 – 04 Pediatric Bradycardia
- 5 – 04 Crush Syndrome

Indications:

- Indicated for severe hyperkalemia and calcium channel blocker overdose

Contraindications/Cautions:

- Digoxin toxicity
- Hypercalcemia
- Irritating to veins and toxic to tissue

Adult Dosages:

- One amp (10 ml) or 1 gram IV/IO

Pediatric Dosages:

See color-coded list

- 20 mg/kg IV/IO slowly

Side effects(Serious):

- Arrhythmias
- Syncope
- Extravasation necrosis

Common:

- Hypotension
- Bradycardia
- Vasodilation/flushing
- Dizziness
- Nausea

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DEXTROSE 25%

GLUCOSE SOLUTION

Trinity EMS Protocols:

- 1 – 06 Behavioral
- 1 – 13 Universal Patient Care
- 2 – 03 Altered Mental Status
- 2 – 11 Vomiting & Diarrhea
- 3 – 11 Suspected Stroke
- 4 – 04 Pediatric Bradycardia
- 4 – 05 Pediatric Head Trauma
- 4 – 06 Pediatric Hypotension
- 4 – 08 Pediatric Pulseless Arrest
- 4 – 10 Pediatric Seizure
- 5 – 09 Hypothermia

Indications:

- Use in unconscious/confused states or hypoglycemic states

Contraindications:

- Intracranial hemorrhage
- Severe dehydration

Adult Dosages:



Pediatric Dosages:

See color-coded list

- 2-4 ml/kg IV or IO starting at low dose
- Repeat based on blood glucose results

Side effects:

- Phlebitis and thrombosis
- Hyperglycemia
- Pulmonary edema

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DEXTROSE 50%

GLUCOSE SOLUTION

Trinity EMS Protocols:

- 1 – 06 Behavioral
- 1 – 13 Universal Patient Care
- 2 – 03 Altered Mental Status
- 2 – 10 Seizure
- 2 – 11 Vomiting & Diarrhea
- 3 – 10 Pulseless Electrical Activity
- 3 – 11 Suspected Stroke
- 3 – 13 Syncope
- 4 – 02 Newly Born
- 4 – 03 Obstetrical Emergency
- 5 – 07 Head Trauma
- 5 – 09 Hypothermia

Indications:

- Use in unconscious/confused states or hypoglycemia

Contraindications:

- Intracranial hemorrhage
- Severe dehydration

Adult Dosages:

- One amp or 25 grams IV bolus
- Repeat based on blood glucose results

Pediatric Dosages:

- **D10** (one ml of **D50** with 4 ml **Normal Saline**) for treatment in Neonates <3 months/White

Side Effects:

- Phlebitis and thrombosis
- Hyperglycemia
- Pulmonary edema

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DIAZEPAM

(Valium)

Trinity EMS Protocols:

- 1 – 01 Airway, Adult
- 1 – 03 Airway, Pediatric
- 1 – 06 Behavioral
- 2 – 10 Seizure
- 3 – 02 Atrial Fibrillation
- 3 – 08 Induced Hypothermia
- 3 – 12 Supraventricular Tachycardia
- 3 – 16 Wide Complex Tachycardia
- 4 – 03 Obstetrical Emergency
- 4 – 10 Pediatric Seizures
- 4 – 11 Pediatric SVT

Indications:

- Used for control of seizures, anxiety, alcohol withdrawal, and sedation

Contraindications:

- Watch for respiratory depression and hypotension

Adult Dosages:

- 2 - 10 mg IV/IO
- 5 - 10 mg PR
- May repeat every 5 minutes
- May be administered rectally
- Max dose 20 mg
- Recommended doses are 5 mg for seizures and 2 mg for sedation

Pediatric Dosages:

- 0.2 mg/kg IV/IO
- 0.5 mg/kg PR
- May repeat every 5 minutes
- Maximum 3 doses

Side effects:

- Drowsiness
- Ataxia
- Confusion
- Hypotension
- Bradycardia

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DIPHENHYDRAMINE

(Benadryl)

Trinity EMS Protocols:

- 2 – 02 Allergic Reaction

Indications:

- Antihistamine used in the treatment of allergic reactions and vertigo

Contraindications:

- Infants < 3 months old
- Caution in the elderly and hypotensive states

Adult Dosages:

- 25-50 mg IV/IM/PO

Pediatric Dosages:

See color-coded list

- 1-2 mg/kg IV/IO/IM
- Do not give in infants <3 months
- Max dose 50 mg

Side effects:

- | | |
|--|---|
| <ul style="list-style-type: none">• Arrhythmias• Seizures• Drowsiness• Dizziness• Dry Mucous Membranes | <ul style="list-style-type: none">• Urinary Retention• Hypotension• Palpitations• Tachycardia• Blurred Vision |
|--|---|

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DOPAMINE

(Intropin)

Trinity EMS Protocols:

- 3 – 03 Bradycardia
- 3 – 07 Hypotension
- 3 – 09 Post-Resuscitation
- 3 – 10 Pulseless Electrical Activity (PEA)
- 4 – 06 Pediatric Hypotension

Indications:

- A vasopressor used in shock or hypotensive states

Contraindications/Cautions:

- Caution with MAO-inhibitors
- Caution with Peripheral Arterial Disease

Adult Dosages:

- 2-20 micrograms/kg/min IV/IO titrated to keep BP systolic of >90 mmHg
- 2-20 micrograms/kg/min IV/IO titrated to maintain a mean arterial pressure (MAP) of 90-100 mmHg post-cardiac arrest
- Recommended doses are 5, 10 and 20 mcg/kg/min

Pediatric Dosages:

See color-coded list

- 2-20 micrograms/kg/min IV/IO titrated to BP systolic appropriate for age

Side effects(Serious):

- Anaphylaxis
- Asthma Exacerbation
- Extravasation Necrosis
- Gangrene

- Hypotension
- Tachycardia
- Headache
- Nausea/Vomiting
- Conduction Abnormalities
- Vasoconstriction

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DUODOTE

(Atropine/Pralidoxime)

Trinity EMS Protocols:

- 2 – 07 Overdose/Toxicity

Indications:

- Used in Organophosphorous insecticide/chemical nerve agent poisonings

Contraindications:

- None if Life-threatening situation

Adult Dosages:

- One Auto-Injector IM in mid-lateral thigh
- May administer up to three for severe symptoms

Pediatric Dosages:

- One Auto-Injector IM in mid-lateral thigh for severe symptoms
- Use only for patients > 40 kg unless directed by Medical Control in nonlife threatening situations

Side effects(Serious):

- Ataxia
- Delirium/Hallucinations
- Arrhythmias
- Syncope
- Laryngospasm
- Myocardial Infarction

Common:

- Dry Mouth
- Confusion
- Headache
- Tachycardia
- Flushing
- Hypertension

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DuoNeb®

(Albuterol/Ipratropium)

Trinity EMS Protocols:

- 2 – 09 Respiratory Distress
- 4 – 09 Pediatric Respiratory Distress

Indications:

- Medication containing Albuterol and Ipratropium to assist patients with asthma and COPD
- Administer only **one treatment**, usually first, in patients with bronchospasm or obstructive lung disease

Contraindications/Cautions:

- Hypersensitivity/Allergy to drug
- Age less than 1 year/12 months or less than 10 kg

Adult Dosages:

- 3 mg Albuterol + 500 mcg Ipratropium per nebulizer treatment in 3 ml unit dose

Pediatric Dosages:

- 3 mg Albuterol + 500 mcg Ipratropium per nebulizer treatment in 3 ml unit dose

Side effects(Serious):

- Anaphylaxis
- Angioedema
- Laryngospasm
- Paradoxical Bronchospasm

Common:

- Cough
- Dry Mouth
- Dizziness
- Rash/Urticaria

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EPINEPHRINE

1:1,000

Trinity EMS Protocols:

- 2 – 02 Allergic Reaction
- 2 – 09 Respiratory Distress
- 4 – 09 Pediatric Respiratory Distress

Indications:

- Vasopressor used in allergic reactions, severe asthma, or anaphylaxis

Contraindications/Cautions:

- Labor and Delivery
- Cardiac Disease
- Hypertension
- Elderly Patients

Adult Dosages:

- 0.3 mg IM (if age <50 years)
- 0.15 mg IM (if age >50 years)
- **EpiPen** Auto-Injector (may repeat one time for severe symptoms)

Nebulized Epinephrine

- 2 mg (2ml) mixed with 1 ml of Normal Saline

Pediatric Dosages:

See color-coded list

- 0.01 mg/kg IM
- Max dose 0.3 mg
- **EpiPen Jr** Auto-Injector for patients 15-33 kg (may repeat one time for severe symptoms)

Nebulized Epinephrine

- 2 mg (2ml) mixed with 1 ml of Normal Saline

Side effects(Serious):

- Pulmonary Edema
- Arrhythmias
- Hypertension
- Angina
- Cerebral Hemorrhage
- Tissue Necrosis

Common:

- Tachycardia
- Nausea/vomiting
- Sweating
- Dizziness
- Tremor
- Anxiety

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EPINEPHRINE

1:10,000

Trinity EMS Protocols:

- 3 – 01 Asystole
- 3 – 10 Pulseless Electrical Activity
- 3 – 14 VFib/Pulseless VTach
- 4 – 04 Pediatric Bradycardia
- 4 – 08 Pediatric Pulseless Arrest

Indications:

- Vasopressor used in cardiac arrest

Contraindications/Cautions:

- Labor and Delivery
- Cardiac Disease
- Hypertension
- Elderly Patients

Adult Dosages:

- 1 mg IV/IO (pulseless)
- May be repeated every 3-5 minutes

Pediatric Dosages:

See color-coded list

- 0.01 mg/kg IV or IO
- Max dose 0.5 mg
- Repeat every 3-5 minutes until response observed

Side effects(Serious):

- Pulmonary Edema
- Arrhythmias
- Hypertension
- Angina
- Cerebral Hemorrhage
- Tissue Necrosis

Common:

- Tachycardia
- Nausea/vomiting
- Sweating
- Dizziness
- Tremor
- Anxiety

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ETOMIDATE

(Amidate)

Trinity EMS Protocols:

- 3 – 08 Induced Hypothermia
- XX - Rapid sequence Intubation Procedure

Indications:

- Hypnotic used in shivering patient being resuscitated from cardiac arrest
- Rapid Sequence Intubation (RSI)

Contraindications/Cautions:

- Elderly patients

Adult Dosages:

- 20 mg IV/IO

Pediatric Dosages:

Use Trinity EMS Standardized Medication Delivery Table

- 0.3 mg/kg IV/IO up to max dose of 20 mg

Side effects:

- Shock
- Transient Myoclonic Jerks
- Nausea/Vomiting
- Apnea

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FENTANYL

(Sublimaze)

Trinity EMS Protocols:

- 1 – 09 Pain Control: Adult
- 1 – 10 Pain Control: Pediatric
- 2 – 08 Pulmonary Edema
- 3 – 02 Atrial Fibrillation
- 3 – 05 Chest Pain and STEMI
- 3 – 12 Supraventricular Tachycardia
- 3 – 16 Wide Complex Tachycardia

Indications:

- Binds opioid receptors producing analgesia and sedation
- Rapid induction of pain relief

Contraindications/Cautions:

- Elderly patients
- Hypotension

Adult Dosages:

- 25-75 mcg IM/IV/IO bolus, then repeat 50 mcg IM/IV/IO every 10-12 minutes until a maximum of 200 mcg or clinical improvement
- 50-100 mcg IN/intranasal per Intranasal Medication Administration (may repeat x1)

Pediatric Dosages:

See color-coded list

- 1 mcg/kg IM/IV/IO single bolus only
- 50 mcg maximum dose
- 2 mcg/kg intranasal **single dose** only

Side effects(Serious):

- Respiratory Depression/Arrest
- Hypotension
- Bradycardia
- Laryngospasm
- Severe Muscle Rigidity
- Increased ICP
- Delirium

Common:

- Somnolence
- Nausea/Vomiting
- Confusion
- Dizziness
- Euphoria
- Hallucinations
- Pruritus

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GLUCAGON

Trinity EMS Protocols:

- 1 – 06 Behavioral
- 1 – 13 Universal Patient Care
- 2 – 03 Altered Mental Status
- 2 – 10 Seizure
- 2 – 11 Vomiting & Diarrhea
- 3 – 03 Bradycardia
- 3 – 10 Pulseless Electrical Activity
- 3 – 11 Suspected Stroke
- 3 – 13 Syncope
- 4 – 03 Obstetrical Emergency
- 4 – 04 Pediatric Bradycardia
- 4 – 05 Pediatric Head Trauma
- 4 – 06 Pediatric Hypotension
- 4 – 10 Pediatric Seizure
- 5 – 07 Head Trauma
- 5 – 09 Hypothermia

Indications:

- Drug acting to release glucose into blood stream by glycogen breakdown
- Use in patients with no IV access
- May be used for smooth muscle relaxation with food bolus
- Beta-blocker overdose

Contraindications:

- Caution with insulinoma/pheochromocytoma/starvation

Adult Dosages:

- 1-2 mg IM/IV/IO
- Follow up blood glucose determination in 15 minutes. If glucose <60, repeat dose

Pediatric Dosages:

See color-coded list

- 0.03 mg/kg IV/IM up to 1 mg
- Follow up blood glucose determination in 15 minutes. If glucose <60, repeat dose

Side effects:

- Nausea/Vomiting
- Urticaria/Rash

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GLUCOSE ORAL

Trinity EMS Protocols:

- 1 – 06 Behavioral
- 1 – 13 Universal Patient Care
- 2 – 03 Altered Mental Status

Indications:

- Use in conscious hypoglycemic states. Do not use in patient without gag reflex

Contraindications/Cautions:

- Absent Gag reflex or inability to protect from aspiration

Adult Dosages:

- One tube or packet
- Repeat based on blood glucose results

Pediatric Dosages:

See color-coded list

- One tube or packet
- Repeat based on blood glucose result
- Minimum age is 2 years

Side effects:

- Hyperglycemia
- Nausea/Vomiting

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IPRATROPIUM

(Atrovent)

Trinity EMS Protocols:

- 2 – 09 Respiratory Distress
- 4 – 09 Pediatric Respiratory Distress

Indications:

- Medication used in addition to albuterol to assist patients with asthma and COPD
- Administer only one treatment, usually first, with Albuterol(Duoneb®)

Contraindications/Cautions:

- Hypersensitivity/Allergy to drug
- Age less than 1 year/12 months or less than 10 kg

Adult Dosages:

- 500 mcg per nebulizer treatment

Pediatric Dosages:

- Use in Pediatrics as a combined therapy with Albuterol
- 500 mcg per nebulizer treatment

Side effects(Serious):

- Anaphylaxis
- Angioedema
- Laryngospasm
- Paradoxical Bronchospasm

Common:

- Cough
- Dry Mouth
- Dizziness
- Rash/Urticaria

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LIDOCAINE

Trinity EMS Protocols:

- 3 – 15 VFib/Pulseless VT (Persistent)
- 3 – 16 Wide Complex Tachycardia
- 4 – 08 Pediatric Pulseless Arrest
- 5 – 07 Head Trauma
- X - *Intraosseous Procedure*

Indications:

- Anesthetic used during invasive airway management that may reduce elevated intracranial pressures during procedures
- Injectable anesthetic used to reduce pain associated with pressure infusion of fluids into marrow space
- Antiarrhythmic (Class IB) which inhibits Na ion channels

Contraindications/Cautions:

- Caution with WPW syndrome, Heart Block, CHF, Bradycardia or Shock

Adult Dosages:

- 100 mg IV
- **RSI premedication:** 100 mg IV/IO
- **IO Anesthesia:** 10 - 20 mg IO slowly
- **Vtach/Persistent VT/VF:** 1 - 1.5 mg/kg IV/IO and may repeat 0.5 - 0.75 mg/kg after 5 minutes
- Maximum dose 3 mg/kg

Pediatric Dosages:

See color-coded drug list

- **IO Anesthesia:** 0.2 mg/kg IO slowly
- **Vtach/Persistent VT/VF:** 1 - 1.5 mg/kg IV/IO and may repeat 0.5 - 0.75 mg/kg after 5 minutes
- Maximum dose 3 mg/kg

Side effects(Serious):

- Seizures
- Heart Block
- Bradycardia
- Respiratory Arrest
- Status Asthmaticus

Common:

- Confusion
- Hypotension
- Dizziness
- Nausea/Vomiting
- Agitation
- Hallucinations

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LORAZEPAM

(Ativan)

Trinity EMS Protocols:

- 1 – 01 Airway, Adult
- 1 – 03 Airway, Pediatric
- 1 – 06 Behavioral
- 2 – 10 Seizure
- 3 – 02 Atrial Fibrillation
- 3 – 08 Induced Hypothermia
- 3 – 12 Supraventricular Tachycardia
- 3 – 16 Wide Complex Tachycardia
- 4 – 03 Obstetrical Emergency
- 4 – 10 Pediatric Seizure
- 4 – 11 Pediatric SVT

Indications:

- Anxiolytic used for sedation and seizures
- Benzodiazepine
- May be given and effective IM

Contraindications:

- May cause hypotension and respiratory depression

Adult Dosages:

- 0.5 - 2 mg IV/IO
- 2 – 4 mg IM
- May repeat q 5 minutes for total of three doses

Pediatric Dosages:

- 0.05-0.1 mg/kg IV/IO
- 0.1 mg/kg IM
- May repeat q 5 minutes for total of three doses

Side effects(Serious):

- Respiratory Depression
- Hypotension
- Syncope
- Paradoxical CNS Stimulation

Common:

- Sedation
- Dizziness
- Ataxia
- Confusion
- Dystonia

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MAGNESIUM SULFATE

Trinity EMS Protocols:

- 3 – 15 Ventricular Fibrillation/Ventricular Tachycardia (Persistent)
- 3 – 16 Wide Complex Tachycardia
- 4 – 03 Obstetrical Emergency

Indications:

- Use in treating Torsades de Pointes/Polymorphic VT
- Treatment of Preeclampsia/Eclampsia

Contraindications:

- Diabetic Coma or Heart Block

Adult Dosages:

- **Cardiac dosing:** 1-2 gm IV/IO, may repeat after 5 minutes for persistent Polymorphic VT
- **Obstetrical Emergency:** 4 gm in 250 ml NS bag infused over 30 minutes

Pediatric Dosages:

- **Cardiac dosing:** 25 – 50 mg/kg IV/IO, max 2 gm/dose, may repeat after 5 minutes for persistent Polymorphic VT

Side effects(Serious):

- Cardiovascular Collapse
- Pulmonary Edema
- Respiratory Paralysis
- Hypothermia

Common:

- Hypotension
- Flushing
- Drowsiness
- Diaphoresis
- Diminished reflexes

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METHYLPREDNISOLONE

(Solumedrol)

Trinity EMS Protocols:

- 2 – 02 Allergic Reaction
- 2 – 09 Respiratory Distress

Indications:

- Steroid used in respiratory distress and allergic reactions

Contraindications/Cautions:

- Caution in severe active infections

Adult Dosages:

- 125 mg IV/IO

Pediatric Dosages:

See color-coded drug list

- 2 mg/kg IV/IO

Side effects:

- Diaphoresis
- Nervousness
- Hypertension
- Hyperglycemia
- Urticaria

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MIDAZOLAM

(Versed)

Trinity EMS Protocols:

- 1 – 01 Airway, Adult
- 1 – 03 Airway, Pediatric
- 1 – 06 Behavioral
- 2 – 10 Seizure
- 3 – 02 Atrial Fibrillation
- 3 – 08 Induced Hypothermia
- 3 – 12 Supraventricular Tachycardia
- 3 – 16 Wide Complex Tachycardia
- 4 – 03 Obstetrical Emergency
- 4 – 10 Pediatric Seizure
- 4 – 11 Pediatric SVT

Indications:

- Used for sedation and to control seizures
- Quick-acting and may be given Intranasal or IM

Contraindications:

- May cause significant *Respiratory Depression* and *Hypotension*

Adult Dosages:

- 2-5 mg IV/IO slowly over 2-3 minutes. May slowly titrate dose up to 5 mg if needed. Usual total dose: 2-5 mg.
- 5 mg intranasal using atomizer. Usual total dose: 5 mg
- **IM dosage:** 5 mg

Pediatric Dosages:

Use Trinity EMS System Standardized Medication Delivery tables

- 0.05-0.1 mg/kg IV/ IO slowly over 2-3 minutes (max 5 mg/dose)
- 0.1 – 0.2 mg/kg IM for seizures
- 0.2 mg/kg intra-nasal for seizure control

Side effects(Serious):

- Respiratory Depression/Apnea
- Hypotension
- Bradycardia

Common:

- Nausea/Vomiting
- Amnesia
- Confusion

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MORPHINE SULFATE

Trinity EMS Protocols:

- 1 – 09 Pain Control: Adult
- 1 – 10 Pain Control: Pediatric
- 2 – 08 Pulmonary Edema
- 3 – 02 Atrial Fibrillation
- 3 – 05 Chest Pain and STEMI
- 3 – 08 Induced Hypothermia
- 3 – 12 Supraventricular Tachycardia
- 3 – 16 Wide Complex Tachycardia

Indications:

- Narcotic pain relief
- Anti-anxiety

Contraindications/Cautions:

- Avoid use if SBP <100
- Caution with CNS depression or Respiratory Compromise

Adult Dosages:

- 2 - 6 mg IV/IO, repeat every 5-10 minutes until a max of 20 mg or clinical improvement
- 5 – 10 mg IM single dose only
- If the patient has suffered burns that require prolonged transport, maximum total dose is 40 mg

Pediatric Dosages:

See color-coded list

- 0.1 mg/kg IV/IO(max 5 mg), may repeat after 5 minutes
- 0.2 mg/kg IM single dose only

Side effects(Serious):

- Respiratory Depression/Apnea
- Hypotension
- Bradycardia
- Seizures

Common:

- Somnolence
- Nausea/Vomiting
- Dizziness
- Pruritus
- Dysphoria/Euphoria

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NALOXONE

(Narcan)

Trinity EMS Protocols:

- 2 – 03 Altered Mental Status
- 2 – 07 Overdose/Toxicity
- 3 – 10 Pulseless Electrical Activity
- 4 – 02 Newly Born
- 4 – 04 Pediatric Bradycardia
- 5 – 07 Head Trauma
- 5 – 09 Hypothermia

Indications:

- Narcotic antagonist
- Anticipate rapid withdrawal or agitation after administration

Contraindications:

- *Anticipate rapid withdrawal, delirium, or agitation after administration*
- Use with caution in chronic pain/chronic opiate usage(i.e. cancer, hospice)

Adult Dosages:

- 0.4 - 2 mg IV/IO bolus titrated to patient's respiratory response
- May be given IM or IN if unable to establish IV in a known or suspected narcotic overdose
- The lowest dose required for patient to protect their airway should be utilized
- Dosing may be repeated at 5 minute intervals without maximum as necessary to maintain protection of the airway

Pediatric Dosages:

See color-coded list

- 0.1 mg/kg IV or IO (max 2 mg)
- May be given IM or IN if unable to establish IV or IO in a known or suspected narcotic overdose
- The lowest dose required for patient to protect their airway should be utilized
- Dosing may be repeated at 5 minute intervals without maximum as necessary to maintain protection of the airway

Side effects:

- Cardiac Arrest
- Seizures
- Tachycardia
- Hypertension
- Nausea/Vomiting
- Withdrawal from Opiates
- Diaphoresis

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NITROGLYCERIN

(Nitrostat)

Trinity EMS Protocols:

- 2 – 08 Pulmonary Edema
- 3 – 05 Chest Pain and STEMI
- 3 – 06 Hypertension

Indications:

- Vasodilator used in anginal syndromes, CHF, and hypertension

Contraindications/Cautions:

- Do not use in those **<30 years old without** a history of heart disease with Chest Pain and SBP <180
- Avoid with increased ICP, Erectile Dysfunction medications, or hypotension

Adult Dosages:

Chest Pain

- 1 tablet 0.4 mg SL every 5 minutes until pain free or 3 doses
- If SBP <100, contact Medical Control before administration

Pulmonary Edema

- 1 tablet SL every 1-2 minutes if BP >110 systolic
- If SBP <100, contact Medical Control before administration
- MAP should not be decreased more than 30%

Hypertension

- 1 tablet SL every 1-2 minutes until Diastolic BP <110
- MAP should not be decreased more than 30%

Pediatric Dosages:



Side effects:

- Hypotension
- Headache

- Flushing
- Tachycardia
- Dizziness/Lightheaded

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NORMAL SALINE

Trinity EMS Protocols:

- 1 – 05 Back Pain
- 1 – 07 Fever/Infection control
- 2 – 01 Abdominal Pain
- 2 – 03 Altered Mental Status
- 2 – 06 Epistaxis
- 2 – 11 Vomiting & Diarrhea
- 3 – 02 Atrial Fibrillation
- 3 – 03 Bradycardia
- 3 – 07 Hypotension
- 3 – 09 Post-Resuscitation
- 3 – 10 Pulseless Electrical Activity
- 4 – 02 Newly Born
- 4 – 03 Obstetrical Emergencies
- 4 – 04 Pediatric Bradycardia
- 4 – 06 Pediatric Hypotension
- 4 – 07 Pediatric Multiple Trauma
- 5 – 02 Burns: Chemical & Electrical
- 5 – 03 Burns: Thermal
- 5 – 04 Crush Syndrome
- 5 – 08 Hyperthermia
- 5 – 10 Multi-System Trauma
- 5 – 12 Traumatic Arrest

Indications:

- The IV fluid of choice for access or volume infusion

Contraindications/Cautions:

- Caution in fluid overloaded states(i.e. CHF, Renal Failure, Cirrhosis)

Adult Dosages:

- KVO for IV access
- Bolus in 250 - 500 ml for cardiac care
- Bolus in 500 - 1000 ml for volume infusions
- Bolus in 1000 ml amount for burns or electrical injuries. See **Burn Protocol** or Reference Materials for IV rates

Pediatric Dosages:

See color-coded list

- KVO for IV or IO access
- Bolus in 20 ml/kg for volume (may be repeated x3)
- See **Burn Protocol** or Reference Materials for IV rates

Side effects:

- Fluid Overload(Edema, CHF)

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ONDANSETRON

(Zofran)

Trinity EMS Protocols:

- 2 – 01 Abdominal Pain
- 2 – 11 Vomiting & Diarrhea
- 3 – 05 Chest Pain and STEMI

Indications:

- Anti-emetic used to control nausea and/or vomiting
- Ondansetron is the recommended anti-emetic for EMS since it is associated with significantly fewer side effects and sedation

Contraindications/Cautions:

- Caution with Prolonged QT

Adult Dosages:

- 2 - 4 mg IV/IO

Pediatric Dosages:

- 0.15 mg/kg IV/IO (max 4 mg) for ages >1 year

Side effects:

- QT prolongation
- Torsades de Pointes
- Urinary Retention
- Dizziness
- Extrapyrarnidal Symptoms

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OXYGEN

Trinity EMS Protocols:

- 1 – 01 Airway, Adult
- 1 – 02 Airway, Adult- Failed
- 1 – 03 Airway, Pediatric
- 1 – 04 Airway, Pediatric- Failed
- 1 – 13 Universal Patient Care
- 3 – 09 Post-Resuscitation
- 4 – 02 Newly Born
- 4 – 09 Pediatric Respiratory Distress
- 5 – 04 Crush Syndrome

Indications:

- Useful in any condition with increased cardiac work load, respiratory distress, or illness or injury resulting in altered ventilation and/or perfusion
- Required for pre-oxygenation whenever possible prior to intubation
- Ideal oxygen saturations are 94-99%

Contraindications:

- Avoid excessive oxygenation in newborns and COPD

Adult Dosages:

- 1 - 4 liters/min via nasal cannula
- 6 - 15 liters/min by NRB mask
- 10 - 15 liters/min via BVM (sufficient to allow reservoir bag to completely refill during ventilations)

Pediatric Dosages:

- 1 - 4 liters/min via nasal cannula
- 6 - 16 liters/min per NRB mask
- 10 - 15 liters/min via BVM (sufficient to allow reservoir bag to completely refill between ventilations)

Side effects:

- Bradypnea/Decreased Respiratory Drive
- Nausea
- Euphoria/Dysphoria

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ROCURONIUM

(Zemuron)

Trinity EMS Protocols:

- 3 – 08 Induced Hypothermia
- XX - Rapid Sequence Intubation Procedure

Indications:

- Non-depolarizing paralytic agent used in RSI or Induced Hypothermia

Contraindications:

- Avoid in patient with chronic neuromuscular disease

Adult Dosages:

- 0.6 - 1.2 mg/kg IV/IO to a max of 100 mg. IF inadequate relaxation after 5 minutes, may repeat dose
- May refer to **Trinity EMS System Standardized Medication Delivery Table**
- **Onset <1 minute**
- **Duration ~45 minutes**

Pediatric Dosages:

- 0.6 - 1 mg/kg IV/IO to a max of 100mg
- *Only for use in RSI for ages >8 yrs.*

Side effects:

- Prolonged Paralysis
- Apnea
- Bronchospasm
- Arrhythmias
- Hypotension, transient

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SODIUM BICARBONATE

Trinity EMS Protocols:

- 2 – 07 Overdose/Toxicity
- 3 – 10 Pulseless Electrical Activity (PEA)
- 3 – 14 Ventricular Fibrillation/Pulseless Ventricular Tachycardia
- 5 – 04 Crush Syndrome

Indications:

- A buffer used in acidosis to increase the pH in cardiac arrest, hyperkalemia, or overdoses

Contraindications:

- Caution in known alkalosis

Adult Dosages:

- One amp (50 mEq) IV/IO
- May repeat every 5 minutes for maximum of three doses

Pediatric Dosages:

See color-coded drug list

- 1 mEq/kg IV/IO
- May repeat every 5 minutes for a maximum of three doses

Side effects:

- Seizures
- Tetany
- Extravasation cellulitis
- Edema
- Phlebitis

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SUCCINYLCHOLINE

Trinity EMS Protocols:

- XX - Rapid Sequence Intubation

Indications:

- Depolarizing paralytic for Medication Assisted/ Rapid Sequence Intubations

Contraindications:

- Avoid in states of hyperkalemia, burns older than 24 hours, muscular dystrophies, dialysis patients

Adult Dosages:

- 1.5 mg/kg IV/IO
- 1.5 mg/kg IM (onset of action may be delayed)
- **May refer to Trinity Ems System Standardized Medication Delivery Table**

Pediatric Dosages:

See color-coded list

- 1-2 mg/kg IV/IO
- Consider administration of atropine to blunt bradycardia with intubation in pediatric population
- RSI only in ages >8 years

Side effects:

- Prolonged Paralysis
- Apnea
- Arrhythmias
- Muscle Fasciculations
- ICP elevation

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Tranexamic Acid (Cyklokapron)

Trinity EMS Protocols:

- 5 – 10 Multi-System Trauma

Indications:

- Any trauma patient **18 years and older** with ***significant ongoing hemorrhage*** or, in the ***clinical judgment of the provider***, has ***significant risk of bleeding*** due to factors such as mechanism of injury, abnormal vital signs, and comorbidities
- Within **3 hours** of time of injury

Contraindications:

- Known recent DVT or PE, thrombophilia

Adult Dosages:

- **Bolus 1 gram** in 100 ml bag Normal Saline over 10 minutes, then initiate infusion of 1 gram in Normal Saline over 8 hours

Pediatric Dosages:



Side effects(Serious):

- Possible Thromboembolic Disease (DVT, PE, DIC)
- Hypotension (with rapid administration)

Common:

- Visual Disturbance
- Nausea/Vomiting
- Diarrhea

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PEDIATRIC COLOR CODED DRUG LIST



WEIGHT 3 – 5 KG (AVG 4 KG)

LENGTH <59.5 cm	VITAL SIGNS Heart Rate 120 – 150 Respirations 24 - 48 BP Systolic 70 (+/- 25)	Acetaminophen 40 mg Adenosine (1 st Dose) 0.5 mg Adenosine (Repeat Dose) 1 mg Albuterol 2.5 mg Amiodarone HOLD Atropine 0.10 mg Calcium Chloride 80 mg D10% 20 – 30 ml Diazepam (IV) 0.8 mg Diazepam (Rectal) 2 mg Diphenhydramine HOLD Dopamine (800 mg in 500 ml) 2 mcg/kg/min 0.3 ml/hr 5 mcg/kg/min 0.9 ml/hr 10 mcg/kg/min 1.7 ml/hr 20 mcg/kg/min 3.3 ml/hr	Epinephrine 1:10,000 0.04mg Epinephrine 1:1,000 IM 0.06 mg Fentanyl 8 mcg Glucagon 0.2 – 0.6 mg Ipratropium HOLD Lidocaine 4 mg Lorazepam 0.2 mg Methylprednisolone 8 mg Midazolam 0.3 – 0.9 mg Morphine Sulfate 0.6 mg Naloxone 0.6 mg Ondansetron 0.6 mg Sodium Bicarbonate 4 mEq	GRAY (0 – 3 MONTHS)
	EQUIPMENT ET Tube 2.5-3.5 Pediatric EZIO			
	DEFIBRILLATION Defibrillation 8 Joules Cardioversion 4 Joules			
	NORMAL SALINE 40 – 80 ml			

WEIGHT 6 – 7 KG (AVG 6.5 KG)

LENGTH 59 – 66.5 cm	VITAL SIGNS Heart Rate 120 – 125 Respirations 24 – 48 BP Systolic 85 (+/- 25)	Acetaminophen 90 mg Adenosine (1 st Dose) 0.7 mg Adenosine (Repeat Dose) 1.4 mg Albuterol 2.5 mg Amiodarone HOLD Atropine 0.13 mg Calcium Chloride 120 mg D25% 24 - 28 ml Diazepam (IV) 1.3 mg Diazepam (Rectal) 3.2 mg Diphenhydramine 6.5 mg Dopamine (800 mg in 500 ml) 2 mcg/kg/min 0.5 ml/hr 5 mcg/kg/min 1.3 ml/hr 10 mcg/kg/min 2.5 ml/hr 20 mcg/kg/min 5 ml/hr	Epinephrine 1:10,000 0.065 mg Epinephrine 1:1,000 IM 0.06 mg Fentanyl 13 mcg Glucagon 0.2 – 0.6 mg Ipratropium HOLD Lidocaine 6 mg Lorazepam 0.33 mg Methylprednisolone 13 mg Midazolam 0.3 – 0.9 mg Morphine Sulfate 0.6 mg Naloxone 0.6 mg Ondansetron 0.6 mg Sodium Bicarbonate 6 mEq	PINK (3 – 6 MONTHS)
	EQUIPMENT ET Tube 3.5 Pediatric EZIO			
	DEFIBRILLATION Defibrillation 13 Joules Cardioversion 6 Joules			
	NORMAL SALINE 65 – 130 ml			

WEIGHT 8 – 9 KG (AVG 8.5 KG)

LENGTH 66.5 – 74 cm	VITAL SIGNS Heart Rate 120 Respirations 24 – 32 BP Systolic 92 (+/- 30)	Acetaminophen 120 mg Adenosine (1 st Dose) 0.9 mg Adenosine (Repeat Dose) 1.8 mg Albuterol 2.5 mg Amiodarone 45 mg Atropine 0.17 mg Calcium Chloride 170 mg D25% 32 - 36 ml Diazepam (IV) 1.7 mg Diazepam (Rectal) 4.25 mg Diphenhydramine 7.5 mg Dopamine (800 mg in 500 ml) 2 mcg/kg/min 0.7 ml/hr 5 mcg/kg/min 1.6 ml/hr 10 mcg/kg/min 3.2 ml/hr 20 mcg/kg/min 6.5 ml/hr	Epinephrine 1:10,000 0.085mg Epinephrine 1:1,000 IM 0.8 mg Fentanyl 17 mcg Glucagon 0.3 – 0.8 mg Ipratropium HOLD Lidocaine 8 mg Lorazepam 0.43 mg Methylprednisolone 17 mg Midazolam 0.4 – 1.2 mg Morphine Sulfate 0.8 mg Naloxone 0.8 mg Ondansetron 0.8 mg Sodium Bicarbonate 8 mEq	RED (7 – 10 MONTHS)
	EQUIPMENT ET Tube 3.5 – 4 Pediatric EZIO			
	DEFIBRILLATION Defibrillation 17 Joules Cardioversion 8 Joules			
	NORMAL SALINE 85 – 170 ml			

PEDIATRIC COLOR CODED DRUG LIST



WEIGHT 10 – 11 KG (AVG 10.5 KG)

LENGTH 74 – 84.5 cm	VITAL SIGNS	Acetaminophen 150 mg	Epinephrine 1:10,000 0.1 mg
	Heart Rate 115 - 120	Adenosine (1 st Dose) 1.1 mg	Epinephrine 1:1,000 IM 0.1 mg
	Respirations 22 - 30	Adenosine (Repeat Dose) 2.2 mg	Fentanyl 21 mcg
	BP Systolic 96 (+/- 30)	Albuterol 2.5 mg	Glucagon 0.3 - 1 mg
		Amiodarone 55 mg	Ipratropium 500 mcg
	EQUIPMENT	Atropine 0.2 mg	Lidocaine 10 mg
	ET Tube 4	Calcium Chloride 210 mg	Lorazepam 0.53 mg
	Pediatric EZIO	D25% 40 - 44 ml	Methylprednisolone 21 mg
	DEFIBRILLATION	Diazepam (IV) 2 mg	Midazolam 0.5 – 1.5 mg
	Defibrillation 20 Joules	Diazepam (Rectal) 2 mg	Morphine Sulfate 1 mg
		Diphenhydramine 10 mg	Naloxone 1 mg
	Cardioversion 10 Joules	Dopamine (800 mg in 500 ml)	Ondansetron 1 mg
		2 mcg/kg/min 0.8 ml/hr	Sodium Bicarbonate 10 mEq
		5 mcg/kg/min 2 ml/hr	
		10 mcg/kg/min 4 ml/hr	
	NORMAL SALINE 105 – 210 ml	20 mcg/kg/min 8 ml/hr	

PURPLE (11 – 18 MONTHS)

WEIGHT 12 – 14 KG (AVG 13 KG)

LENGTH 84.5 – 97.5 cm	VITAL SIGNS	Acetaminophen 180 mg	Epinephrine 1:10,000 0.13mg
	Heart Rate 115 – 120	Adenosine (1 st Dose) 1.4 mg	Epinephrine 1:1,000 IM 0.13 mg
	Respirations 20 - 28	Adenosine (Repeat Dose) 2.8 mg	Fentanyl 26 mcg
	BP Systolic 100 (+/- 30)	Albuterol 2.5 mg	Glucagon 0.4 – 1 mg
		Amiodarone 65 mg	Ipratropium 500 mcg
	EQUIPMENT	Atropine 0.26 mg	Lidocaine 13 mg
	ET Tube 4.5	Calcium Chloride 260 mg	Lorazepam 0.65 mg
	Pediatric EZIO	D25% 48 - 56 ml	Methylprednisolone 26 mg
	DEFIBRILLATION	Diazepam (IV) 2.6 mg	Midazolam 0.6 – 1.8 mg
	Defibrillation 26 Joules	Diazepam (Rectal) 6 mg	Morphine Sulfate 1.3 mg
		Diphenhydramine 12.5 mg	Naloxone 1.3 mg
	Cardioversion 13 Joules	Dopamine (800 mg in 500 ml)	Ondansetron 1.3 mg
		2 mcg/kg/min 0.8 ml/hr	Sodium Bicarbonate 13 mEq
		5 mcg/kg/min 2.5 ml/hr	
		10 mcg/kg/min 5 ml/hr	
	NORMAL SALINE 130 – 260 ml	20 mcg/kg/min 10 ml/hr	

YELLOW (19 – 35 MONTHS)

WEIGHT 15 – 18 KG (AVG 16.5 KG)

LENGTH 97.5 – 110 cm	VITAL SIGNS	Acetaminophen 220 mg	Epinephrine 1:10,000 0.16mg
	Heart Rate 100 -115	Adenosine (1 st Dose) 1.8 mg	Epinephrine 1:1,000 IM 0.16 mg
	Respirations 20 – 26	Adenosine (Repeat Dose) 3.6 mg	Fentanyl 33 mcg
	BP Systolic 100 (+/- 20)	Albuterol 2.5 mg	Glucagon 0.5 – 1 mg
		Amiodarone 85 mg	Ipratropium 500 mcg
	EQUIPMENT	Atropine 0.33 mg	Lidocaine 15 mg
	ET Tube 5	Calcium Chloride 330 mg	Lorazepam 0.83 mg
	Pediatric EZIO	D50% 30 - 36 ml	Methylprednisolone 33 mg
	DEFIBRILLATION	Diazepam (IV) 3.3 mg	Midazolam 0.8 – 2.4 mg
	Defibrillation 35 Joules	Diazepam (Rectal) 8.25 mg	Morphine Sulfate 1.5 mg
		Diphenhydramine 15 mg	Naloxone 1.5 mg
	Cardioversion 16 Joules	Dopamine (800 mg in 500 ml)	Ondansetron 1.5 mg
		2 mcg/kg/min 1.2 ml/hr	Sodium Bicarbonate 15 mEq
		5 mcg/kg/min 3 ml/hr	
		10 mcg/kg/min 6 ml/hr	
	NORMAL SALINE 165 – 330 ml	20 mcg/kg/min 12 ml/hr	

WHITE (3 – 4 YEARS)

Trinity EMS System

PEDIATRIC COLOR CODED DRUG LIST



WEIGHT 19 – 22 KG (AVG 20.75 KG)

LENGTH 110 – 122 cm	VITAL SIGNS	Acetaminophen 285 mg	Epinephrine 1:10,000 0.2 mg	BLUE (5 – 6 YEARS)
	Heart Rate 100	Adenosine (1 st Dose) 2.2 mg	Epinephrine 1:1,000 IM 0.2 mg	
	Respirations 20 - 24	Adenosine (Repeat Dose) 4.4 mg	Fentanyl 40 mcg	
	BP Systolic 100 (+/- 15)	Albuterol 2.5 mg	Glucagon 1 mg	
	EQUIPMENT	Amiodarone 100 mg	Ipratropium 500 mcg	
	ET Tube 5.5	Atropine 0.5 mg	Lidocaine 20 mg	
	Pediatric EZIO	Calcium Chloride 400 mg	Lorazepam 1 mg	
		D50% 38 - 44 ml	Methylprednisolone 42 mg	
	DEFIBRILLATION	Diazepam (IV) 4 mg	Midazolam 1 - 3 mg	
	Defibrillation 40 Joules	Diazepam (Rectal) 10 mg	Morphine Sulfate 2 mg	
	Cardioversion 20 Joules	Diphenhydramine 20 mg	Naloxone 2 mg	
		Dopamine (800 mg in 500 ml)	Ondansetron 2 mg	
	NORMAL SALINE 200 – 300 ml	2 mcg/kg/min 1.6 ml/hr	Sodium Bicarbonate 20 mEq	
		5 mcg/kg/min 3.9 ml/hr		
		10 mcg/kg/min 7.8 ml/hr		
		20 mcg/kg/min 16 ml/hr		

WEIGHT 24 – 30 KG (AVG 27 KG)

LENGTH 122 – 137 cm	VITAL SIGNS	Acetaminophen 320 mg	Epinephrine 1:10,000 0.27 mg	ORANGE (7 – 9 YEARS)
	Heart Rate 90	Adenosine (1 st Dose) 3 mg	Epinephrine 1:1,000 IM 0.3 mg	
	Respirations 18 – 22	Adenosine (Repeat Dose) 6 mg	Fentanyl 54 mcg	
	BP Systolic 105 (+/-15)	Albuterol 2.5 mg	Glucagon 1 mg	
	EQUIPMENT	Amiodarone 100 mg	Ipratropium 500 mcg	
	ET Tube 6	Atropine 0.5 mg	Lidocaine 25 mg	
	Pediatric EZIO	Calcium Chloride 540 mg	Lorazepam 1.35 mg	
		D50% 48 - 60 ml	Methylprednisolone 54 mg	
	DEFIBRILLATION	Diazepam (IV) 4 mg	Midazolam 1.3 – 3.9 mg	
	Defibrillation 54 Joules	Diazepam (Rectal) 10 mg	Morphine Sulfate 2.8 mg	
	Cardioversion 27 Joules	Diphenhydramine 25 mg	Naloxone 2 mg	
		Dopamine (800 mg in 500 ml)	Ondansetron 2.8 mg	
	NORMAL SALINE 270 - 540 ml	2 mcg/kg/min 2 ml/hr	Sodium Bicarbonate 25 mEq	
		5 mcg/kg/min 5 ml/hr	Succinylcholine 40 mg	
		10 mcg/kg/min 10 ml/hr		
		20 mcg/kg/min 20 ml/hr		

WEIGHT 32 – 40 KG (AVG 36 KG)

LENGTH 137 – 150 cm	VITAL SIGNS	Acetaminophen 480 mg	Epinephrine 1:10,000 0.36 mg	GREEN (10 – 12 YEARS)
	Heart Rate 85 – 90	Adenosine (1 st Dose) 4 mg	Epinephrine 1:1,000 IM 0.3 mg	
	Respirations 16 – 22	Adenosine (Repeat Dose) 8 mg	Fentanyl 62 mcg	
	BP Systolic 115 (+/-20)	Albuterol 2.5 mg	Glucagon 1 mg	
	EQUIPMENT	Amiodarone 180 mg	Ipratropium 500 mcg	
	ET Tube 6.5	Atropine 0.72 mg	Lidocaine 36 mg	
	Pediatric EZIO	Calcium Chloride 720 mg	Lorazepam 1.8 mg	
		D50% 62 - 80 ml	Methylprednisolone 72 mg	
	DEFIBRILLATION	Diazepam (IV) 4 mg	Midazolam 1.8 – 5.4 mg	
	Defibrillation 70 Joules	Diazepam (Rectal) 10 mg	Morphine Sulfate 3.6 mg	
	Cardioversion 40 Joules	Diphenhydramine 35 mg	Naloxone 2 mg	
		Dopamine (800 mg in 500 ml)	Ondansetron 3.6 mg	
	NORMAL SALINE 400 – 800 ml	2 mcg/kg/min 2.7 ml/hr	Sodium Bicarbonate 36 mEq	
		5 mcg/kg/min 7 ml/hr	Succinylcholine 60 mg	
		10 mcg/kg/min 14 ml/hr		
		20 mcg/kg/min 28 ml/hr		

Trinity EMS System

TRINITY EMS SYSTEM

Standardized Medication Delivery



AMIODARONE 50MG/ML ONLY	AMIODARONE		
	PEDIATRIC Vfib/Pulseless Vtach or Wide Complex Tachycardia		
	WEIGHT (KG)	DOSE (5MG/KG)	VOLUME (ML)
	5	25	0.5
	10	50	1
	15	75	1.5
	20	100	2
	25	125	2.5
	30	150	3
	35	175	3.5
	40	200	4
	45	225	4.5
	50	250	5
	55	275	5.5
	60+	300	6
	Dosages approved by Trinity EMS System Medical Director 2012		

TRINITY EMS SYSTEM

Standardized Medication Delivery



DOPAMINE (INTROPIN)

VALUES BELOW ARE DRIPS/MIN ON A 60 DRIP/ML (MICRO DRIP) SET

WEIGHT (KG)	5 mcg/kg/min	10 mcg/kg/min	15 mcg/kg/min	20 mcg/kg/min
30	6	12	18	24
35	7	13	19	25
40	8	15	22	29
45	8	17	26	35
50	9	19	29	39
55	10	21	32	43
60	11	23	35	47
65	12	24	36	48
70	13	26	39	52
75	14	28	42	56
80	15	30	45	60
85	16	32	48	64
90	17	34	51	68
95	18	36	54	72
100	19	38	57	76
105	20	39	58	77
110	21	41	61	81

Approved by Trinity EMS Medical Director 2012

TRINITY EMS SYSTEM

Standardized Medication Delivery



ETOMIDATE

Induction of Paralysis

ADULT DOSING FOR ETOMIDATE

For Etomidate
2 mg/ml only

ALL PATIENTS REQUIRING
DRUG-INDUCED PARALYSIS
20 MG (10 ML)

PEDIATRIC DOSING FOR ETOMIDATE

For Etomidate 2 mg/ml only 0.3 mg/kg to max 20 mg	Weight (kg)	Dose (mg)	Near Volume (ml)
	5	1.5	0.75
	10	3	1.5
	15	4.5	2
	20	6	3
	25	7.5	3.5
	30	9	4.5
	35	10.5	5
	40	12	6
	45	13.5	6.5
	50	15	7.5
	55	16.5	8
	60	18	8.5

TRINITY EMS SYSTEM

Standardized Medication Delivery



INDUCTION OF PARALYSIS			
Rocuronium			
For Rocuronium 10 mg/ml only 0.6 mg/kg to max of 100 mg	Weight (kg)	Dose (mg)	Volume (ml)
	5	3	0.3
	10	6	0.6
	15	9	0.9
	20	12	1.2
	25	15	1.5
	30	18	1.8
	35	21	2.1
	40	24	2.4
	45	27	2.7
	50	30	3
	55	33	3.3
	60	36	3.6
	65	39	3.9
	70	42	4.2
	75	45	4.5
	80	48	4.8
	85	51	5.1
	90	54	5.4
	95	57	5.7
	100	60	6

TRINITY EMS SYSTEM

Standardized Medication Delivery



INDUCTION OF PARALYSIS			
Succinylcholine			
For Succinylcholine 200 mg/10ml only 1.5 mg/kg to max of 200mg	Weight (kg)	Dose (mg)	Volume (ml)
	5	8	0.4
	10	16	0.8
	15	22	1.2
	20	30	1.5
	25	32	1.6
	30	40	2
	35	52	2.6
	40	60	3
	45	68	3.4
	50	76	3.8
	55	82	4.1
	60	90	4.5
	65	98	4.9
	70	106	5.3
	75	112	5.6
	80	120	6
	85	128	6.4
	90	136	6.8
	95	142	7.2
	100	150	7.5

TRINITY EMS SYSTEM

Standardized Medication Delivery



VERSED (MIDAZOLAM) FOR PEDIATRIC SEIZURE/ SEDATION

DOSAGE FOR VERSED 1 MG/ML ONLY. 0.15 – 0.2 MG/KG IV/IO OR 0.2 MG/KG IM/IN TO MAX 5 MG

0.05 mg/kg (IV/IO)			0.1 mg/kg (IV/IO)			0.2 mg/kg (IV/IO/IM/IN)		
WEIGHT (kg)	Dose (mg)	Volume (ml)	Weight (kg)	Dose (ml)	Volume (ml)	Weight (kg)	Dose (mg)	Volume (ml)
2	0.1	0.1	2	0.2	0.2	2	0.4	0.4
4	0.2	0.2	4	0.4	0.4	4	0.8	0.8
6	0.3	0.3	6	0.6	0.6	6	1.2	1.2
8	0.4	0.4	8	0.8	0.8	8	1.6	1.6
10	0.5	0.5	10	1	1	10	2	2
12	0.6	0.6	12	1.2	1.2	12	2.4	2.4
14	0.7	0.7	14	1.4	1.4	14	2.8	2.8
16	0.8	0.8	16	1.6	1.6	16	3.2	3.2
18	0.9	0.9	18	1.8	1.8	18	3.6	3.6
20	1	1	20	2	2	20	4	4
22	1.1	1.1	22	2.2	2.2	22	4.4	4.4
24	1.2	1.2	24	2.4	2.4	24	4.8	4.8
26	1.3	1.3	26	2.6	2.6	26	FOR IV OR IN ROUTE: IF PATIENT IS \geq 21 KG, THEN 5 MG (5 ML) IS MAXIMUM DOSE	
28	1.4	1.4	28	2.8	2.8	28		
30	1.5	1.5	30	3	3	30		
32	1.6	1.6	32	3.2	3.2	32		
34	1.7	1.7	34	3.4	3.4	34		
36	1.8	1.8	36	3.6	3.6	36		
38	1.9	1.9	38	3.8	3.8	38		
40	2	2	40	4	4	40		
42	2.1	2.1	42	4.2	4.2	42		
44	2.2	2.2	44	4.4	4.4	44		
46	2.3	2.3	46	4.6	4.6	46		
48	2.4	2.4	48	4.8	4.8	48		
50	2.5	2.5	50	5	5	50		

Appendix C (General Forms)

Preliminary Report Form

Short Report Form – Non-Transport Services

Disposition / Refusal Form

Patient Instructions for Disposition / Refusal Form

School Bus Incident Form

#8362-12/03

TRINITY EMS SYSTEM PRELIMINARY REPORT FORM – SHORT VERSION

NAME OF NON-TRANSPORT SERVICE

INCIDENT #

DATE

NAME OF PATIENT _____

HOME ADDRESS _____

CHIEF COMPLAINT _____

TREATMENT GIVEN: ☐ OXYGEN ☐ IV/IV FLUIDS ☐ MEDICATION

☐ C-COLLAR ☐ DEFIBRILLATION

VITAL SIGNS: _____ TEMP _____ PULSE _____ RESP _____ B/P _____

SIGNATURE OF FIELD PERSONNEL _____

ORIGINAL COPY WITH NON-TRANSPORT SERVICE
YELLOW COPY WITH TIER SERVICE.

PART OF PATIENT CHART. DO NOT DESTROY.

TRINITY EMS SYSTEM PRELIMINARY REPORT FORM – SHORT VERSION

NAME OF NON-TRANSPORT SERVICE

INCIDENT #

DATE

NAME OF PATIENT _____

HOME ADDRESS _____

CHIEF COMPLAINT _____

TREATMENT GIVEN: ☐ OXYGEN ☐ IV/IV FLUIDS ☐ MEDICATION

☐ C-COLLAR ☐ DEFIBRILLATION

VITAL SIGNS: _____ TEMP _____ PULSE _____ RESP _____ B/P _____

SIGNATURE OF FIELD PERSONNEL _____

ORIGINAL COPY WITH NON-TRANSPORT SERVICE
YELLOW COPY WITH TIER SERVICE.

PART OF PATIENT CHART. DO NOT DESTROY.

<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">PCR NUMBER</div> <div style="text-align: center; margin-top: 5px;"> TRINITY EMS SYSTEM PATIENT DISPOSITION/REFUSAL INFORMATION </div>						
Patient's Name		Date of Birth		Date		
Patient's Address		Phone		EMS Professional's Name/EMS Service		
PATIENT REFUSAL	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 10px;"> <input type="checkbox"/> <i>This section only applies if this box is marked.</i> </div> <p>The EMT-B EMT-I EMT-P PHRN ECRN Medical Control Physician (circle one) has recommended</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Measuring the patient's blood pressure <input type="checkbox"/> A backboard and neck collar for the patient <input type="checkbox"/> Starting an IV for the patient <input type="checkbox"/> Ambulance transportation for the patient </div> <div style="width: 45%;"> <input type="checkbox"/> A complete physical exam of the patient <input type="checkbox"/> Giving the patient oxygen <input type="checkbox"/> Giving the patient medication <input type="checkbox"/> Other _____ </div> </div> <p>I refuse the care that the EMS service has recommended. I understand that my refusal may result in serious injury or death to the patient. I accept full responsibility for this decision. I assume all risks and consequences resulting from my refusal of care. I will not hold the EMS service or its officers, agents, or employees/volunteers responsible for any bad things that may happen to the patient because of my refusal.</p> <p>My signature below attests that I understand what has been recommended, what the consequences may be if that is not done, and I still refuse to have the recommended care provided by the EMS service.</p>					
	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 10px;"> <input type="checkbox"/> <i>This section only applies if this box is marked.</i> </div> <p>You have not been evaluated by a doctor</p> <p>You should contact or see your doctor immediately.</p> <p>The patient is being released to:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Family member <input type="checkbox"/> Guardian </div> <div style="width: 45%;"> <input type="checkbox"/> Law Enforcement Officer <input type="checkbox"/> Other _____ </div> </div> <p>Follow the instructions (printed on the back of this form) indicated:</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> Abdominal Pain <input type="checkbox"/> Head Injury <input type="checkbox"/> Fever <input type="checkbox"/> Wound Care </div> <div style="width: 33%;"> <input type="checkbox"/> Back Pain <input type="checkbox"/> Insect Sting/Bite <input type="checkbox"/> Extremity Injury </div> <div style="width: 33%;"> <input type="checkbox"/> Universal <input type="checkbox"/> Respiratory Distress <input type="checkbox"/> Vomiting/Diarrhea </div> </div> <p>Other Instructions:</p> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div>					
	Guardian's Name		Patient <input type="checkbox"/> Guardian <input type="checkbox"/> Refused to sign <input type="checkbox"/>		Patient/Guardian Signature	
	Guardian's Address Same as Patient		Date of Signatures		EMS Personnel's Signature	
Witness #1 Signature 2/2017		Witness #2 Signature			Patient's Physician Name	

PATIENT INSTRUCTIONS

UNIVERSAL INSTRUCTIONS:

- You have not received a complete medical evaluation. See a physician as soon as possible.
- If at any time after you have taken any medication, you have trouble breathing, start wheezing, get hives or a rash, or have any unexpected reaction, call 911 immediately.
- If your symptoms worsen at any time, you should see your doctor, go to the emergency department or call 911.

ABDOMINAL PAIN:

- Abdominal pain is also called belly pain. Many illnesses can cause abdominal pain and it is very difficult for EMS to identify the cause.
- Take your temperature every 4 hours.

BACK PAIN:

- Apply heat to the pain area to help relieve pain. You may use a warm heating pad, whirlpool bath, or warm, moist towels for 10 to 20 minutes every hour.
- Stay in bed as much as possible the first 24 hours.
- Begin normal activities when you can do them without causing pain.
- When picking things up, bend at the hips and knees. Never bend from the waist only.

FEVER:

- Always take medications as directed. Tylenol and ibuprofen can be taken at the same time.
- If you are taking antibiotics, take them until they are gone, not until you are feeling better.
- Drink extra liquids (1 glass of water, soft drink, or Gatorade per hour of fever for an adult).
- If the temperature is over 103° F, it can be brought down by a sponge bath with room temperature water. Do not use cold water, a fan, or an alcohol bath.
- Temperature should be taken every 4 hours.

Call or see a physician immediately, go to the emergency department, or call 911 immediately if:

- Your pain gets worse or is now only in one area
- You vomit (throw up) blood or find blood in your bowel movement.
- You become dizzy or faint.
- Your abdomen becomes distended or swollen.
- You have a temperature over 100° F.
- You have trouble passing urine.
- You have trouble breathing.

Call or see a physician, go the emergency department, or call 911 immediately if:

- You have shooting pains into your buttocks, groin, legs, or arms or the pain increases.
- You have trouble urinating or lose control or your stools or urine.
- You have numbness or weakness in your legs, feet, arms, or hands.

Call or see a physician, go the emergency department, or call 911 immediately if:

- Temperature is greater than 101°F for 24 hours.
- A child becomes less active or alert.
- The temperature does not come down with Acetaminophen (Tylenol) or Ibuprofen with the appropriate dose.

HEAD INJURY:

- Immediately after a blow to the head, nausea, and vomiting may occur.
- Individuals who have sustained a head injury must be checked, and if necessary awakened every 2 hours for the first 24 hours.
- Ice may be placed on the injured area to decrease pain and swelling.
- Only drink clear liquids such as juices, soft drinks, or water the first 12 hours after injury.
- Acetaminophen (Tylenol) or Ibuprofen only may be used for pain.

INSECT BITE/STING:

- A bite or sting typically is a red lump which may have a hole in the center. You may have pain, swelling, and a rash. Severe stings may cause a headache and an upset stomach (vomiting).
- Some individuals will have an allergic reaction to a bite or sting. Difficulty breathing or chest pain is an emergency requiring medical care.
- Elevation of the injured area and ice (applied to the area 10 – 20 minutes each hour) will decrease pain and swelling.
- Diphenhydramine (Benadryl) may be used as directed to control itching and hives.

RESPIRATORY DISTRESS:

- Respiratory Distress is also known as shortness of breath or difficulty breathing.
- Causes of respiratory distress include reactions to pollen, dust, animals, molds, foods, drugs, infections, smoke, and respiratory conditions such as asthma or COPD. If possible avoid any causes which produce respiratory distress.
- If you have seen a physician for this problem, take all medications as directed.

Call or see a physician immediately, go to the emergency department, or call 911 immediately if:

- The injured person has persistent vomiting, is not able to be awakened, has trouble walking or using an arm or leg, has a seizure, develops unequal pupils, has a clear or bloody fluid coming from the ears or nose, or has strange behavior.

Call or see a physician immediately, go to the emergency department, or call 911 immediately if:

- You develop chest pain or difficulty breathing.
- The area becomes red, warm, tender, and swollen beyond the area of the bite or sting.
- You develop a temperature over 101°F.

Call or see a physician immediately, go to the emergency department, or call 911 immediately if:

- Temperature is greater than 101°F.
- The cough, wheezing, or breathing difficulty becomes worse or does not improve even when taking medications.
- You have chest pain.
- Sputum (spit) changes from clear to yellow, green, gray, or becomes bloody.
- You are not able to perform normal activities.

EXTREMITY INJURY:

- Extremity injuries may consist of cuts, scrapes, bruises, sprains, or broken bones (fractures).
- Apply ice on the injury for 15 – 20 minutes each hour for the first 1 to 2 days.
- Elevate the extremity above the heart as much as possible for the first 48 hours to decrease pain and swelling.
- Use the extremity as pain allows.

VOMITING/DIARRHEA:

- Vomiting (throwing up) can be caused by many things. It is common in children, but should be watched closely.
- Diarrhea is most often caused by either a food reaction or an infection.
- Dehydration is the most serious problem associated with vomiting or diarrhea.
- Drink clear liquids such as water, apple juice, soft drinks, or Gatorade® for the first 12 hours or until things improve. Adults should drink 8 – 12 glasses of fluid per day with diarrhea. Children should drink 1 cup of fluid for each loose bowel movement.

WOUND CARE:

- Wounds include cuts, scrapes, bites, abrasions, or puncture wounds.
- If the wound begins to bleed, apply pressure over the wound with a clean bandage and elevate the wound above the heart for 5 – 10 minutes.
- Unless instructed otherwise, clean the wound twice daily with soapy water, and keep the wound dry. It is safe to take a shower, but do not place the wound in bath or dish water.
- See a physician for a tetanus shot if it has been more than five years since your last one.

Call or see a physician immediately, go to the emergency department, or call 911 immediately if:

- Temperature is greater than 101°F.
- The bruising, swelling, or pain gets worse despite the treatment listed above.
- Any problems listed on the Wound Care Instructions are noted.
- You are unable to move the extremity or if numbness or tingling is noted.
- You are not improved in 24 – 48 hours or you are not normal in 7 – 10 days.

Call or see a physician immediately, go to the emergency department, or call 911 immediately if:

- Temperature is greater than 101°F.
- Vomiting or diarrhea lasts longer than 24 hours, gets worse, or blood is noted.
- You cannot keep fluids down or no urination is noted in 8 hours.

Call or see a physician immediately, go to the emergency department, or call 911 immediately if:

- See the Extremity Injury Instructions.
- Temperature is greater than 101°F.
- Bruising, swelling, or pain gets worse or bleeding is not controlled as directed above.
- Any signs of infection, such as redness, drainage of yellow fluid or pus, red streaks extending from the wound, or a bad smell is noted.

**REGION 2
EMS SYSTEMS**

**TRINITY EMS SYSTEM MULTIPLE CASUALTY RELEASE FORM
(SCHOOL BUS INCIDENT)**

RUN # _____ LOCATION _____ DATE _____

MEDICAL CONTROL CONTACTED: _____ TIME _____

ECRN/MD _____

AMBULANCE # _____ TELEMETRY RADIO USED _____

DESCRIPTION OF INCIDENT _____

OF VICTIMS _____ SCHOOL DISTRICT _____

BUS COMPANY _____ DRIVER _____

SCHOOL OFFICIAL/DESIGNEE PRESENT: YES _____ NO _____ HOW CONTACTED _____ ARRIVAL TIME _____

POLICE AT SCENE (NAME/BADGE #) _____

The following children were involved in the above School Bus Incident. They have been medically triaged and no injuries were found. The appropriate School official/designee has been advised to CALL 911 IMMEDIATELY if there is a change in any of the children that raises any suspicion of potential injury.

NAME OF STUDENT

PRINT: _____ DOB/AGE: _____

PRINT: _____ DOB/AGE: _____

PRINT: _____ DOB/AGE: _____

PRINT: _____ DOB/AGE: _____

PRINT: _____ DOB/AGE: _____

PRINT: _____ DOB/AGE: _____

PRINT: _____ DOB/AGE: _____

PRINT: _____ DOB/AGE: _____

PRINT: _____ DOB/AGE: _____

School Official/Designee _____
Signature _____ Print _____

Signatures of Two EMS Personnel and one Witness:

1. _____ EMT

2. _____ EMT

3. _____ Witness

Appendix D

(Trinity EMS System Forms)

EMS Incident Report

Improvement Opportunity Report (IOR) Form

Service Excellence Form



TRINITY EMS SYSTEM

2701 17TH Street
Rock Island, IL 61201

Phone: (309) 779-7756
Fax: (309) 779-7746

EMS INCIDENT REPORT

Date of Incident: _____ Date Report Filed: _____

REASON FOR REPORT: (Check all that apply)

Violation of: _____ Policy	Related to: _____ Medical Control	_____ FRD
_____ Procedure	_____ Dispatch	_____ BLS
_____ Protocol	_____ Patient	_____ ILS
_____ Unusual Incident	_____ Safety	_____ ALS

Situation: Describe the specific incident.

Background: Pertinent information related to the situation.

Assessment: Why do you think this happened?

CONFIDENTIAL DOCUMENT



TRINITY EMS SYSTEM

2701 17TH Street
Rock Island, IL 61201

Phone: (309) 779-7756
Fax: (309) 779-7746

Recommendation: What can be done to improve the situation?

Submitted by: _____

EMS System Coordinator/EMS Quality Coordinator:

EMS Medical Director:

Action Taken:

EMS Medical Director

Date

EMS System Coordinator

Date

CONFIDENTIAL DOCUMENT



TRINITY EMS SYSTEM

2701 17TH Street
Rock Island, IL 61201

Phone: (309) 779-7756
Fax: (309) 779-7746

IMPROVEMENT OPPORTUNITY REPORT "I.O.R. FORM"

DATE: _____

TIME: _____

SITUATION: Briefly explain the current situation:

BACKGROUND: Pertinent information related to the situation:

ASSESSMENT: Why did this happen?

RECOMMENDATION: What can be done to improve the situation?

Submitted by:



TRINITY EMS SYSTEM

2701 17TH Street
Rock Island, IL 61201

Phone: (309) 779-7756
Fax: (309) 779-7746

EMS System Coordinator/EMS Quality Coordinator:

EMS Medical Director:

Action Taken:

EMS Medical Director

Date

Trinity EMS System Coordinator

Date



TRINITY EMS SYSTEM

2701 17TH Street
Rock Island, IL 61201

Phone: (309) 779-7756
Fax: (309) 779-7746

SERVICE EXCELLENCE FORM

Date: _____

Name of Individual or Unit deserving recognition: _____

Situation: Tell us how this individual or unit provided service above your expectations in the Trinity EMS System.

Submitted by: _____

Please send to the EMS System Coordinator

EMS System Policies:

Section # 01: General

<i>Description of Pre-Hospital Advisory Board</i>	01-01
<i>General System Requirements / Recommendations</i>	01-02
<i>Remediation</i>	01-03
<i>System Participation Suspension</i>	01-04
<i>Pharmacy – Based Option for Medications</i>	01-05
<i>Communications</i>	01-06
<i>Vehicle Staffing Requirements</i>	01-07
<i>Vehicle Response Requirements</i>	01-08
<i>Medical Control Communication / Override</i>	01-09
<i>Special Events Requirements</i>	01-10

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

DESCRIPTION OF PREHOSPITAL ADVISORY BOARD POLICY # 1 - 01

PURPOSE:

To provide a forum for prehospital care providers to learn of new legislation, equipment, skills, and to address the concerns of prehospital care providers

OBJECTIVES:

1. Promote and provide an optimum level of prehospital care to our communities
2. Promote camaraderie, teamwork, and understanding among all prehospital providers
3. Improve communications and exchange of information between the prehospital provider agencies and local hospitals
4. Maximize prehospital care through standardization of equipment, procedures and protocols between prehospital providers and local hospitals
5. Evaluate the delivery of emergency services in our region and effectively deal with any questions or problems encountered
6. Provide ongoing education and educational offerings to prehospital providers
7. Plan for the future of EMS care delivered in our system

MEETINGS:

The Prehospital Advisory Board meets the first Wednesday of designated months. All prehospital providers are welcome to attend. Membership is afforded to all Trinity EMS System services.

For additional information about the Prehospital Advisory Board, contact:

Trinity Office of EMS
2701 17th St
Rock Island, IL 61201
(309)779-7756
Fax (309)779-7746

POLICY # 1 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

GENERAL SYSTEM REQUIREMENTS/ RECOMMENDATIONS POLICY # 1 - 02

PURPOSE:

To identify for all Trinity EMS System personnel general system requirements not identified in other policies. To delineate for Trinity Medical Center EMS Provider Agencies recommendations (non-mandatory) policies the agency may wish to develop

POLICY:

1. All ALS/Trinity Medical Center EMS System personnel will determine a patient is either ALS or BLS by the highest level of care provider on scene. If the patient is determined ALS, then a monitor will be used in addition to any other treatments necessary. ALS personnel may not choose ILS as a category of treatment
2. All patients who require intermediate/advanced treatments should have them started **regardless of distance to destination**. If protocols indicate treatment or Medical Control issues orders, then begin treatment as indicated. If transport time is extremely short, contact Medical Control for treatment decisions. Do not arbitrarily determine transport time is too short to begin ILS/ALS treatment without checking with Medical Control. However, **do not delay transport** to perform interventions or procedures if medically feasible
3. All patients requiring ALS intervention should be ALS if it can be done in a timely manner and does not delay transport or arrival to destination. For example, an ambulance expecting an ALS tier should not stop if their expected wait time is in excess of their time to destination
4. The Trinity EMS Office maintains an open door policy and encourages discussion of protocols, policies, emerging issues and system concerns

POLICY # 1 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

REMEDIATION POLICY # 1 - 03

PURPOSE:

To identify for Trinity EMS System personnel when supervision, remediation, or re-education (minor infractions) is required such as, but not limited to: documentation problems, non-professional conduct, patient care issues, language offenses, clinical techniques, continuing education questions. These infractions are such that they can be cleared up with re-education/remediation process. In these situations the EMS system personnel may ask for due process

POLICY:

1. EMT's should always follow their agencies chain of command, but the EMS Department is available to discuss specific case issues
2. The EMS Medical Director may at any time call a provider to the office for discussion regarding poor standard of performance, documentation, and/or patient care. After notification of the personnel, the provider's agency will be notified. Documentation of these discussions will be maintained in the EMT's file at the resource hospital and not at the provider agency. The information/documentation files will be signed by the EMS personnel when presented. Information will be protected under the Medical Studies Act
3. The EMS Medical Director will decide when the offense is criteria for removal from being scheduled on the agency ambulance. He will notify the EMT at the time of a scheduled discussion and note the length of time off ambulance, remediation and inform the EMT of all recourses. The EMS Medical Director will notify the Agency Director of the EMT's removal from work and expected time of return(See **System Participation Suspension Policy**)
4. Upon completion of remediation, the provider's agency will be notified of reinstatement and return to service. Written confirmation will be provided to the agency of completion of remediation and return to active service, and documentation will be kept in the provider's personnel file in the Trinity Office of EMS

POLICY # 1 - 03

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

SYSTEM PARTICIPATION SUSPENSION POLICY # 1 - 04

Page 1 of 4

PURPOSE:

To identify the grounds and process by which a Trinity Medical Center System participant may be suspended or have revocation of licensure. The EMS Medical Director may recommend for suspension a license or refuse to license any FR, EMT-B, EMT-I, or EMT-P where he/she has been found in failure to comply with the EMS System Act and/or the policies and standards of TMC/EMS system. The severity of the infraction shall determine the degree of action taken by the EMS Medical Director

POLICY:

A. SYSTEM PARTICIPATION SUSPENSIONS:

Suspensions may be based on one or more of the following:

1. Failure to meet the initial and continuing education requirements
2. Violation of the Act, Rules, and Regulation
3. Failure to maintain proficiency in the provision of basic, intermediate, or advanced life support services
4. Failure to comply with the provisions of the System's Program Plan approved by the department
5. Intoxication or personal misuse of any drugs or the use of intoxicating liquors, narcotics, controlled substance, or other drugs or stimulants in such a manner as to adversely affect the delivery, performance or activities in the care of patients requiring medical care (For the purposes of this subsection, adversely affected means anything which could harm the patient or treatment that is administered improperly)
6. Intentional falsification of any medical reports or order, or making misrepresentations involving patient care
7. Abandoning or neglecting a patient requiring emergency care
8. Unauthorized use or removal of narcotics, drugs, supplies, or equipment from any ambulance, health care facility, institution or other work place location
9. Performing or attempting emergency care, techniques, or procedures without proper permission, licensure, education, or supervision
10. Discrimination in rendering emergency care because of race, sex, creed, religion, national origin or ability to pay
11. Behavior or conduct inappropriate or unbecoming of a member of the Trinity EMS System including social media and the internet
12. EMTALA or HIPAA violations

POLICY # 1 - 04

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

SYSTEM PARTICIPATION SUSPENSIONS POLICY # 1 - 04

Page 2 of 4

11. Medical misconduct or incompetence, or a pattern of continued or repeated medical misconduct or incompetence in the provision of emergency care
12. Violation of the system's standards of care
13. Physical impairment of an EMT to the extent that he/she cannot exercise the appropriate judgment, skill, and safety for performing the emergency care and life support functions for which he/she is licensed, as verified by a physician, unless the EMT is on inactive status pursuant to this Part; or
14. Mental impairment of an EMT to the extent that he/she cannot exercise the appropriate judgment, skill, and safety for performing the emergency care and life support functions for which he/she is licensed, as verified by a physician, unless the EMT is on inactive status pursuant to this Part

B. SYSTEM PARTICIPATION IMMEDIATE SUSPENSIONS:

This policy defines under what grounds a system participant may be immediately suspended. The EMS Medical Director may immediately suspended from participation within the system any individual or individual provider if he/she finds that the information in their possession indicates that the continuation in practice by an individual or individual provider would constitute an imminent danger to the public. The suspended individual or individual provider shall be issued an immediate verbal notification followed by a written suspension order to the individual or individual providers by the EMS Medical Director which states the length, terms, and basis for the suspension

1. Within 24 hours the EMS Medical Director shall deliver to the Department (IDPH) a copy of the suspension order and copies of any written materials which relate to the EMS Medical Director's decision to suspend the individual or individual provider
2. Within 24 hours the suspended individual or individual provider may deliver to the Department (IDPH) a written response to the suspension order and copies of any written materials which the individual or individual provider feels related to that response
3. Within 24 hours of receipt of the suspension order or the response, whichever is later, the Department (IDPH) shall determine if the immediate suspension should be stayed or continued pending the individual or individual provider's opportunity for hearing or review

POLICY # 1 - 04

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

SYSTEM PARTICIPATION SUSPENSIONS POLICY # 1 - 04

Page 3 of 4

C. SYSTEM SUSPENSIONS:

1. The EMS Medical Director may suspend a provider from participation in the system for not meeting system requirements
2. The EMS Medical Director shall provide the individual with a written explanation of the suspension including terms, length, and date of commencement, and that a hearing can be held with the State Disciplinary Review Board
3. The individual must request, in writing, the hearing within 15 days or the right is waived
4. The individual still has the right to review by the State EMS Disciplinary Review Board
5. All documents and transcripts of the hearing/proceedings shall be retained in the custody of Trinity EMS System
6. Upon reinstatement, the individual and the providers service will be notified and documentation of the incident will be kept in the Trinity EMS System personnel records

POLICY # 1 - 04

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

SYSTEM PARTICIPATION SUSPENSIONS POLICY # 1 - 04

TRINITY EMS SYSTEM RECORD OF DISCIPLINARY ACTION FORM

Name _____ Date _____

Job Classification _____ Agency _____

You are here by officially counseled for the following incident(s) which occurred on _____

ISSUE/COUNSELING/ACTION:

ACTION TAKEN/DATE:

Verbal Counseling _____ / _____

Written Warning _____ / _____

Suspension _____ / _____

Probation _____ / _____

Was due process offered and explained? Yes _____ No _____ Not Applicable _____

Has previous disciplinary action been given for this offense? Yes _____ No _____

A copy of this notice is being placed in your personnel file. You are warned that further incidents of poor conduct or performance may lead to your termination from the Trinity EMS System.

This is a quality improvement/corrective action plan intended for the use of EMS system quality improvement and is protected by the Medical Studies Act.

Reviewed by: _____
EMS System Coordinator Date

Reviewed by: _____
EMS Medical Director Date

I have reviewed and understand the above: _____
Signature Date

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

PHARMACY-BASED OPTION FOR MEDICATIONS POLICY # 1 - 05

Page 1 of 5

PURPOSE:

To establish a medication program for Trinity EMS System that meets or exceeds the requirements of Iowa/Illinois Code, Drugs in Emergency Medical Service Programs

POLICY:

The interaction of the physician medical director, pharmacist, service leadership and EMS providers is critical for the success of the medication program. All staff must understand their role, responsibilities and duties as part of the team. Every team member shall receive an initial orientation to this policy and be provided with an opportunity for input and updates when amended. The pharmacist in charge and service director shall develop, implement and adhere to these written pharmacy procedures for the operation and management with respect to prescription drugs.

1. The service shall maintain documentation of periodic reviews of these policies and procedures by the pharmacist in charge or designee, medical director and service director.
2. The service shall maintain documentation of staff training to the service pharmacy agreement and policies and procedures when initiated and amended.
3. All records regarding prescription drugs shall be maintained and be available for inspection and copying by the Board of Pharmacy and the Bureau of EMS.
4. **Identification, Access and Administration:**
 - a. The service shall ensure that access is limited to appropriate staff and proper documentation is maintained.
 - b. The service shall maintain records that log access to prescription drugs and records regarding procurement, storage and administration of the drugs.
 - c. The log shall be maintained in a readily-retrievable manner and be made available for inspection and copying by the Board of Pharmacy and the Bureau of EMS.
 - d. The log shall include the staff printed name and signature, printed and signed initials, level of certification and other unique identification used in the service records.
 - e. Access to prescription drugs shall be limited to certified EMS providers that are listed on the pharmacy signature log and system registry roster.
 - f. Drugs, excluding Schedule II controlled substances, may be administered beyond the limits of the patient care protocols provided that online or verbal medical direction has been obtained prior to administration.

POLICY # 1 - 05

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

PHARMACY-BASED OPTION FOR MEDICATIONS POLICY # 1 - 05

Page 2 of 5

5. Procurement, Storage, Inspection, and Inventory Control

- a. The pharmacist in charge or designee shall order, receive and distribute prescription drugs.
- b. Records of ordering and receipt of drugs shall be maintained by the pharmacy.
- c. The service shall maintain, at the primary site, an accurate list of all prescription drugs.
- d. The service shall maintain records of monthly inspections of all drugs at the primary site and all satellites.
- e. The inspection shall include removal of outdated drugs one month prior to expiration or removal of adulterated drugs that are quarantined for disposal.
- f. Yearly inventory will be done no later than January 31st but not before January 1st. All yearly inventory sheets will be turned into the EMS Coordinator.
- g. Staff may handle drugs within their current scope of practice as defined by the Bureau of EMS.
- h. Storage at the primary site and all satellites will be in a designated, secure, clean and free of debris climate-controlled area.
- j. Environmental temperatures shall be recorded on a daily basis, as a minimum.
- k. Refrigerated drugs will have daily recorded temperatures at a minimum.
- l. Drugs exposed to extreme temperatures (>104 degrees and <13 degrees Fahrenheit) shall not be administered to patients and removed from usable stock and quarantined for proper disposal.
- m. The pharmacist in charge shall notify the service regarding recalls and ensure removal and replacement.
- n. Expired, recalled and damaged drugs (except controlled substances) shall be removed from usable stock and returned to the pharmacy.

6. Replenishment

- a. Service staff may request replenishment of drugs maintained at the primary program site or satellites provided that the pharmacy has been supplied with administration records justifying the order.
- b. The pharmacist shall approve every drug taken from the pharmacy's dispensing stock. The pharmacist shall document and maintain verification of approval.

POLICY # 1 - 05



PHARMACY-BASED OPTION FOR MEDICATIONS POLICY # 1 - 05

Page 3 of 5

7. Protocols, Administration of Drugs Beyond the Limits of Protocols, Patient Care Reports

- a. The medical director shall approve patient care protocols for all drugs carried by the service.
- b. The service will ensure the pharmacist in charge receives the patient care protocols when state or local updates are approved by the medical director.
- c. The pharmacist in charge and service director shall ensure that the drugs and controlled substances carried by the service match the drug list in the approved patient care protocols.
- d. Drugs, excluding Schedule II controlled substances, may be administered beyond the limits of the patient care protocols provided that online or verbal medical direction has been obtained prior to administration.
- e. Verbal orders for drugs not covered in the patient care protocols shall be repeated back to the physician or designee for verification.
- f. Drugs administered outside the parameters of the approved patient care protocols shall be documented in the patient care report including the name of the authorizing prescriber and any person that may have relayed the order.
- g. Patient care reports that include drugs administered outside the parameter of the approved patient care protocols are subject to an immediate written audit of the patient care report per the service Continuous Quality Improvement Policy.

8. Controlled Substances Administration, Destruction & Disposal, Inventories and Record Maintenance, Suspicion of Loss or Theft

- a. The service shall deliver an order signed by the prescriber to the pharmacy within seven days of the date the administration was authorized, for all Schedule II controlled substances.
- b. Every inventory and other required records shall be maintained by the pharmacy and the service and shall be readily retrievable and available for inspection and copying by the Board of Pharmacy and the Bureau of EMS.
- c. A perpetual inventory (electronic or manual) of Schedule II controlled substances shall be maintained at the primary program site:
 - i. The electronic inventory shall provide for a hard-copy print out for any specified period of time and shall include the current inventory quantities for each drug at the time the record is printed.
 - ii. Electronic entries may not be changed once recorded. Adjustments or corrections shall require a separate entry that includes the identity of the person making the correction and the reason for the correction.



PHARMACY-BASED OPTION FOR MEDICATIONS POLICY # 1 - 05

Page 4 of 5

- iii. The perpetual inventory shall identify all receipts and disbursements of Schedule II controlled substances by name or National Drug Code.
- iv. The perpetual inventory shall include patient administration, wastage, return to the pharmacy and disposal.
- v. The record of receipt shall identify the source of the drug, the strength and dosage form, the quantity, the date, and name or the unique identification of the individual verifying receipt of the drug.
- vi. The record of disbursement shall identify where and to whom the drug is disbursed or administered, the strength and dosage form, the quantity, the date, and the name or the unique identification of the individual verifying receipt of the drug.
- vii. The pharmacist in charge or designee shall be responsible for reconciling the physical inventory of all Schedule II controlled substances with the perpetual inventory balance **monthly**.
- vii. Any discrepancy shall be reported to the EMS Coordinator.
- d. The service shall document an annual accurate inventory of Schedule II controlled substances at the primary site and any satellites that carry controlled substances.
- e. All controlled substance records for the primary program site and any satellites shall be maintained at the primary site. The records will clearly identify which records are for the primary site and each of the satellite(s).
- f. The pharmacy and primary program site shall maintain records of destruction or disposal of controlled substances.
 - i. Outdated, adulterated or unwanted supply shall be quarantined until the controlled substance can be returned to the pharmacy. EMS personnel shall not destroy controlled substances, except during wastage.
 - ii. For destruction and disposal of controlled substances the pharmacist shall use the services of a DEA-registered and licensed disposal firm or other means approved by the board.
 - iii. EMS personnel, the medical director or pharmacist may destroy or dispose of the unused portion of a controlled substance resulting from administration to a patient.
 - 1. Wastage shall be conducted in the presence an EMS provider authorized to administer the drug or a licensed healthcare professional.
 - 2. Written or electronic records of controlled substance wastage shall be maintained by the service and pharmacy.

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

PHARMACY-BASED OPTION FOR MEDICATIONS POLICY # 1 - 05

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3. The records shall include legibly printed names and the signatures or other unique identification of the witness and of the individual wasting the controlled substance and:

- a. The controlled substance wasted;
- b. The date of destruction or disposition;
- c. The quantity or estimated quantity of the wasted controlled substance;
- d. Patient identification;
- g. Upon suspicion of loss or theft of any controlled substance, the service shall notify, in writing (email preferred), The EMS System Office and the pharmacist in charge within 48 hours of the discovery of the theft or loss.
- h. The pharmacist in charge shall notify, in writing, the DEA and the Board of Pharmacy of any theft or significant loss of any controlled substance within two weeks of the discovery of the theft or loss.
- i. The incident report shall be maintained at the pharmacy and at the EMS System office.

9. Misuse or Diversion

- A. This is a criminal offense, which may result in loss of employment, immediate suspension from the system and/or revocation of license
- B. The agency Director, Chief or designee is responsible to review the count records frequently
- C. If a pattern evolves of continued breakage or documentation by one EMT the Director or Chief should follow up with interview and/or drug screen (Policy of the agency)
- D. Report any infractions to the EMS System office(See system participation suspension policy)
- E. If system personnel are proven to abuse drugs or alcohol while on duty they will be subject to system disciplinary action(see system suspension policy)
- F. Immediate system suspension will occur if the system personnel use on duty and/or distribute controlled substances for other than their intended use. This may also involve termination of their current employment

A complete copy of the Pharmacy-based Option Policy can be obtained from the Trinity EMS System Office upon request.

POLICY # 1 - 05

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

COMMUNICATIONS POLICY # 1 - 06

PURPOSE:

This policy is to define for Trinity EMS System Personnel the type of communication methods and acceptable equipment to be used

A. FR, BLS, ILS, ALS

1. All services, whether transport or non-transport, will communicate to Medical Control via Merci (VHF) radio, Med channel 6, or a recorded cellular line on tones assigned by IDPH
2. In any instance where communication is not possible on Merci, cellular communication should be used. If this is not possible, call from a landline before leaving the site

C. Use unit identifier number in all communication. This unit number will be used for re-contact and should use common terms, i.e., "Moline Ambulance 11"

D. See standard operating guidelines and policy for radio report contents and care initiated prior to contact of medical control

COMMUNICATIONS TO FACILITIES:

A. Should there be a phone communication failure at Trinity, use MERCI radio (recorded line)

B. Reports of patient transfer to another facility may be repeated and/or given by the ECRN at TMC by phone and/or radio to the receiving facility

C. The UHF channels dedicated to our area are 1-4-6-8, 8 being an all calls and can be used in certain circumstances to transfer a report

D. Communication orders may be received only from Trinity RI Campus, ECRN's/MD's. Hammond Henry Hospital is approved as an associate hospital at the ILS level and may give orders to BLS, ILS in the TMC system. Hammond Henry Hospital provides system approved ECRN's and is monitored by TMC

POLICY # 1 - 06

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

VEHICLE STAFFING REQUIREMENTS POLICY # 1 - 07

Page 1 of 2

PURPOSE:

This policy is to identify minimum accepted staffing patterns for all system vehicles and process to follow if you are unable to meet this criteria on a constant basis.

POLICY:

FR

1. All First Response vehicles are to be staffed 24 hours a day, 365 days a year with First Responders trained at that level
2. Other Appropriate personnel trained to a minimum of CPR

BLS

1. All BLS transport vehicles are to be staffed 24 hours a day, 365 days a year with one of the following: (Drivers may be used anytime, but not in place of EMT staff)
 - A. Two (2) EMT-B's, licensed appropriately per state law
 - B. One (1) EMT-B and system field PHRN or ILS, ALS personnel working at the BLS level licensed appropriately per state law

ILS

1. All ILS transport vehicles are to be staffed 24 hours a day, 365 days a year with one of the following: (Drivers may be used anytime but not in place of licensed EMT staff)
 - A. Two (2) EMT-I's licensed appropriately per state law
 - B. One (1) EMT-B or system field PHRN, one (1) EMT-I or ALS personnel working at the ILS level, licensed appropriately per state law

ALS

1. All ALS vehicles transport are to be staffed 24 hours a day, 365 days a year with one of the following crews: (Drivers may be used but not in place of licensed EMT staff)
 - A. Two (2) EMT-P's
 - B. One (1) EMT-P, one (1) EMT-I, EMT-B or system PHRN

POLICY # 1 - 07

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

VEHICLE STAFFING REQUIREMENTS POLICY # 1 - 07

Page 2 of 2

RESCUE NON-TRANSPORT/AMBULANCE ASSIST VEHICLES

1. FR must staff/arrive with appropriate FR personnel at the level of the service offered
2. BLS responders must arrive with appropriate BLS personnel appropriately licensed per state law and at the level of the service offered
3. ILS responders must staff/arrive with ILS personnel appropriately licensed per state law and at the level of the service offered
4. ALS responders must arrive with ALS personnel appropriately licensed per state law
5. All levels BLS, ILS, and ALS non-transport first responding provider agencies must carry system equipment and state required equipment for the level of the vehicle license(See EMS Act for state required equipment and system required supplies policy) and follow system policies, procedures, and standing operating guidelines

STAFFING WAIVERS

1. Staffing waivers may be approved by the EMS Medical Director system services. Waivers are completed and sent to the Illinois Department of Public Health for final approval. The department will approve the waiver if it determines there is no reduction in the quality of care established by the act and/or if full compliance with the regulation in the act at issue would constitute a hardship for the applicant
2. Anytime that a service can not meet it's staffing obligation due to extenuating circumstances, please contact the EMS System office at once to review the problem and, if applicable, request a staffing waiver
3. All staffing waivers must be approved by the EMS Medical Director and sent to the Department of Public Health

LICENSURE

1. All staff will be licensed by IDPH and approved to work in the EMS system
2. The EMS Medical Director in Illinois is responsible for all levels of EMT licensure in that he/she will approve CE and other requirements listed by IDPH and present the provider for licensure and relicensure

POLICY # 1 - 07

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

VEHICLE RESPONSE REQUIREMENTS POLICY # 1 - 08

Page 1 of 2

PURPOSE:

To delineate for agencies in the Trinity Medical Center EMS System tiered response, time response, and caller information. To provide information for entering the Trinity EMS System

VEHICLE RESPONSE:

1. Any agency may respond with one vehicle to a call. That vehicle will be of the level and type that is indicated in the provider application. Staffing shall be as listed for that level of response/vehicle and according to Trinity Medical Center **EMS Vehicle Staffing Requirements Policy**
2. Any agency may respond with a second vehicle to the scene such as: Fire Engine, Rescue Vehicle. The second vehicle may or may not be utilized as EMS Responders, but as extra personnel for manpower. If these responders are trained as EMS Providers they may assist medically if they are in the System and recognized by the Medical Director
3. If a call to a scene has dual responding ambulances, the highest level provider will determine the need of the patient
4. All First Responding vehicles in the System will be listed in the provider application and licensed as required. Each subsequent vehicle will be listed as transport/non-transport and may be designated as FR, BLS, ILS, or ALS if system equipment, staffing requirements are met

TIERED RESPONSE:

1. Any agency may participate in a tiered response to patient care providing that response is listed in the system plan and documented in the agency commitment.
2. Any Agency may utilize:
 - A. Ambulance assist vehicle
 - B. Transport vehicle of another agency
 - C. First responding vehicle
 - D. Non-transport vehicle
3. Designation with mutual aid or by contract for the transport vehicle must be made and attached to the commitment to the system
4. Staffing must be maintained as listed in the vehicle staffing policy

POLICY # 1 - 08

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

VEHICLE RESPONSE REQUIREMENTS POLICY # 1 - 08

Page 2 of 2

TIME RESPONSE:

1. All system ambulances, assist/non-transport vehicles and rescue vehicles listed in the system plan/commitment must adhere to the response time listed in EMS Act section 515.810
2. A commitment to optimum response times up to 6 minutes for the primary coverage areas, 6-15 minutes in the secondary coverage areas, and 15-20 minutes in the outlying coverage areas

SYSTEM APPLICATION:

1. Each provider entering Trinity Medical Center EMS System must provide application as determined by the Illinois Department of Public Health and all attachments requested in the application. All vehicles using EMS providers at any level must be included in the application
2. All provider agencies will have Mutual Aid Agreements established and submitted in the provider application
 - A. Fire, Municipal within it's own agency, i.e. Paramedic Engine Company level as it is. Agency needs a transport agency agreement.
 - B. Fire, Municipal with First Response and requires another agency to transport does need a transport agreement signed with that agency
3. Any First Responding, non-transport agency will provide a transport agreement with the agency utilized to transport
4. Renewal of applications will be with renewal of the EMS System Plan as requested by IDPH

POLICY # 1 - 08

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

MEDICAL CONTROL COMMUNICATION/ OVERRIDES POLICY# 1 - 09

PURPOSE:

To identify for the Trinity Medical Center Emergency Communication Registered Nurse personnel and the Emergency Room Physicians their responsibilities in regard to the communications of medical orders to prehospital care providers. To delineate a course of action should the Resource Hospital Medical Control need to override medical orders from any other hospital to Trinity Medical Center System personnel

1. An Emergency Communications Registered Nurse in the Trinity Medical Center EMS System, who has received the entire course of ECRN instruction and passed the required system examination is approved to communicate via radio to personnel in the field
2. The ECRN must follow the Standing Operating Guidelines of the EMS Medical Director and/or relay orders from the designated Emergency Room Physician. If the Medical Control Physician is not in direct communication with the ECRN, the ECRN must begin orders in strict adherence to SOG's
3. The designated Emergency Room Physician should be notified and called to the console as soon as possible
4. The Emergency Room Physician may deviate from the SOG's for certain patient situations, but may not advise the field personnel to administer any treatments/medications which have not been previously approved through the EMS Medical Director
5. Suggestions for change of Policy/Procedure may be made to the System EMS Medical Director
6. Overriding other Medical Control Communication may occur if the ECRN/ Medical Control Physician determines that those orders could be harmful or dangerous to either the field personnel/patient
7. Document fully any override situations or unusual occurrences and send to EMS MD/EMS System office
8. Medical Control Physicians may also override decisions of transports to facility based on the interpreted condition of the patient(See **Closest Hospital/ Transport Decision Policy**)

POLICY # 1 - 09

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2013

SPECIAL EVENTS REQUIREMENTS POLICY # 1 - 10

PURPOSE:

A Special Events Form is to be completed as an amendment to an existing EMS System plan by an ambulance provider who will be providing coverage at the specific event. This form with attachments, if appropriate, should be submitted to the EMS Department ideally **45 days** prior to the event. The form will be filed in the EMS Department and will be sent to the Illinois Department of Public Health if requested.

A copy of the Special Events Form and the items required by the EMS System for each level of care can be found on the IDPH Department of EMS website or requested from the EMS office, titled **Emergency Medical Service (EMS) Systems Special Events Request Application**.

1. First Responder Assist Vehicles inclusive of:
 - A. Bicycle
 - B. Boat
 - C. Paramedic Engines
2. Transport/Non-Transport Vehicle Assist
3. Intermediate Life Support Transport Vehicles
4. Advanced Life Support Transport Vehicles

POLICY # 1 - 10

EMS System Policies:

Section # 02: Medical / Legal

<i>Patient Abandonment</i>	02-01
<i>Patient Interaction- Unlawful Discrimination</i>	02-02
<i>Preservation of Evidence Reporting – Suspected Crimes</i>	02-03
<i>Child abuse recognition and reporting</i>	02-04
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<i>Region II Restraint</i>	02-08
<i>Minor Patient / Guardian Consent</i>	02-09
<i>System Refusals</i>	02-10
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<i>Criteria for Death / Withholding Resuscitation</i>	02-12
<i>Discontinuation of Pre-hospital Resuscitation</i>	02-13
<i>Do Not Resuscitate Form</i>	02-14
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<i>Intercept – ILS / ALS on Scene</i>	02-19
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TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

PATIENT ABANDONMENT POLICY # 2 - 01

PURPOSE:

To identify for all system personnel the term abandonment and those aspects which may constitute abandonment

POLICY:

- Abandonment is the unilateral severance of the EMT-patient relationship without reasonable notice, when further medical treatment is required. Abandonment occurs when the EMT-patient relationship, once created, is terminated intentionally and unjustifiably by the EMT. Very often abandonment takes the form of negligence or an act of omission
- Abandonment can ensure after the patient-EMT relationship is formed, i.e. when an ambulance is dispatched and arrives at the scene of an emergency and the EMT begins treatment or begins contact with the patient, the relationship is formed, then leaving care of the patient to anyone of a lesser level than the responding service EMT's constitutes abandonment

There are only three (3) ways the patient-EMT relationship can be terminated without abandonment

1. The patient does not require further medical care
2. The patient terminates the relationship
3. The patient is transferred to another qualified medical professional of equal or greater licensure. You cannot turn the patient over to lesser licensed personnel

Recommendations to eliminate abandonment questions are:

- A. Once you start treatment, or accept the duty to provide service, then remain with the patient until he/she is safely transferred to the care of another provider of equal or greater licensure.
- B. Do not leave a patient who decided he/she may not require emergency care unless you obtain a refusal (See **System Refusal Policy**)
- C. Never leave a patient in an Emergency Department until you have provided the staff with all the required reports and information and the staff has assumed care of the patient. Document the name of the doctor and/or nurse you turned the patient over to by having them sign your run/bedside report form
- D. Do not leave the patient or discontinue treatment because of police interference. If you receive a direct order from police to desist and the patient is removed from you under direct police custody, you no longer have the option to treat, but you must document fully the statements of police and police ID's, as well as immediately notify Medical Control
- E. In a triage situation, it is advisable to summon an adequate number of personnel to assure that all patients are treated and transported in a timely fashion

POLICY # 2 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

PATIENT INTERACTION/UNLAWFUL DISCRIMINATION POLICY # 2 - 02

PURPOSE:

To identify for system personnel at all levels their responsibility to patient care and unlawful discrimination

POLICY:

The patient is to be considered primary at anytime you are called to serve.

1. Once you are dispatched you are to offer any care/treatment to your patient at the level of your licensure (that of the vehicle you serve on)
2. You are responsible to know the laws of your state and the regional/system policies and Standard Operating Guidelines of your system
3. You must provide for the well-being of the patient while rendering the necessary interventions relevant to your licensure level
4. You must be cognizant of the patient's ability to understand and comprehend your applications of treatment and his/her rights to refuse any part or all treatments. You must fully explain any risks involved with refusal of treatment and/or refusal of transport with this refusal. It is your responsibility to have the appropriate refusal signed and to document the explanation of risks in the narrative report
5. Provide privacy/confidentiality and allow patients to maintain dignity
6. Allow access to relatives and caregivers on request if appropriate
7. Make all emotional and physical needs of the patient a priority
8. Maintain honest/open discussions of events and procedures to the patient and their families
9. Explain the process of procedures
10. Recognize and respect all rights of property, patient, and families
11. Recognize the emotional needs of the infant and pediatric patient as well as the adult and elderly
12. Physical contact should be limited to treatments or therapeutic interventions
13. Maintain professional attitude at all times
14. Use appropriate language and do not try to overwhelm a patient with technical language
15. Allow interpreters and/or those who "sign" to accompany the patient

Discrimination:

1. No service/agency or EMT can refuse an emergent patient service based on race, sex, age, religion, mental competency/capacity, or ability to pay
2. When an ambulance is called, it is a call for help and appropriate response, care must be given
3. Any refusal to care for patient, even those who are in need, will result in system discipline and/or licensure suspension

POLICY # 2 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

PRESERVATION OF EVIDENCE REPORTING SUSPECTED CRIMES POLICY # 2 - 03

Page 1 of 2

PURPOSE:

To identify for the Trinity Medical Center EMS System personnel the procedures to preserve a chain of evidence. To identify necessary reporting of crime and circumstances in which reporting is mandated. It is recommended that EMS management work closely with the police to avoid any interaction problems. Police/EMS joint education may be helpful. Trinity Medical Center EMS personnel must keep in mind that the patient is your primary responsibility

POLICY:

Dying Declaration: is a statement or declaration from the dying patient is meant to be communicated to others you must: (this statement may indicate who the perpetrator of the crime is)

1. Record the message in as much detail as possible. Have the written record signed by two witnesses who may have heard the declaration
2. Communicate the message to the immediate police
3. A declaration may also be regarding property, particularly regarding valuables or burial instructions. Also turn the documentation over to authority Police/Hospital and family if indicated

Suspicious Death: You must work with police and not disturb evidence. Police should never ask you not to examine the patient or transport if necessary. Ask police if you can move patient to a "non-crime area" to begin treatment. (If this will not endanger the patient). Patient exam and treatment is your responsibility and must be done and documented

1. Move nothing at a crime scene unless it is necessary to immediately treat a patient
2. If you must move something document its original location and give to police
3. Any bottles etc. that may be taken with you in transport must stay in a chain of custody. You are responsible for that chain until turned over the MD/police document who receives the property

Arrest: Police may wish to place restraints on the patient. Discuss the EMS policy for restraints with the officer prior to transport. Contact medical control if any questions arise which you may feel can compromise patient care. Document all information that pertains

POLICY # 2 - 03

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

PRESERVATION OF EVIDENCE REPORTING SUSPECTED CRIMES POLICY # 2 - 03

Page 2 of 2

Reportable crimes are as follows but not limited to:

Child/Elder Abuse

- Provide care/comfort to the child/adult
- Report all evidence you find or see
- Should you be called to an abused child/adult, and a parent/guardian arrives and refuses care, immediately call police and standby to render aid after police arrive
- Document any and all evidence of abuse

Domestic Violence

- Provide comfort and care to the victim
- Report all evidence noted
- Do not place yourself in a position of danger. Call police immediately
- Document all evidence

Rape

- Comfort, treat injuries, appropriate assessment, call Rape Crisis if requested.
- Do not force unwanted questions about the rape.
- Do not examine or treat the genital area unless hemorrhage is present. Save all clothing.
- Do not allow the patient to wash, urinate or defecate until at the hospital
- Document all information/evidences and notify the police.

Alcohol/Drug Abuse/Controlled Substances

- Document fully all evidence of use
- Bring any evidence of use with you if possible
- Document behavioral effects

Suicide

- Document all evidence including statements that could point to suicide or attempted suicide
- Bring appropriate bottles, poisons, or notes with you if the patient is transported

Animal Bites

- Care for the patient. Document information and report to authorities, identify animal (if possible) for police

Other Reportable Crimes

- Gunshot/knife wounds, other assaults, injuries, MVA's, etc.
- When in doubt, call police/Medical Control

MAKE NO STATEMENTS TO THE MEDIA

POLICY # 2 - 03

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

CHILD ABUSE RECOGNITION AND REPORTING POLICY # 2- 04

PURPOSE:

Child abuse is the physical and mental injury, sexual abuse, negligent treatment, or maltreatment of a child under the age of 18 by a person who is responsible for the child's welfare. The recognition of abuse and the proper reporting is a critical step to improving the safety of children and preventing child abuse

POLICY:

Assessment of a child abuse case based upon the following principles:

- ✓ **Protect** the life of the child from harm, as well as that of the EMS team from liability
- ✓ **Suspect** that the child may be a victim of abuse, especially if the injury/illness is not consistent with the reported history
- ✓ **Respect** the privacy of the child and family
- ✓ **Collect** as much evidence as possible, especially information

PROCEDURE:

1. With all children, assess for and document psychological characteristics of abuse, including excessively passivity, complaint or fearful behavior, excessive aggression, violent tendencies, excessive crying, fussy behavior, hyperactivity, or other behavioral disorders
2. With all children, assess for and document physical signs of abuse, including and especially any injuries that are inconsistent with the reported mechanism of injury
3. With all children, assess for and document signs and symptoms of neglect, including inappropriate level of clothing for weather, inadequate hygiene, absence of attentive caregiver(s), or physical signs of malnutrition
4. Immediately report any suspicious findings to both the receiving hospital (if transported) and to the Department of Children and Family Services(DCFS). While law enforcement may also be notified, the law requires the EMS provider to report the suspicion of abuse to DCFS. EMS should not accuse or challenge the suspected abuser. This is a legal requirement to report, not an accusation. In the event of a child fatality, law enforcement must also be notified

POLICY # 2 - 04

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

INFANT ABANDONMENT POLICY # 2 - 05

PURPOSE:

Illinois provides a mechanism for unwanted infants to be taken under temporary custody by a law enforcement officer, social services worker, healthcare provider, or EMS personnel if an infant is presented by the parent within 30 days of birth. Emergency Medical Services will accept and protect infants who are presented to EMS in this manner, until custody of the child can be released to the Department of Social Services

POLICY:

To Provide:

- ✓ Protection to infants that are placed into the custody of EMS under this law
- ✓ Protection to EMS systems and personnel when confronted with this issue

PROCEDURE:

1. Initiate the **Pediatric Assessment Procedure**
2. Initiate **Newly Born Protocol** as appropriate
3. Initiate other treatment protocols as appropriate
4. Keep infant warm
5. Call local Department of Children and Family Services or the county equivalent as soon as infant is stabilized
6. Transport infant to medical facility as per local protocol
7. Assure infant is secured in appropriate child restraint device for transport
8. Document protocols, procedures, and agency notifications in the PCR

POLICY # 2 - 05

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DOMESTIC VIOLENCE RECOGNITION AND REPORTING POLICY # 2 - 06

POLICY:

Domestic violence is physical, sexual, or psychological abuse and/or intimidation, which attempts to control another person in a current or former family, dating, or household relationship. The recognition, appropriate reporting, and referral of abuse is a critical step to improving patient safety, providing quality health care, and preventing further abuse

Elder abuse is the physical and/or mental injury, sexual abuse, negligent treatment, or maltreatment of a senior citizen by another person. Abuse may be at the hand of a caregiver, spouse, neighbor, or adult child of the patient. The recognition of abuse and the proper reporting is a critical step to improve the health and wellbeing of senior citizens

PURPOSE:

Assessment of an abuse case based upon the following principles:

- ✓ **Protect** the patient from harm, as well as protecting the EMS team from harm and liability
- ✓ **Suspect** that the patient may be a victim of abuse, especially if the injury/illness is not consistent with the report history
- ✓ **Respect** the privacy of the patient and family
- ✓ **Collect** as much information and evidence as possible and preserve physical evidence

PROCEDURE:

1. Assess the/all patient(s) for any psychological characteristics of abuse, including excessive passivity, complaint or fearful behavior, excessive aggression, violent tendencies, excessive crying, behavioral disorders, substance abuse, medical non-compliance, or repeated EMS requests. This is typically best done in private with the patient
2. Assess the patient for any physical signs of abuse, especially any injuries that are inconsistent with the reported mechanism of injury. Defensive injuries (e.g. to forearms), and injuries during pregnancy are also suggestive of abuse. Injuries in different stages of healing may indicate repeated episodes of violence
3. Assess all patients for signs and symptoms of neglect, including inappropriate level of clothing for weather, inadequate hygiene, absence of attentive caregiver(s), or physical signs of malnutrition
4. Immediately report any suspicious findings to the receiving hospital (if transported). If an elder or disabled adult is involved, also contact the Department of Children and Family Services (DCFS) or equivalent in the county
5. EMS personnel should attempt in private to provide the patient with the phone number of the local domestic violence program, or the National Domestic Violence Hotline, 1-800-799-SAFE

POLICY # 2 - 06

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

EMOTIONALLY DISTURBED POLICY # 2 - 07

PURPOSE:

To identify for the System personnel information to deal with the emotionally disturbed

POLICY:

The emotionally disturbed patient is defined as:

One who would intentionally or unintentionally physically injure himself or others. One who is unable to care for himself and guard himself from physical injury and who cannot provide for his own physical needs. The emotionally disturbed patient may be in need of treatment and is not able to comprehend the risks in refusing or needing treatment.

The emotionally disturbed does not include a person whose mental processes have:

- A. Been weakened or impaired by advanced years
- B. Effects from an overdose of drugs or the ingestion of mind-altering hallucinogens or psychosis causing controlled substances
- C. Alcoholic beverages that bring the patient to the point of intoxication
- D. Anxiety, depression, suicidal tendency, or metabolic disease
- E. Emotional distress caused from accidents or other life crisis

Approach to the Emotionally Disturbed:

- A. Provide a calm atmosphere, reassurance, and well defined explanations. Have someone with the patient at all times
- B. Document any criteria which confirms your opinion of decisional capacity of the patient evidence by:
 - Patient's general behavior
 - Inappropriate conversation/responses
 - Evidence of drug or alcohol abuse or use
 - Confirming statements of family/bystanders
- C. When the patient consents to treatment, you may treat as usual and transport. If the patient is quiet and does not consent but does not actively resist, decide in favor of treatment, particularly when the patient appears extremely psychotic
- D. Some emotional disorders show behavior that may be harmful to you, themselves or others. Under these circumstances you may treat and transport the patient without consent. This is done under the legal theories of:
Emergency Doctrine- if the patient had the mental capacity to, they would consent
Police Powers- this is the power to protect citizens from people who can cause themselves bodily harm
- E. If it is necessary to restrain the patient follow the **Region II Restraint Policy**

POLICY # 2 - 07

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

REGION II RESTRAINT POLICY # 2 - 08

Page 1 of 2

PURPOSE:

To identify for Region II EMS personnel when restraints are necessary and the application procedure for restraining the violent patient. A restraint is identified as a manual or physical mechanical device that restricts the patient's freedom or movement or normal access to his/her body and cannot be easily removed

POLICY:

Patients will only be restrained if clinically justified. The use of restraints is only utilized if the patient is violent and may cause bodily harm to themselves or to others. Restraints are a last result in caring for the emotionally disturbed patient

CLINICAL JUSTIFICATION:

- Aggression
- Behaviors out of control/combative
- Appears the patient will cause injury to themselves or others
- Impulsive striking out/throwing objects
- Self abuse
- Assaultive behavior/threats with weapons
- Mental confusion/incompetence with aggression

PROCEDURE:

1. To restrain the patient, use minimum of 4 people. Have 1-2 of those as the same sex as the patient, if possible
2. As soon as possible contact medical control for guidance
3. May use police protective custody if available. Notify as soon as possible
4. Protect and preserve privacy and dignity of the patient
5. Explain procedure to the family and patient if possible/ One person (team leader) should communicate with the patient
6. Do not spend time in bargaining with patient. Once the decision is made, move to restrain. For example: a patient under the influence of drugs such as Bath Salts will not listen
7. Remove any equipment from your person, which can be used as a weapon against you
8. Assess the patient and area for any other types of potential weapons
9. Approach the patient keeping the team leader near the head to continue communications
10. Have a restrainer at 3 limbs and the team leader at the head

POLICY # 2 - 08

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

REGION II RESTRAINT POLICY # 2 - 08

Page 2 of 2

11. Move patient to back board/stretchers
12. Have patient supine and place soft disposable restraints on 3-4 limbs and fasten to backboard. Do not restrain prone. Monitor airway frequently throughout transport
13. The restraint is fastened to the backboard and the backboard strapped to the stretcher. This allows ease in moving the patient if necessary to their side (May be necessary to prevent aspiration)
14. Continue verbal contact with the patient
15. Transport as soon as possible to nearest receiving hospital
16. Stay with the patient at all times after restraining
17. Document circulation checks every 15 minutes of restrained limbs, physical assessment, justifying factors for restraints, time of application of restraints, notification time of police and medical control. Document if police are on scene and accompany you to the receiving facility

SAFETY:

- Safety of yourself and the patient should be the most important factor at all times
- Stay with the patient
- Be prepared for the unexpected
- Continue to monitor for weapons the patient may have access to
- Police to accompany you in transport if possible
- Do not use metal restraints or requiring keys
- Do not remove restraints until released by medical personnel at the nearest receiving hospital

POLICY # 2 - 08

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

MINOR PATIENT/GUARDIAN CONSENT POLICY # 2 - 09

PURPOSE:

To delineate for the Trinity Medical Center EMS System personnel the steps to take in releasing a minor who refuses treatment in the field and/or continuing to treat without specific consent. To identify for the Trinity Medical Center EMS System personnel definition of emancipated minor, minor and guardianship. Adults have legal authority to make health care decisions, **MINORS DO NOT HAVE AUTHORITY**

Minor: a minor is defined as one who is under the age of 18 years

Emancipated Minor: In the state of Illinois is defined as one who is under the age of 18, married and/or self supporting or living independently or in the military service

Guardianship: When one is granted legal appointment by a court to manage another person's affairs, i.e. parents or court appointed guardians

Competent Adult: A person 18 years or older with no mental confusion or impairment who can understand risks of non-treatment and treatments needed

Minor Consent of Minors: Minors over the age of 12 may consent for treatment of:

- Sexually Transmitted Disease (STD)
- Treatment of ETOH use and alcoholism
- Treatment of drug use

Treatment of Minors:

- A. The EMT may at any time treat a minor without parental or guardian consent where life-threat exists or he deems that the minor requires immediate care to prevent serious injury
- B. Parents or guardians should be notified as quickly as possible (May be done by the Police)
- C. When a condition is non-life threatening a parent or guardian should be contacted to obtain permission to treat. If this is not possible in the field, notify the police and transport the child for treatment to the appropriate facility
- D. Complete documentation is required for treatment with or without parental or guardian consent, explaining the need to treat
- E. An emancipated minor should have a legal document recognizing emancipation. If they do not, document carefully the identification of their own emancipation and treat under informed consent
- F. If a child appears to need treatment to prevent further injury, contact Medical Control by radio, report the circumstances and receive permission. Always treat a child rather than not treat

Permission Acceptance:

You may accept permission for treatment from either **parent, older sibling, grandparents, aunts or uncles, or police officer** (in that order) when parents are not immediately available

POLICY # 2 - 09

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

SYSTEM REFUSALS POLICY # 2 - 10

Page 1 of 2

PURPOSE:

To identify for system personnel the procedure for refusal and the criteria to utilize when allowing a refusal to be written

POLICY:

- A. ***An approved system refusal form must be used on all refusals.*** The EMT is responsible to do an adequate assessment to make sound refusal decisions. Medical control should be contacted as soon as possible with the refusal decision if the patient appears to be high risk. High risk can be identified but not limited to, the following:
- Head injury
 - Presence of alcohol/drugs
 - Loss of consciousness
 - Impaired judgment
 - Minors
- Low risk does not require medical control contact such as:
- Slow speed accidents without injury
 - Competent patient with minimal complaint
- B. The approved form should be signed by the patient who refuses medical help and/or transportation and does not appear to be a threat to himself or others
- C. Risks of not receiving medical care must be carefully explained to the patient. In the case of minors the parent/guardian must sign the refusal form and receive the full explanation of risks for refusal of medical care (see **Minor Patient/Guardian Consent Policy**)
- D. In the care of the patient (with decisional capacity) making the decision to transport to a farther care facility and/or inappropriate hospital the risks must be fully explained. Explain the benefits of transport to the closest or most appropriate facility. For example, chest pain to cardiac lab facility, suspected strokes to a stroke ready hospital, or traumas to an appropriate level trauma hospital. Utilize the refusal form to denote this decision. Please inform medical control of this decision and ask for assistance
- E. If a patient or guardian refuses a part of the treatment this must be fully documented in the run record and on the refusal form. Call medical control to discuss alternatives or further orders
- F. Contact medical control as soon as possible on any patient who appears to be unstable and wishes to refuse. The patient may have to be stabilized at the closest hospital and then transferred on to the facility of their choice
- G. Document carefully in any areas of these situations
- H. Have a witness sign the refusal form with you. If an officer is on the scene, he may sign as the witness. Note the name and badge number on form

Note: Family members cannot refuse treatment and transportation of a patient to a hospital unless they have durable power of attorney for healthcare

POLICY # 2 - 10

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

SYSTEM REFUSAL POLICY # 2 - 10

Page 2 of 2

PURPOSE:

The EMS Patient Disposition/Refusal Information form has been designed to be used by EMS personnel to legally document a variety of situations. This duplicate form consists of a single page. The front of the page is used to describe the situation and the back lists a variety of specific patient instructions by complaint. The form should be used to document any refusal of care by a patient (complete refusal or refusal of specific aspects of care) and to document the patient/guardian's understanding of medical instructions. Common scenarios of refusal are:

- 1. COMPLETE REFUSAL OF EMS CARE OR TRANSPORT:** The first box "Patient Refusal" should be marked. In the first section, the appropriate blocks for "EMS Recommendation" should also be marked. This section should be explained to the patient or guardian, who should understand that their refusal may result in complications up to and including death. The patient or guardian should be asked to sign the form, indicating that he/she understands the seriousness of the situation and the information provided. If the situation warrants, the EMT should explain the risks of the refusal using the patient instructions section and the back of the form for assistance. If the instructions section is used, the appropriate blocks should also be checked
- 2. REFUSAL OF A SPECIFIC PROCEDURE (IV THERAPY, C-COLLAR):** The first box "Patient Refusal" should be marked. In the first section, the specific refused procedure should be marked. The first section should be explained to the patient or guardian, who should understand the potential consequences of their refusal. The patient or guardian should be asked to sign the form, indicating that he/she understands the seriousness of the situation
- 3. The box "Patient Instructions"** and the appropriate blocks in that section should be marked. This section and the specific instructions (on the back) should be carefully explained to the patient and/or guardian, who understands them. The patient or guardian should be asked to sign the form, indicating that he/she understands the instructions and the seriousness of the situation

In all situations, the top part of the form should be completed, and as much of the signature portion as necessary. It is preferable to have witnesses, particularly if the patient or guardian refuses to sign. The original form should be kept on file, while a duplicate copy provided to the parent or guardian

POLICY # 2 - 10

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

CORONER POLICY POLICY # 2 - 11

PURPOSE:

This policy is for all System personnel as a guideline for identifying and reporting a death to the coroner's office, and to note common types of reportable deaths

POLICY:

- In all cases in which you do not resuscitate, the coroner's office should be notified. You or the police officer on scene are responsible for that notification. The responding EMS personnel are required to stay with the body until the coroner or their designee arrives
- You may, however, return to service if a police officer or coroner representative relieves you of your responsibility
- You are not required by law to transport the body and be taken out of service. If you or your service do assist in this process, please see that your territory/service area is covered for emergency care
- Please notify Medical Control about non-transport of the deceased person if there are any questions about procedures

Reportable deaths include:

- A. Traumatic violent death (suicide, homicide, accidental) to include but not limited to:
Alcohol/Drug Causes, Burn, Crushing, Drowning, Elderly Abuse, Electrocution, Fall, Gunshots, Poison, Radiation Injury, Sex Crime Related, Stabbing, Starvation, Strangulation, Sudden Unexplained Death, Suffocation, Suspected Child Molestation/Abuse, Suspicious Circumstances, Vehicular Accidents, Weather Related
- B. Jailed Victims
- C. Deaths following procedures (i.e. at clinic or MD's office)
- D. Nursing Home/Extended Care Deaths
- E. Birth/Death of Newborn delivered outside of Hospital

Exposure:

- A. If any ambulance/police personnel are exposed to blood or body fluid, please notify the Coroner or Deputy at once so that a sufficient amount of blood can be held for testing. You are responsible to see that this occurs
- B. Follow Infection Control Policy for the agency

POLICY # 2 - 11

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

CRITERIA FOR DEATH/ WITHHOLDING RESUSCITATION POLICY # 2 - 12

PURPOSE:

To identify for EMS personnel patients which it is acceptable to withhold medical care

POLICY:

CPR and ALS treatment are to be withheld only if the patient is obviously deceased per the criteria below or a valid **Do Not Resuscitate** form (see separate policy) is present:

INDICATIONS:

One or more of the following is present:

- ✓ **Rigor mortis and/or profound dependent lividity**
- ✓ **Decapitation**
- ✓ **Incineration**
- ✓ **Decomposition**
- ✓ **Mummification**
- ✓ **Frozen State**
- ✓ If arrest is traumatic in origin, go to **Traumatic Arrest Protocol**

Do not resuscitate any patient who meets the above criteria. If resuscitation efforts are in progress, consider discontinuing the resuscitation efforts (**Paramedic Only**) per the **Discontinuation of Prehospital Resuscitation Policy**

The pronouncement may be done only by the Trinity Medical Control Physician in the following situations:

1. When, in the medical judgment of the physician, the patient has died and the **initiation** of medical treatment by paramedics is not appropriate

If at anytime the ALS personnel are not certain which policy applies (**DNR or Criteria for Death or Discontinuation of Prehospital Resuscitation**) begin treatment and contact Medical Control for orders/assistance

Notify law enforcement/coroner of the patient's death according to the **Deceased Persons Protocol**

NOTE: If you are unsure whether the patient meets the above criteria, resuscitate

POLICY # 2 - 12

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DISCONTINUATION OF PREHOSPITAL RESUSCITATION POLICY # 2 - 13

PURPOSE:

The purpose of this policy is to allow for discontinuation of prehospital resuscitation after the delivery of adequate and appropriate ALS therapy by **Paramedics only**, when, *in the medical judgment of the medical control physician*, the patient has died and **continued** treatment of the patient would be ineffective and, therefore, inappropriate

POLICY:

Unsuccessful cardiopulmonary resuscitation (CPR) and other advanced life support (ALS) interventions may be discontinued **prior to transport or arrival** at the hospital when this procedure is followed

1. Discontinuation of CPR and ALS intervention may be implemented with contact to **Medical Control** if **ALL** the following criteria have been met:
 - Patient must be **18 years of age or older**
 - Adequate **CPR** has been administered
 - An advanced **Airway** has been placed such as endotracheal intubation, Blind Insertion Airway Device (BIAD), or cricothyrotomy
 - **IV or IO** access has been achieved
 - Rhythm appropriate **medications and defibrillation** have been administered according to **ACLS guidelines**
 - **Persistent VF, asystole or agonal rhythm** is present
 - A minimum of **25 minutes** of resuscitation
 - All EMS paramedic personnel involved in the patient's care agree that discontinuation of the resuscitation is appropriate
2. If all of the above criteria are not met and discontinuation of pre-hospital resuscitation is desired, *contact Medical Control*
3. Document all patient care and interaction with the patient's family, personal physician, medical examiner, law enforcement, and medical control in the patient care report (PCR)

POLICY # 2 - 13

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DO NOT RESUSCITATE FORM POLICY # 2 - 14

POLICY:

Any patient presenting to any component of the EMS system with a completed **Do Not Resuscitate (DNR)** form shall have the form honored. Treatment will be limited as documented on the DNR form

PURPOSE:

- ✓ To honor the terminal wishes of the patient
 - ✓ To prevent the initiation of unwanted resuscitation
1. When confronted with a patient or situation involving the DNR form, the following form content must be verified before honoring the form request.
 - The form must be an original DNR form
 - The effective date and expiration date must be completed and current
 - The DNR form must be signed by a physician
 2. A valid DNR form may be overridden by the request of:
 - The patient
 - The guardian of the patient
 - An on-scene physician

If the patient or anyone associated with the patient requests that a DNR form not be honored, EMS personnel should contact *Medical Control* to obtain assistance and direction
 3. A living will or other legal document that identifies the patient's desire to withhold CPR or other medical care may be honored with the approval of Medical Control. This should be done when possible in consultation with the patient's family and personal physician
Note: In any case not covered by this policy and/or there is not a signed DNR order then resuscitation procedures must be followed
 4. In all cases in which you do not resuscitate, the coroner's office must be notified. Either you or the police officer are responsible for this notification
 - You are responsible to stay with the body until the coroner or deputy coroner arrives
 - You may return to service if a police officer or coroner representative relieves you of your responsibility
 - ALL pre-hospital deaths MUST be reported to the coroner and follow the **Deceased Person Protocol**

POLICY # 2 - 14

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

ON-SCENE NONSYSTEM PHYSICIANS POLICY # 2- 15

PURPOSE:

To identify for System Personnel procedural steps to take in those prehospital emergency situations where physicians volunteer to help

POLICY:

Patient's local attending physician at the scene

- A. Work with the physician to provide any and all necessary emergency care to the patient. Establish contact with Medical Control and advise them of physician on-scene after informing the physician on-scene you are mandated by Illinois law to take orders only from Medical Control
- B. Ask the physician to accompany you to the hospital and assume responsibility for care of the patient. If there is a discrepancy or conflict in the care of the patient, you may request them to speak with Medical Control
- C. If agreement cannot be reached as to the care of the patient, the Trinity Medical Control has the ultimate responsibility for the patient. Begin transport and re-contact Medical Control

Physician/nurses on-scene and offer services

- A. The above procedure should prevail and if the physician is unknown to you and please ask them for their name and identification and verify with Medical Control any orders given provided the orders encompass skills and/or medications approved by both the EMS System Medical Director

Note: Remember you are licensed to receive orders from a state approved EMS system or a TMC EMSS ECRN. The ER Physicians of Trinity Medical Center are the only physicians directed by our EMS Medical Director to give orders to Paramedics in the field, and their orders will always take precedence, either by the ECRN or the on-line MD

POLICY # 2 - 15

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

CLOSEST HOSPITAL TRANSPORT DECISIONS POLICY # 2 - 16

Page 1 of 2

PURPOSE:

To identify for all levels of EMS Provider in the Trinity EMS System appropriate destinations for transportation of the sick and injured. State law requires transport to the nearest hospital unless there is documented criteria for a different decision. The nearest hospital should be that facility which would be defined closest by travel time. These decisions still allow the patient, or power of attorney/healthcare to choose the facility they prefer, unless the risk outweighs the benefit of this transfer

POLICY:

All sick or injured persons requesting transport who do not express a preference for a hospital will be transported without delay to the closest appropriate local hospital unless circumstances meet one of the following:

1. The patient is competent or a competent parent for a minor or POA agent and refuses transport to the nearest hospital then:
 - A. Contact medical control
 - B. Communicate the circumstances of patient condition, travel time and reasons the patient gives (i.e. the patient records/physicians are at the further facility)
 - C. Medical control will weigh the risks and benefits to the transfer and certify the decision
 - D. Then medical control physicians may determine the risks outweigh the benefits for a further transport
 - E. If the transport decision is confirmed this will be documented on the radio log sheet and the run record
 - F. If the transport is denied and the patient still insists on the further facility, they may be transported but against medical advice and must have a refusal signed
 - G. The patient must have all risks and benefits explained to them regarding the bypass to a further facility
 - H. Have the medical control ECRN contact the more distant hospital in advance to assure acceptance of the patient request for the more distant transfer. The ECRN will then document this information on the radio log sheet
 - I. Should the responding ambulance service be a municipal agency which cannot transport to the further hospital then they must stay with the patient and initiate all ALS/BLS appropriate treatment until another private transport service can assume care

POLICY # 2 - 16

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

CLOSEST HOSPITAL TRANSPORT DECISIONS POLICY # 2 - 16

Page 2 of 2

- J. Continued monitoring and treatment of the patient condition must occur while waiting for the transport service. Contact with medical control should continue as needed. Any changes of patient condition treatments must be documented on the radio log sheet by the ECRN and the run record by the EMT
- 2. The patient must be informed of the obvious risks of transportation of a greater distance. Document your discussion with the patient
 - A. Have a refusal form signed if patient refuses to go to the nearest most appropriate hospital (see **Systems Refusal Policy**)
- 3. It is mandatory for transport decisions other than the closest hospital that there is consultation with medical control and a well documented written report
- 4. If the patient is judged incompetent or unable to make an educated decision they must be transported to the nearest hospital. Document all findings such as actions, behavior, statement, and or physical assessment, which indicated the patient, is unable to make a competent decision
- 5. If the patient requires specialized services, which are available only at the more distant hospital, document the need for hospital destination. Patients whose condition is covered by a formal destination protocol (**ROSC/Post-Resuscitation, STEMI, Stroke, Trauma**, etc.) shall be transported in accordance with those specialty algorithms. All other patients should be transported per the policy
- 6. Mass causality situations: follow the multiple casualty incident/crisis plan.
- 7. Hospital resource limitations : refer to the bypass policy.
- 8. Trauma Transport: All trauma patients are to follow the **Trauma Field Criteria Destination Protocol**
The plan indicates:
 - A. Those patients with appropriate criteria should be transported to the nearest level I or II Trauma Center unless that transport time is greater than 30 minutes
 - B. If transport time is greater than 30 minutes, the closest hospital prevails. Notify Medical Control that you will need assistance in making the decision. Give indications of patient's condition and ETA to the nearest hospital. If prolonged transport, consider air medical transport

When in doubt, transport to Trauma Center

Note: For all refusals to the nearer hospital, use the Disposition/ Refusal form. If a patient also refuses to sign the refusal of service form, clearly document the patients refusal on the run record and refusal

POLICY # 2 - 16

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

BYPASS POLICY # 2 - 17

PURPOSE:

To provide an explanation and a written procedure in the event that the question of bypass arises. Bypass can be to another hospital other than which transport was originally intended or to a larger more comprehensive facility. To provide an explanation and procedure if an area hospital places itself on bypass for limited bed availability. The patient has the right to select a hospital of their choice (see **Closest Hospital/ Transport Decisions Policy**)

POLICY:

- A. To bypass nearest hospital in favor of another, please confirm with Medical Control, decision should be determined by Medical Control based on the risks and benefits to the patient for the condition reported at the time, as well as, the level of Emergency Room at the hospital which is bypassed
- B. When a hospital places itself on bypass due to limited bed availability or internal disaster the EMT must contact Medical Control to determine the best transport decision for the patient.
 - Give Medical Control all patient information and transport time to assist in making a transport decision
 - All Critical unstable patients must be taken to the nearest facility and disposition to a farther facility made after stabilization
 - Use Mutual Aid/Outreach to assist if necessary in more distant transfers
 - Do not sit on-scene with potentially unstable patients to wait for Mutual Aid
- C. Hospitals may go on bypass due to lack of monitored beds, but the Emergency Room may well be able to take the patient. Please clarify this with Medical Control if you suspect such a condition exists

POLICY # 2 - 17

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

SYSTEM TRANSFER-TREATMENT STANDBY POLICY # 2 - 18

PURPOSE:

To define for the Intermediate and Paramedic personnel the conditions and requirements of interfacility transfer of patients. To identify that an interfacility transfer is a patient who has been diagnosed and treated under a licensed hospital facility and physician and to be transferred to another licensed hospital facility and physician. The ILS and/or ALS agency who transports may do so if there is adequate coverage in their 911 response areas(can be mutual aid).

POLICY:

The Intermediate within the Trinity Medical Center System may perform interfacility transfers in an approved ILS vehicle with approved ILS crew following this criteria

1. Run sheet documentation with inclusion of patient exam, condition, history and medications(medication information and that of history can be obtained from the transferring facility)
2. May transfer patients with the following:
 - A. Heparin/Saline Lock
 - B. IV fluids to include and IV/IO Pumps and Infusions
3. Maintenance IV established
4. The patient's hospital record will accompany the patient

The Paramedic within the System may perform the interfacility transport an approved ALS vehicle with an approved ALS crew following:

1. Run Sheet Documentation with inclusion of patient exam, condition, history, and medications, patient, and hospital record
2. Documentation of Medications or IV drips which may be in use during transfer
3. Drips must be maintained at rate ordered by the attending physician

Notify Medical Control of the ensuing transfer and the general condition of the patient.

1. It is the responsibility of the transferring service to obtain any specific orders from the patient's personal physician before beginning transport. A complete report should be given to the transporting crew by the facility caring for the patient
2. Patient condition should be monitored frequently through transport. Document your findings and if any changes, call Medical Control immediately and refer to the proper protocol for treatment

POLICY # 2 - 18

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

INTERCEPT-ILS/ALS ON SCENE POLICY # 2 - 19

Page 1 of 2

PURPOSE

To identify for Trinity EMS System personnel activation and communication for ILS/ALS intercept

POLICY:

To outline procedures of TMC EMSS ILS/ALS Ambulance Intercept Policy and ALS/ILS on scene

- A. The first responding ambulance arriving **on scene** shall perform rapid patient assessment and determine the need for ILS/ALS intercept. Need for ILS/ALS intercept shall be determined by, but **not limited** to the following:
- Any patient care issue in which the EMT feels the need to call ILS/ALS
 - Cardiac and Respiratory Arrest
 - Chest pain (medical or trauma)
 - Shortness of breath
 - Unconscious patient
 - Seizure
 - Overdose/Ingestion
 - Shock
 - Childbirth
 - Multi-casualty incidents
 - Haz-Mat responses
 - Trauma with potential for significant injury
- B. Radio Reports are to be transmitted without delay so Medical Control also has the option to send ILS/ALS Intercept if they deem it necessary. **Any request for ILS/ALS intercept by Medical Control is to be considered a direct order**
- C. Medical Control is the only party to cancel any ILS/ALS intercept request
- D. Contact the intercepting ILS/ALS vehicle at once to predetermine an appropriate intercept point

POLICY # 2 - 19

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

INTERCEPT - ILS/ALS ON SCENE POLICY # 2 - 19

Page 2 of 2

Transport

- A. No more than **four (4)** ambulance personnel should be in patient care area of the ambulance at any time
- B. If there are two (2), each patient must have an appropriate level of provider with them (i.e. ALS/Paramedic, ILS/Intermediate, BLS/Basic)

ILS/ALS on Scene

- A. If the ILS/ALS System personnel are on scene of a BLS call, they may assist BLS personnel with assessment of patients to determine if a higher level of care is needed. If ILS/ALS is needed, follow intercept policy
- B. If ILS/ALS system personnel assumes responsibility, BLS must remain with the higher level of crew and assist in the care of the patient
- C. **Off-duty non-system personnel are not allowed to participate in the patient care**
- D. ILS/ALS system personnel are on scene and have no equipment and/or ambulance, they may still assist in the assessment of need of the higher level of care, but of course may not treat the patient beyond the BLS level. When the ILS/ALS intercept vehicle/personnel arrive, the ILS/ALS system personnel on scene may only participate in care if the intercepting agency has provisions for this, i.e. liability policies
- E. These assessments must not delay transport or care of the patient

ILS/ALS intercepts are meant to improve care and be beneficial for the treatment of the patient, but should not unnecessarily delay transport to definitive care at the destination hospital

Note: If you feel the ILS/ALS assessments/transfer of care would jeopardize the condition of the patient, it is mandatory that you call Medical Control and they will make the decisions

POLICY # 2 - 19

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

AIR TRANSPORT POLICY # 2 - 20

PURPOSE:

To identify for Trinity EMS System personnel guidelines which may assist in identification of patients who may benefit from aeromedical transport

POLICY:

A helicopter may be utilized when ALL of the following criteria are present:

1. Patient meets criteria for trauma center evaluation
2. The patient is entrapped and extrication is expected to last greater than 20 minutes
3. The ground transport time is greater than 15 minutes
4. The patient is not in traumatic cardiac arrest

A helicopter may be utilized when any of the following is present:

1. A situation approved by the EMS Medical Director/medical control physician OR
2. Mass Casualty Incident (MCI) OR
3. The patient meets burn center criteria OR
4. The patient meets STEMI criteria and ground transport is greater than 15 minutes OR
5. The patient meets Stroke thrombolytic criteria and ground transport time is greater than 30 minutes

POLICY:

1. The need for a helicopter should be determined by both the service controlling the scene and the service taking care of the patient. The on-scene First Responder may request the helicopter in order to expedite transport
2. The on-scene service will request the helicopter from dispatch
3. A safe landing zone will be established
4. If the helicopter does not arrive prior to the extrication of the patient, the patient should be placed in the ambulance and transport started to the nearest appropriate hospital
5. Under *no circumstances* should transport of a patient be delayed to use a helicopter

POLICY # 2 - 20

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

CONCEALED CARRY/ WEAPONS POLICY #2 - 21

PURPOSE:

To identify for System Personnel procedural steps to take in instances where a patient or family member lawfully carry a concealed weapon. The intent is to respect the citizens rights while ensuring the safety of EMS, healthcare providers, and the public

POLICY:

A **weapon** can be defined as a firearm, a device capable of producing death or great bodily harm, or an electronic weapon

A. EMS should always anticipate that a person may have a concealed weapon.

Always ask a patient if they have any weapons on their person

B. All ambulances and EMS agencies should designate themselves weapons-free facilities or "No-carry zones". It should be clearly posted

C. It is not the job of EMS to determine if a patient is in violation of the law

D. Optimally, weapons should be secured in the patient's residence and not Transported. If transported, they should be secured in a firearms safety box inside a lockable cabinet or compartment

E. Always contact law enforcement to assist. Never put yourself at risk

F. A **conscious pt willing to relinquish a weapon** away from home should turn the weapon over to law enforcement on-scene. If law enforcement is not available and the condition of the pt warrants immediate transport, the weapon should be place in a designated locked location and transported to the destination with report to medical control of a weapon. The weapon should be turned over to facility security or law enforcement on arrival. Document in the PCR the chain of custody in detail

G. A **conscious pt unwilling to relinquish a weapon** should have law enforcement called to intervene until "scene safety" is assured. A person carrying a concealed weapon in a "No-carry zone" is violating the law

H. Patients with **altered levels of consciousness** demand extreme caution when found with a concealed weapon. Law enforcement should be called to disarm the patient. If the condition of the patient demands immediate transport, EMS personnel may attempt to safely and cautiously remove the weapon if able. Secure the weapon in a designated locked location and transport with notification to medical control of a weapon. The weapon should be turned over to facility security or law enforcement on arrival. Document in the PCR the chain of custody in detail

I. **Absolutely no family members or friends are to be transported with an unsecured weapon**

ALWAYS ASSUME EVERY WEAPON IS LOADED. ALWAYS HANDLE WITH CAUTION. NEVER ATTEMPT TO UNLOAD A WEAPON

POLICY # 2 - 21

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2015

IN-FIELD UPGRADE POLICY # 2 - 22

PURPOSE

To identify for Trinity EMS System personnel the process for system In-Field Upgrade

POLICY:

A. An ambulance operated by a rural ambulance service provider or a specialized a emergency medical services vehicle or alternate response vehicle operated by a rural vehicle service provider may be upgraded, as defined by the EMS system Medical Director with prior approval of the proposal, **to the highest level of EMT licensure** (ALS/Paramedic, ILS, Advanced EMT, BLS) held by any person staffing the ambulance, specialized emergency services vehicle, or alternate response vehicle

B. All service vehicles must meet the following requirements:

1. Protocol to store all ALS equipment, medications, and supplies
2. Written CQI and QA program approved by the EMS System
3. Advertisement and promotion of the service only at the level that can be provided in continuity
4. Annual inspections by the department and EMS system
5. A written statement and internal policy submitted detailing the security, environmental controls, and access by personnel to the advanced medical equipment
6. A written plan submitted outlining the time frame for obtaining equipment and training of personnel, including trauma education (by 2018)

C. All system personnel that hold a license and work for a BLS service may run at the appropriate license level upon completion of skills verification and passing the system advanced level protocol test

D. All advanced level providers will need to have at a minimum

- **AHA CPR card**
- **AHA ACLS card**
- **AHA PALS card**
- **Appropriate State Licensure**

POLICY # 2 - 22

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2016

TREATMENT OF SUSPECTED OPIATE OVERDOSE # 2 - 23

PURPOSE

Provide protocols and policy for first responders, EMS providers, and non-medical personnel to treat suspected opiate overdose with the use of **Naloxone(Narcan)**

POLICY:

- A.** Opiate overdoses are a significant and rising cause of death and disability. Rapid administration of the antidote, Naloxone, may reverse the side effects within 2 minutes the deadly side effects that cause victims to **stop breathing** and become **comatose**. Opiates or narcotics come in many forms and names. There are prescription pills such as Hydrocodone(Vicodin/Norco), Oxycodone(Percocet), and Codeine. Fentanyl has a commonly used patch for chronic pain. Illicit drugs such as heroin are often used IV. The rapid administration of Naloxone is intended to save their lives, and may be given in either in the nose or injected in a muscle, likely the thigh. Intranasal use may be preferred due to the ease of administration, avoidance of potential needle stick injuries, and cost. Intramuscular(IM) may be facilitated by the use of an auto-injector.
- B.** Personnel responding to a victim should administer Naloxone if there is a suspicion of opiate overdose by either a history or exam. The hallmarks of opiate overdose are:

Respiratory Depression Coma/Decreased Consciousness Pinpoint Pupils

Providers responding to an unconscious person, not breathing, with or without a pulse may give Naloxone and begin CPR.

C. For Intranasal use by FR, EMR, EMT, AEMT, and Paramedic levels:

1. For the prefilled syringe Naloxone 2mg/2mL, remove the yellow caps from the syringe.
2. Next remove the red cap from the medication vial.
3. Now attach the nasal atomizer(often a **MAD®** device) to the syringe tip.
4. Screw the syringe into the medication vial.
5. Now place the device into the nose, occluded the other nostril, and briskly push 1mL or half of the medication, and repeat on the other side.

D. For Intramuscular use by EMT, AEMT, and Paramedic levels:

1. Remove the auto-injector(e.g. Evzio®) from the package and remove the red safety cap.
2. Place the black end on the patient's middle lateral thigh, with or without clothing.
3. Press firmly for 5 seconds until a click and hiss are heard.
4. Dispose of the device in and appropriate sharps container.

E. Patients with no response may receive a second dose after 3 minutes, by either route, if opiate overdose is still suspected or there is only a mild response.

F. All patients who are given Naloxone must be transported by EMS, and if necessary, Police Custody. NO REFUSALS ARE ALLOWED. Naloxone has a short duration and some opiates last much longer. The victim may lapse back into a coma if allowed to refuse treatment and must be transported for medical care.

POLICY # 2 - 23

EMS System Policies:

Section # 03: Personnel / System Requirements

<i>System Entrance Requirements</i>	03-01
<i>License, Reciprocity and Renewal</i>	03-02
<i>Inactive, Reduction in Level</i>	03-03
<i>Scope of Practice</i>	03-04
<i>Emergency Dispatcher</i>	03-05
<i>First Responder</i>	03-06
<i>ECRN Requirements, reciprocity</i>	03-07
<i>Prehospital RN, TNS</i>	03-08
<i>Field Preceptor</i>	03-09
<i>EMS Lead Instructor</i>	03-10

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

SYSTEM ENTRANCE REQUIREMENTS FOR TRINITY EMS POLICY # 3 - 01

Page 1 of 3

PURPOSE:

To identify for prehospital personnel (FR, EMT-B, EMT-I, EMT-P, PHRN) the requirements to be completed before they may function independently of a preceptor in the Trinity EMS System

POLICY:

System Entrance Process (FR-D, BLS, ILS, ALS, PHRN)

Application and entrance packet:

Complete Application to the system and return with the applicable attachments:

- Copy of current Illinois license
- Copy of current Iowa license if applicable
- Copy of National Registry Certification if applicable (not required in Illinois)
- Copy of letter of good standing from previous system
- Letter of course completion from educational program
- Copy of current CPR card (Health Care Provider)
- Copy of valid drivers license
- Copy of any certifications (ACLS, BTLIS, PHTLS, PALS, NRP, TNS)

Application and entrance packet must be returned completed to the EMS System Office at : 2701 17th Street, Rock Island, IL 61201

FR-D:

- A. Attend System Protocol and Policy review at Agency
- B. Review and return demonstration of Skills Competency
- C. Return letter of competency completion to the system(Included in entrance packet). Once the system requirements are completed, the system will issue a letter of independence to the agency

EMT-B:

- A. Attend System Protocol and Policy review at agency
- B. Review and return demonstration of Skills Competency
- C. Return the letter of competency completion to the system(Included in the entrance packet)
- D. A period of preceptorship with agency will be completed per agency's guidelines or bylaws. The Training Officer or an approved Trinity Preceptor will fill out a Field Evaluation tool, provided in packet, showing field competency
- E. Complete and pass a system BLS protocol and policy exam(at Trinity EMS System office)
- F. Once the system requirements are complete, the system will issue a letter of independence to the agency

POLICY # 3 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

SYSTEM ENTRANCE REQUIREMENTS FOR TRINITY EMS POLICY # 3 - 01

Page 2 of 3

EMT-I:

- A. Attend System Protocol and Policy review at agency
- B. Review and return demonstration of Skills Competency
- C. Complete and pass a system protocol and policy exam(at Trinity EMS office)
- D. A period of preceptorship with agency will be completed per agency's guidelines or bylaws. The training officer or an approved Trinity Preceptor will complete a Field Evaluation Tool, provided in packet, showing field competency
- E. Return the letter of competency completion to the system (included in the entrance packet)
- F. Once the system requirements are complete the system will issue a letter of independence to the agency

EMT-P/PHRN:

- A. Attend System Protocol and Policy review at agency
- B. Review and return demonstration of Skills Competency
- C. Complete and pass a system ALS Protocol and Policy exam(at Trinity EMS Office)
- D. A period of preceptorship with agency will be completed per agency's guidelines or bylaws. The Training Officer or an approved Trinity Preceptor will fill out a Field Evaluation Tool, provided in packet, showing field competency
- E. Return the letter of competency completion to the system(Included in the entrance packet)
- F. Once the system requirements and files are completed, the system will send a letter of independence to the EMS agency

2. If after completion of all entrance requirements the agency does not feel the applicant can work independently of a preceptor, the agency must notify the system in writing noting deficiencies. Once this is reviewed the system will arrange education (if applicable). Education may consist of:

- Auditing classes
- Video review
- Testing
- Skills validation
- Clinical rotation
- Surgical rotation for intubation
- Field precepting at a system recommended agency

POLICY # 3 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

SYSTEM ENTRANCE REQUIREMENTS FOR TRINITY EMS POLICY # 3 - 01

Page 3 of 3

3. If the Applicant cannot complete all requirements for their respective level they will not be recommended to enter the system

4. The Applicant can retake all skills validations and system exams up to 3 times. If not successful in 3 retakes the EMS Medical Director will decide what further process the applicant must take or deny entrance to the System

5. The EMS System reserves the right to selectively do random testing on any personnel to assess knowledge and practical skills ability

Transfer from out of state:

- A. EMT's transferring from out of state who wish to function in Illinois as an EMT (of any level) may apply to the Illinois Department of Public Health EMS and Highway Safety Division for Licensure reciprocity
- B. Once the license is awarded, the EMT may apply to the Trinity EMS System for entrance to the system

POLICY # 3 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

LICENSE, RECIPROCITY AND RENEWALS POLICY # 3 - 02

Page 1 of 2

PURPOSE:

To clarify for the EMS System personnel licensure, reciprocity, and renewal criteria

POLICY:

1. Original Licensure:

FR-D

- See First Responder Policy

EMT-B

- Must pass the Illinois EMT-B exam or the National Registry EMT-B exam
- Function in a state approved BLS system verified by that System's EMS Medical Director
- Original request for licensure comes from the Education Program/System in which the EMT is educated so that the license can be generated after the state exam is passed. Transaction cards for licensure are submitted to IDPH by the education program provided by the System Resource Hospital at the time exam is scheduled

EMT-I

- Must pass the Illinois EMT-I exam
- Function in a state approved ILS system verified by the EMS Medical Director
- Original request for licensure comes from the Education Program/System in which the EMT is educated so that the license can be generated after the state exam is passed. Transaction cards for licensure are submitted to IDPH by the education program provided by the System Resource Hospital at the time exam is scheduled

EMT-P

- Must pass the Illinois EMT-P exam or the National Registry EMT-P exam
- Function in a state approved ALS system verified by the EMS Medical Director
- Original request for licensure comes from the Education Program/System in which the EMT is educated so that the license can be generated after the state exam is passed. Transaction cards for licensure are submitted to IDPH by the education program provided by the System Resource Hospital at the time exam is scheduled

POLICY # 3 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

LICENSE, RECIPROCITY AND RENEWALS POLICY # 3 - 02

Page 2 of 2

Note: Illinois State Licenses will be in effect for four years. The term "functioning in Trinity EMS System" may be in a vehicle, free standing clinic, ER and/or other health facility, industrial medical department, or education through the system.

2. Licensure Renewals:

All levels, EMT-B, EMT-I, EMT-P, Pre-hospital RN, ECRN, and TNS are required by the EMS Act 515.540, 730, 740, 750 to notify the Department of Public Health within 30 days of any address or name change. Notification may be by person, mail, email, phone or fax

After application through IDPH for renewal, a copy of CE must be sent to the Trinity EMS System office from the training officer of the agency **prior** to expiration of the current license

3. Reciprocity:

For those individuals who wish to function in Illinois and hold licensure in another state. Provide the following to the EMS System office and we will send this to the state with a letter of recommendation

- A. Copy of the current state license
- B. Copy of the Training Program which states that it meets or exceeds the National Standard Curriculum
- C. Letter of Recommendation from the EMS Medical Director of the System in which you will function
- D. CE hours pro-rated to the length of the current license
- E. Current CPR card

A license will be issued by IDPH if all information is available, but only for the time left on your current state license and will not exceed 4 years

Following licensure by reciprocity the individual will comply with Illinois regulations for license renewal

POLICY # 3 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

INACTIVE/REDUCTION IN LEVEL POLICY # 3 - 03

Page 1 of 2

PURPOSE:

To delineate for the prehospital personnel of the Trinity EMS System what constitutes inactive status and the requirements

POLICY:

I. INACTIVE STATUS

- A.** The EMT-B, EMT-I, EMT-P may apply in writing to the EMS Medical Director to be put on inactive status. The application made must be prior to expiration of the current license and contain:
 - Name, date of licensure, level, EMT-ID number
 - Circumstances which require inactive status
 - Length of time of inactive status needed
 - Documentation that relicensure requirements have been met to the date of application for inactive status
- B.** The EMS Medical Director, EMS System office will then review the information and if all requirements are met will submit to IDPH a request for inactive status form. The licensee will surrender his/her license with application
- C.** The EMS applicant will be notified by the EMS System office of acceptance or denial of the application following return notification of Illinois Department of Public Health. If the inactive status is granted, the EMT's license shall be forwarded to IDPH
- D.** For the EMT to return to active status, the EMS Medical Director will make an application to IDPH. Included in that application is documentation that the EMT has been examined and is capable to return to active status. Testing will include but may be not limited to :
 - System entrance requirements in full
 - Continuing education, current
 - Refresher as necessary
- E.** While the EMT is on inactive status he is not allowed to work in any prehospital capacity or level in any system
- F.** The inactive EMT is not under the policies of the system other than the inactive policies while on approved inactive status
 - The request to reduce must be made in writing to IDPH and the EMT-I/P license must be surrendered to IDPH

POLICY # 3 - 03

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

INACTIVE/REDUCTION IN LEVEL POLICY # 3 - 03

Page 2 of 2

- If, after a period of time as an active EMT-B, the I/P wished to be relicensed as an I/P, he/she may apply in writing to the EMS Medical Director and the EMS Medical Director will verify knowledge and skills of the appropriate level and resubmit to IDPH for the requested I or P license. Licensure will only be at the level the EMT has been previously educated and licensed

II. Voluntary Reduction in Level:

A. EMT-Reduction to First Responder:

- Any level of EMT may reduce to the level of First Responder prior to the expiration of their current license. They may revert to First Responder status for the remainder of the license period. The EMT must make this request in writing to the Department of Public Health. To re-register, the individual must follow First Responder registration requirements. The EMT who reduces to FR level cannot revert from FR to an EMT level

B. EMT-Intermediate or Paramedic to EMT Basic or Intermediate:

- An EMT-I/P may at any time, prior to current expiration date, revert to an EMT-B status and is then required to meet EMT-B relicensure criteria
- The request to reduce must be made in writing to IDPH and the EMT-P/I license must be surrendered to IDPH
- If, after a period of time as an active EMT-B, the I/P wishes to be relicensed as an I/P, he/she may apply in writing to the EMS Medical Director and the EMS Medical Director will verify knowledge and skills of the appropriate level and resubmit to IDPH for the requested I or P license. Licensure will only be at the level the EMT has been previously educated and licensed

POLICY # 3 - 03

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

SCOPE OF PRACTICE POLICY # 3 - 04

PURPOSE:

The purpose of this policy is to define for Trinity EMS System personnel the circumstances under which Emergency and Non-Emergency Medical Services can be performed in accordance with their level of licensure and their EMS System

POLICY:

- A. Each EMT(all levels) is required to be associated with an approved EMS System. In this case the EMT can work in the following areas but will work in conjunction with the equipment, protocols and policies of the system which has medical oversight for that area of practice. If you are in the Trinity EMS System you must have a direct reporting relationship with Trinity EMS System or we accept no responsibility for your licensure(i.e., The public event, function must be approved through special events form by IDPH and the system). Other areas of work include:
- Prehospital emergency setting, i.e. ambulance, First Responder service
 - Non-emergency transport, i.e. ambulance, wheelchair van
 - Locations which are not Health Care Facilities but which utilize EMT's to render prehospital emergency care, i.e. industry, athletic events, public functions, public places
 - Industry prehospital (first response) requires the industry to enter the appropriate EMS System, and you must follow the dictates of that system
- B. Any EMT may practice in an ER or other health care setting as follows:
- For Continuing Education
 - As personnel hired by the Health Care Agency*
 - Industrial Health Care*
 - Clinics*
- *Requires appropriate job description and orientation by the hiring agency. Individuals may at any time seek other credentials to enhance their ability to work in the healthcare setting under the jurisdiction of that employer, but they may not specifically utilize their EMS license as they enter criteria to work in these healthcare settings*
- C. Student EMT's must follow the student policies of the system and work directly under an approved preceptor for the system
- D. Anyone can work in 2 different systems but must follow the protocols, policies, and procedures of the system which has medical oversight
- E. The EMT should list which system is his/her primary system

POLICY # 3 - 04

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

EMERGENCY DISPATCHER POLICY # 3 - 05

PURPOSE:

An Emergency Medical dispatch program is based on curriculum established by the U.S. Department of Transportation-National Highway Traffic and Safety Administration, The Illinois State Police and the Illinois Department of Public Health

POLICY:

- A.** This course is designed to educate Emergency telecommunicators who receive calls for Emergency Medical Assistance from the public to provide pre-arrival instructions to callers in order to aid persons needing assistance prior to the ambulance arrival
- B.** Any Emergency Medical Dispatch Center and Emergency Medical Dispatcher may enter the Trinity EMS System by application with documentation of an approved dispatch course
- C.** State Registration
 - Submission to IDPH a request for application with name, address system affiliation and employer
 - Documentation of an approved medical dispatcher course meeting or exceeding the National DOT dispatcher curriculum
 - Documentation of continuing education meeting IDPH standards
- D.** Medical prearrival instructions will be provided in accordance with the protocols established by the EMS System
- E.** A state of Illinois lead instructor may teach an Emergency Medical Dispatch program following the appropriate IDPH approval process and approved by the system

POLICY # 3 - 05

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS
Medical Director 2014

FIRST RESPONDER POLICY # 3 - 06

PURPOSE:

"First Responder" means a person who has successfully completed a course of instruction in Emergency First Responder Defibrillator which meets or exceeds the National DOT curriculum in the First Response. A First Responder or FRD agency should enter the EMS System to provide approved care

POLICY:

- A. A person must register as a First Responder Defibrillator with the Department of Public Health to:
 - Enter the EMS System- see system entrance requirements
 - The System will register the First Responder Defibrillator with name, address and service agency on a form provided by the Illinois Department of Public Health
 - Provide the System with documentation of successful completion of a First Responder course, which meets or exceeds the National Standard curriculum
 - Verification that required equipment is available
- B. FR-D agency should submit an appropriate system application (available in the EMS System Office) and be trained in the Protocols and Policies of the System

POLICY # 3 - 06

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

ECRN REQUIREMENTS/ RECIPROCITY POLICY # 3 - 07

Page 1 of 2

PURPOSE:

To delineate for all Emergency Department, Trauma Center nursing personnel the requirements and reciprocity for Emergency Communication Registered Nurse Certification in the Trinity Emergency Medical Services System. To define the ECRN rules and regulations of the EMS Act of Illinois. Section 515.740 mandates that an ECRN must notify within 30 days of name or address change

POLICY:

- A.** An ECRN must be a licensed registered nurse under the Illinois Nursing Act of 1987 and complete a course of instruction required by the EMS Act of Illinois under the design and direction of Trinity EMS Medical Director
- B.** Those persons with the following current certifications may possibly be exempt from the Trauma and Cardiac portions of the ECRN course
 - A course in Trauma either TNS or TNCC
 - Advanced Cardiac Life Support Provider or Instructor
- C.** Everyone, regardless of their current certifications, must attend the Protocol/Policy Section and Communication Sections and take the final exam
- D.** The ECRN course shall consist of didactic, practical, and clinical components including:
 - Medico-legal roles and responsibilities
 - Communications, telemetry, and nurse at the console
 - Cardiac and Rhythm review
 - Trauma Assessment/Treatment review/Pediatric Trauma
 - Protocol/Policy
 - Final exam
- E.** Complete 8 hours of field experience and 4 hours of EM dispatch authorized by the EMS MD

Licensure

- A.** The ECRN will complete an application for licensure and the EMS MD will license them for a four (4) year period after documentation of successful course completion
- B.** Renewals will be through the EMS MC/System with documented 32 hours of continuing education in a four (4) year period

POLICY # 3 - 07

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

ECRN REQUIREMENT/ RECIPROCITY POLICY # 3 - 07

Page 2 of 2

Reciprocity

Those nurses trained in another Illinois Resource System will be granted reciprocity on the basis of four (4) year license period and with the following:

- Copy of current licensure
- Trinity System entrance exam completion
- Attendance of TMC SMO/Policy lecture, communication lecture
- Trinity System ECRN final exam completion

Inactive Status

- A. Prior to expiration of current certification the ECRN may request to be placed on inactive status
- B. Make the request to the EMS Medical Director in writing and include:
 - Name and date
 - Date of approval
 - Circumstances of inactive status
 - Statement of meeting current CE requirements
- C. The EMS MD will allow return to active status:
 - By examination of mental/physical capability to return
 - Knowledge and skills of the system
 - Acknowledging the disability has ceased if applicable
- D. During inactive status the individual must not function as an ECRN at any level

State Notification

Will be done by the EMS MD for approvals, re-approvals, or inactive status within 10 days of the status change

POLICY # 3 - 07

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

PREHOSPITAL RN/TNS POLICY # 3 - 08

Page 1 of 2

PURPOSE:

To define the requirements for completion of Prehospital nurse program and continuing education requirements for rectification as set forth in the Trinity Medical Center Emergency Medical Services System and by the Illinois Department of Public Health through rules of the EMS Act. To delineate reciprocity into Trinity Medical Center EMS System of a prehospital RN from another system. The PHRN is required by EMS Act Section 515.730 to notify the IDPH within 30 days of any address or name change

POLICY:

- A. Must be a Registered Nurse licensed in Illinois under the "Illinois Nursing Act" of 1987 and an ECRN in the TMC EMS System
- B. Will have a system developed prehospital RN course which contains telecommunications, prehospital cardiac and trauma, pediatrics and other specific courses delineated by the EMS MD (See prehospital RN course syllabus)
- C. Must be currently ACLS/PALS certified as a provider, ACLS/PALS instructor preferred, but not mandatory
- D. Complete a field internship of 10 ALS runs requiring monitor, drugs, IV's, and if possible, at least one with field intubation (May be Trauma/Medical mix) (Candidate may return to OR for intubation if necessary)
- F. When all classroom educational requirements are completed successfully, the student must pass a system prehospital registered nurse exam
- G. The prehospital nurse candidate must also complete a final practical exam covering:
 - Intubation, in-line, orotracheal, nasal
 - Intraosseous access
 - Chest Decompression
 - Jugular vein access, transtracheal jet insufflation, cricothyrotomy
 - Traction splint and other immobilization techniques

POLICY # 3 - 08

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

PREHOSPITAL RN/TNS POLICY # 3 - 08

Page 2 of 2

- I.** Once these requirements are completed, the prehospital RN will submit an application and the EMS Medical Director of Trinity Medical Center EMS program will sign and issue Illinois Department of Public Health prehospital RN card and send notification of certification to the State Office of EMS and Highway Safety Illinois Department of Public Health
- J.** The prehospital RN will be certified for a period of four (4) years
- K.** Continuing education requirements for the field RN renewal are:
 - Meet minimum guidelines for CE for renewal
 - CE hours can be obtained as listed in system CE policy
 - Maintain CPR, ACLS, PALS and Trauma Certifications
- L.** It is the responsibility of the prehospital RN to obtain the continuing education requirements and once obtained, and is in the prehospital RN personnel EMS file, the RN will be renewed
- M.** Reciprocity will be given to PHRN trained in another system on the basis of:
 - Presentation of the course outline and practicum from the preceding system which is an approved in Illinois
 - Completion of the Trinity ECRN course, or those portions indicated by the System EMS MD, and validation of skills of Trinity Medical Center EMS system not performed in previous system with written and practical exam
- N.** Re-licensure policy for PHRN shall follow the same requirements as EMT-P policy

POLICY # 3 - 08

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

CLINICAL FIELD PRECEPTOR POLICY # 3 - 09

PURPOSE:

To delineate the qualifications of a Trinity EMS System Field Preceptor

POLICY:

Preceptor Qualifications

- A. The preceptor may be a Registered Nurse in the State of Illinois with current licensure and a current Prehospital RN license. ACLS and BCLS provider certifications are preferred but not mandatory. The nurse preceptor must review all policies and educational programs of the system, with the EMS department educators
- B. The preceptor may be a Physician currently licensed in Illinois and familiar with the Protocols and other operating policies of Trinity EMS System
- C. The preceptor may be the EMS Medical Director or Alternate EMS Medical Director of Trinity Emergency Medical Services System
- D. The preceptor may be an Emergency Medical Technician-Paramedic currently licensed in Illinois for a period not less than one year. This paramedic must be actively working on an ALS vehicle.
 - The paramedic should apply to the EMS Medical Director to be a preceptor and notify his agency of that desire
 - The paramedic shall be approved by the EMS Medical Director and working in the Trinity EMS System
 - The paramedic shall review, through an education program provided by the Trinity Emergency Medical Services Department, all educational policies and precepting policies, forms for students, as well as observe at least one run review, meet with EMS System office educators to identify current, correct procedures
- E. Once all above requirements are completed the paramedic may then function as a system preceptor

POLICY # 3 - 09

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

EMS LEAD INSTRUCTORS POLICY # 3 - 10

Page 1 of 2

PURPOSE:

To define for EMS Lead Instructors, within the Trinity EMS system, a method of obtaining a Lead Instructor Licensure/Renewal

POLICY:

LICENSURE:

The candidate who wishes to take a lead instructor course will submit to IDPH, through the appropriate training institution, the following

- a. Completed application
- b. Recommendation letter from the EMS System Medical Director
- c. A Lead Instructor application (IDPH) which includes, but is not limited to, name, address, and resume
- d. A copy of a current EMT-B/I/P, RN/MD license
- e. A minimum of four (4) years experience in prehospital Emergency Care
- f. Documentation of at least two (2) years of teaching experience with documentation of classroom experience (i.e., BTLS, PHTLS, CPR, PALS)
- g. Documented successful completion of the Illinois EMS Instructor Education Course
- h. License will then be sent and valid for four (4) years

EDUCATION:

TMC EMS Medical Director approves the candidate to take an IDPH approved course anywhere in the State

RENEWAL:

License renewal shall be as listed for a four (4) year period

- Approval letter from EMS Medical Director that the instructor has successfully coordinated programs for the EMS System
- Meet minimum CE guidelines for license renewal

POLICY # 3 - 10

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

EMS LEAD INSTRUCTORS POLICY # 3 - 10

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TMS EMS System approves the following as continuing education:

- Seminars on education, continuing education, and teaching techniques
- Continuing education within the system
- Coordination of a full education course
- Coordination of certification courses (i.e., PALS,BTLS,ACLS,BCLS)
- Preceptor education courses within Trinity Education
- Trinity Education Department courses which are pertinent to the curricula of EMT-B,I,P,PHRN, and ECRN
- Degree work in an accredited college/university pertinent to healthcare/ education
- Appropriate nursing education

Non-Renewal

May be determined by IDPH following a hearing based on:

- Not conducting a course in accordance with curriculum prescribed in the Act
- Not complying with protocols in Section 3.65 (b)(7) of the Act

EMS MD may ask the lead instructor to stop functioning within TMC EMSS for the above or for non-compliance with policies and protocols of TMC EMS educational program

POLICY # 3 - 10

EMS System Policies:

Section # 04: Exposure / Documentation

<i>Documentation and Reporting of Problems</i>	04-01
<i>Documentation Chart Form Policy</i>	04-02
<i>Documentation of Vital Signs</i>	04-03
<i>Medical Devices</i>	04-04

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DOCUMENTATION AND REPORTING OF PROBLEMS POLICY # 4 - 01

PURPOSE:

To define a mechanism for reporting of problems not identified elsewhere in the System Manual

POLICY:

- A.** Reporting and documentation of problems may include:
- Communication issues
 - Non-territory transfer
 - Family conflict
 - Non-system MD/Nurse
 - Order conflicts (medications, treatments not accepted in System)
 - Out-of-system treatment requests
 - Equipment failure(see **Medical Devices Policy**)
 - Personnel injury
 - Exposure(follow the Infection Control Policy of your agency)
 - Refusal to sign refusals or for pertinent areas of treatment
- B.** Make a separate, full written explanation of the incident and attach a copy of run report and send to EMS System office within 24 hours of the event. Utilize the **EMS Incident Report** form located in **Appendix D**. Include immediate steps of remediation in your written explanation
- C.** Report ALL communication problems immediately so it can be resolved as soon as possible
- D.** If supplies are not functioning properly or equipment fails, pull it from the service, contact your agency EMS Coordinator and agency manager. Exchanges or replacement need to be made and explanations given to the oncoming crew

POLICY # 4 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DOCUMENTATION/ CHART FORM POLICY # 4 - 02

Page 1 of 9

PURPOSE:

The purpose of this policy is to aid in the collection of data, which serves as legal documentation of prehospital assessment and care. This policy also includes forms approved by the Trinity EMS System and under what circumstances the forms are to be utilized

POLICY:

- A.** A Trinity EMS Run Sheet/Ambulance Report must be completed on all EMS runs regardless of the nature or outcome of the call. The run sheet is a legal medical record and is discoverable through subpoena. Ambulance reports will also be completed on refusal
- B.** EMS personnel are responsible for making certain that all information noted is factual to the best of their ability and that all data has been correctly entered on the form, whether electronic or paper, so it represents a thorough and accurate record of the run before copies are distributed

FORM COMPLETION GUIDELINES:

General Information:

1. **Date of Run-**Month, day and year of the run. Be accurate when a run extends from one day to the next. Note date on which run began
2. **Vehicle Number/License Plate Number-** Numbers of all vehicles responding to this call, i.e. 1J22 or T4 and all plate numbers. This is a state requirement to assure that all ambulances providing care are approved and registered by IDPH. Medicare will not pay for services of an unapproved provider
3. **Agency Name-** i.e. RIFD
4. **Incident Number-** Provider issued number
5. **Supplemental Report-** Document the completion of additional forms/ supplemental reports, i.e., child abuse, petition form, etc. This assists in identifying all written documents for one call
6. **Treatment Prior to Arrival or by Others-** Treatment rendered before the arrival of EMS personnel. It is useful in cardiac arrest situations to document patient down time. It is important to document care provided by persons other than EMS personnel
7. **Ambulance Requested By-** Originator of the call, i.e., police, citizen, co-worker, family member, friend, unknown, etc.

POLICY # 4 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DOCUMENTATION/CHART FORM POLICY # 4 - 02

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Time Information:

Use 24-hour clock times as given by department or dispatcher

1. **Dispatch**-Time dispatchers alert EMS personnel of the call
2. **Enroute**-Time the ambulance/squad leaves quarters or begins to respond, if already in motion
3. **Location**-Time of arrival at the scene
4. **Patient Contact**-Time of actual ability to touch or assess
5. **To Hospital**-Time departed scene. May also be interpreted as time departed to destination if an interfacility transport
6. **At Hospital**-Time arrived at receiving facility
7. **In Service**-Time available to handle another call
8. **Quarters**-Time back at the station/garage
9. **Total Time**-Total time elapsed from dispatch to in-service

Road Conditions:

Note road and traffic conditions which may have affected your response to the scene.

1. **Light**- No impedance by traffic
2. **Moderate**- Some traffic but caused minimal delay
3. **Heavy**- Roads filled with vehicles-caused response delay
4. **Dry**
5. **Wet**
6. **Icy**

Call Location:

Address of call, not the name of the company or institution

Nature of Call:

When categorizing a call, take into account the patient's CHIEF COMPLAINT and your ultimate impression/diagnosis

1. **Cardiac**- An problem traceable to a cardiac condition/disturbance; i.e., chest pain, pulmonary edema, CHF, Cardiac Arrest, Dysrhythmia, Cardiogenic Shock
2. **Medical**- Infections, allergic reactions, hypertension, isolated pain, acute and chronic pulmonary diseases; diabetes, stroke, seizures, GI/GU problems, heat/cold emergencies, poisoning, and gynecologic problems, etc.
3. **Vehicle Accident**- Automobile/bus, motorcycle/bicycle crashes or pedestrians who are struck by a moving vehicle
4. **Trauma**- All other trauma. Note the specific mechanism of the injury
5. **Burn**- Thermal, chemical, electrical, and/or radiation exposure

POLICY # 4 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



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DOCUMENTATION/ CHART FORM POLICY # 4 - 02

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6. **Psychiatric**- Mental illness or behavior disorders, suicidal ideations
7. **Chemical Abuse**- Drug and/or alcohol abuse and/or overdose
8. **OB**- Pre-partum complications, labor, delivery and/or post-partum complications up to one month after delivery
9. **Inter-Hospital**- Transport from one medical facility to another
Intra-Hospital- Between campuses
10. **Code Blue**- cardiopulmonary arrest victims

Hospital Contacted:

Hospital contacted for medical orders

Communications:

Document the type and quality of communication with the hospital

1. **UHF**-voice- Quality of transmission over telemetry radio
2. **EKG**- transmission of 12 lead EKG's
3. **MERCI**- Quality of VHF transmission
4. **Phone**- Landline phone
5. **Cellular phone**- Cellular phone contact
6. **Good**- Able to clearly hear majority of transmission with little static or interference
7. **Poor**- Transmission broken- unable to hear much of communication but could finish run
8. **Unable**- Either the hospital did not answer after reasonable attempts to contact them or the quality of communication was so poor that another method of communicating became necessary. Insert comments if poor or unable is marked

Outcome of Run:

Check all the boxes that apply to this patient

1. **ALS**- Patients requiring ALS services per System guidelines
2. **ILS**- Patients requiring ILS services per System guidelines
3. **BLS**- Patients requiring BLS services per System guidelines
4. **Assess/Treat**- Patient was assessed and given ALS or BLS treatment
5. **Transport**- Patient was transported
6. **No Contact**- No patient contact was made. No person found at the address to which you responded

POLICY # 4 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DOCUMENTATION/CHART FORM POLICY # 4 - 02

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7. **No Assessment-** Arrived at a scene where a mechanism of injury did occur or a situation exists that could potentially result in illness (noxious gas leak). Person present but refuses all EMS services. Person denies illness or injury and none are apparent to responders. No patient assessment is completed. No care is rendered. Example: MVA where you are called by police and none of the passengers wish medical attention. If one person involved: complete the run sheet with any information available to you about the scene and/or person. Must include mental status exam to document **decisional capacity**. Obtain refusal in accordance with the **System Refusals Policy**
8. **Refused Care-** Patient is assessed but refuses any treatment. Requires full disclosure of risk and a release signed in accordance with **System Refusals Policy**
9. **Refused Transport-** Patient may have been assessed and treated but refuses to be transported. Requires full disclosure of risk and a release signed in accordance with **System Refusals Policy**
10. **Release Signed-** Indicated that the Release of Liability Form has been signed and witnessed after the patient has been given full disclosure of risks and has been advised to seek further medical care in accordance with System Refusal
11. **Police on Scene-** Note an officer's department, name, if present on scene
12. **Patient Taken To-** Patient destination. Write hospital name. If a patient with decisional capacity requests a more distant hospital, a system refusal form may be completed to bypass a closer appropriate treating hospital

Patient Demographics:

Completely document on all patients. The only exception should be no patient contacts and no patient assessments.

1. **Name-** If the identity of the patient is unknown, indicate John or Jane Doe. Note personal information that assists in identifying the patient
2. **Home Address-** If known
3. **Phone-** If known
4. **Date of Birth-** Estimate age if not known
5. **Sex-** Gender, male or female
6. **Weight-** Enter weights on all pediatric patients and those receiving meds with weight dependent doses, i.e., lidocaine, dopamine
7. **Medications patient now taking-** List all known medications. If unknown or none, place an "X" in the appropriate box. May document, patient's list attached if numerous
8. **Allergies-** List known allergies. Check box if patient denies any allergies. If patient is uncertain, check unknown

POLICY # 4 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
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DOCUMENTATION/ CHART FORM POLICY # 4 - 02

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History:

1. **Chief complaint, presenting problem, history of present, illness, cause of injury-** Record the patient's chief complaint in his/her own words. If the patient is a minor, enter the parent or guardian's statement. Note when and how this current condition occurred; what prompted this call; and why or how is it different from the past. Include precipitating factors, quality, recurrent, severity, onset and duration of the complaint. The section should be sufficient to refresh the clinical situation after it has faded from memory
2. **Past Medical History-** Check applicable boxes provided. Note any other pertinent illness/surgeries in the space provided. Check box if valid DNR/ Advance Directive present on scene

Assessment:

1. The times noted for the first assessment will be interpreted as being the time of patient contact
2. **Pupils-** Document on all calls involving an altered mental status, head injury, stroke, seizure, or symptoms indicating possible neurologic causes or involvement. Note the size and reactivity of each pupil and whether pupils are equal or unequal
3. **Level of consciousness-** Document on all patients
 - A&Ox3- Alert and oriented to person, place, and time
 - Verbal- Responds to verbal stimuli- record GCS
 - Pain- Responds to painful stimuli- record GCS
 - Unresponsive- Unresponsive to any stimulus- record GCS
 - Combative- Patient agitated/fighting. Must be noted if restraints applied
4. **Glasgow Coma Score-** Document on all calls where the patient has a mechanism of trauma that could result in a head injury and all patients with an altered mental status. Record the patient's BEST response.
5. **Respiratory Effort-** Document on all patients
6. **Lung Sounds-** Document on all patients c/o respiratory and/or cardiovascular distress, chest trauma, a history of lung disease and/or chest pain
7. **Skin-** Document color, moisture, temperature on all patients
8. **Pain-** Patients should be asked to rate pain on a scale of 0 to 10, 0=no pain and 10=worst pain imaginable. Document initial pain rating and subsequent pain reassessment scores

POLICY # 4 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
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DOCUMENTATION/ CHART FORM POLICY # 4 - 02

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Vitals/RX:

Document **at least two sets** on all patients unless they are refusing assessment and care, are too combative or an exemption applies and is noted in the comments section

1. **Vital signs** shall be reassessed and documented every 15 minutes or more frequently, as indicated by the patient's condition
2. **EKG Strips**- Interpret and note all EKG rhythms obtained on ALS calls. Document all rhythm changes. When recording rhythm strips, run at least 20 seconds. Attach a 6-second strip (30 large boxes) and leave copies
3. **Defibrillation** -Time and wattage used for each defibrillation/cardioversion
4. **Drugs/Solutions/Dose/Route/Response**- Time, drug, dose, route and response for all medications/solutions given

Exam:

Note all significant **positive and negative** findings for each of the body systems. Each system should have a notation as either showing pathology or being within normal limits (WNL). It is not necessary to repeat findings that have been noted in other areas of the record

Treatment:

Capillary glucose readings should be noted on all patients with an altered mental status. Note the site, type of fluid, gauge of the catheter, flow rates, and amount administered in the field for all IV's. Note the liters per minute and delivery device for all oxygen administration. Indicate if ventilations were assisted and the number of breaths per minute.

Comments:

Document any other observations or care that was given, any pertinent findings or responses to treatment **not** covered in other areas of the sheet. Example: irrigated both eyes with NS. Document any unusual occurrences that happen to the patient before arrival of EMS personnel, during pre-hospital care or during transport. May also use to continue the narrative from the Chief Complaint/HPI/Mechanism of injury section

Paramedic Impression: Correlate the findings of the chief complaint, PMH, History, Present illness and Patient assessment to determine a presumptive diagnosis upon which all pre-hospital treatment shall be based. Whenever possible, record all impressions in professional medical terminology. This area is not to be used for (subjective) comments. Be as specific/objective as possible

POLICY # 4 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DOCUMENTATION/ CHART FORM POLICY # 4 - 02

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Crew:

ALS runs must be signed by a minimum of two crew members, one of which is EMT-P level or pre-hospital RN, directly providing care. The names and system identifier numbers of all responding EMS personnel providing care must be noted. BLS/ILS runs must be signed by a minimum of two EMT-B's or EMT-I's with their system identifier numbers listed. Providers are responsible for assigning responsibility for completing the report

Addendums/Corrections:

1. After completing an ambulance report, it is occasionally discovered that important information was omitted, an amendment is necessary, or information needs to be added to clarify the report or more thoroughly document the incident. Every effort must be made to avoid any discrepancy between the provider's copy of the report and the hospital's medical record copy. If an error is noted before distribution of the copies; draw a single line through the entry and date initial notation. Enter the correct information. Never obliterate an entry by scratching it out with heavy line, marker, or white out

Distribution of EMS Rescue and Ambulance Report Form:

Transport to a system hospital:

Original copy- Original form used as the official run report for legal and agency records. This copy must be filed out completely, have the EKG strips attached, and shall be retained by the provider agency

Second copy- Forward to Emergency Department personnel caring for the patient. This copy should be added to the patient's permanent medical record kept in the medical records division of that hospital. EKG strips to be attached if obtained

Preliminary Report Form (ambulance short form):

The **Preliminary report form** (short form) is designed to be an intricate part of Trinity Medical Center's EMS reporting system. It is utilized by transporting and non-transporting agencies. This form produces initial information pertaining to the patient's chief complaint, treatment, medical history, and response to care. The use of the preliminary report aids the emergency department staff with vital information pertaining to patient care and permits pre-hospital care services to return to their districts in a timely manner. Every effort though should be to leave the completed run sheet (paper or electronic) at the ER with the patient

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1. The Preliminary Report form (short form) will be accepted by the staff at the Emergency Department if the following conditions are satisfied:
 - Approval from the Emergency Department RN or MD
 - Full verbal report will be given to the receiving RN upon arrival to the Emergency Department
 - The signature of the receiving RN must be on the form
2. The approved system Preliminary Report Form (short form) will be in duplicate and copy #1 is given to the Emergency Department RN or staff. Copy #2 is retained by the transporting service and attached to the computer generated run report. Remember the preliminary report form is a **legal document** and must be maintained as such
3. The Preliminary Report form (short form) is **not** intended to be used in the following circumstances.
 - When the patient's condition is critical, whether due to trauma or a medical cause
 - Cases that may have legal concerns need to have the full report left at the Emergency Department before the EMT leaves the facility
4. When the Preliminary Report Form (short form) is used, the paper or computer generated ambulance report must be received in the hospital within 24 hours after leaving the Emergency Department

Radio Report Form:

The Radio Report form is designed to be an intricate part of Trinity Medical Center's EMS reporting system. It is utilized by the Emergency Communications Registered Nurse when taking report on patients. This form produces initial information pertaining to the patient's chief complaint, treatment, medical history, and response to care. The use of the preliminary report aids the Emergency Department staff with vital information pertaining to patient care and permits pre-hospital care services to return to service in a timely manner

1. The Radio Report form will be used by the staff at the Emergency Department in the following situations.
 - The patient information per UHF or VHF/Cellular Transmissions
 - A second full verbal report will be given to the receiving RN at the bedside
 - The signature of the receiving RN or ER Physician must be on the form

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TRINITY EMS SYSTEM STANDARDS POLICY



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2. The approved system Radio Report form is kept as part of the Trauma Center chart. The Radio Report form is a **legal document**

Electronic Submission:

The only approved pre-hospital computer programs for TMC, EMSS are:

1. Trinity PCR: copies may be obtained from the EMS System office
 - If a system provider chooses to utilize another software they must submit system required data in a form that will link to our database. This required information must be submitted monthly
2. Runs shall be submitted every month to TMC EMS to download into TMC data base. TMC EMS will upload the appropriate State data to the Illinois Department of Public Health
3. Suggestions for change and other considerations are to be reported to TMC EMS and the vendor will be contacted
4. If there is a problem with the computer software, please utilize a regular run sheet until the problem is resolved by your agency director. Then re-enter the appropriate information in to the main agency computer to transfer to the EMS System office. The paper run sheet will be left at the receiving hospital

POLICY # 4 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

DOCUMENTATION OF VITAL SIGNS POLICY # 4 - 03

PURPOSE:

Every patient encounter by EMS will be documented. Vital signs are a key component in the evaluation of any patient and a complete set of vital signs is to be documented for any patient who receives some assessment component

POLICY:

To insure evaluation of every patient's cardiovascular status and documentation of a complete set of vital signs

1. An **initial** complete set of vital signs includes:
 - **Heart rate**
 - **Systolic AND diastolic blood pressure**
 - **Respiratory rate**
 - **Pain/severity**(when appropriate to patient complaint)
 - **GCS** for Injured Patients
2. When no ALS treatment is provided, palpated blood pressures are acceptable for **REPEAT** vital signs
3. Based on patient condition and complaint, vital signs may also include:
 - **Pulse Oximetry**
 - **Temperature**
 - **End Tidal CO2** (if Invasive Airway Procedure)
4. If the patient refuses this evaluation, an assessment of decisional capacity and a **Patient Disposition Form** must also be completed
5. When any components of vital signs were obtained using a cardiac monitor, the data should be included in the patient care report
6. Document situations that preclude the evaluation of a complete set of vital signs
7. Record the time vital signs were obtained
8. **Any abnormal vital sign should be repeated** and monitored closely

POLICY # 4 - 03

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

MEDICAL DEVICE EQUIPMENT FAILURE POLICY # 4 - 04

PURPOSE:

To define for the Trinity EMS System personnel reporting mechanisms for all medical devices carried on ambulance's rescue vehicles. When a device does not function properly and/or in it's malfunction may injure a patient. To comply with the Safe Medical Devices Act

POLICY:

Occurrence/Documentation

- A. If a device fails and/or injures anyone in it's failure the device must be preserved in the condition at the time of failure
- B. Document date and time, if possible
- C. Document a description of the failure and the injury/harm caused by it's failure
 - Note that equipment was removed from service at this time
 - Note description of any injury and MD/Physicians who examined the patient/injured party, patient diagnosis, age
 - Note the manufacturer of the equipment and last maintenance/inspection date. Note why routine maintenance is not applicable or is applicable
 - Note if procedure to patient could not be completed due to failure
 - Add complete location of incident information
 - Include brand name, model number, lot number, serial number, any analysis post failure

Reporting/Record

- A. Send documentation of any incident to Trinity EMS Department within 24 hours
- B. EMS System office will relay information to Risk Manager of TMC for further reporting guidance
- C. If applicable, you will assist in compiling: FDA Form #3500A to send to Secretary of Health and Human Services and to the manufacturer
- D. All records will be maintained at the agency and a copy filed with the EMS System office on any reportable device failure

Medical Devices

- A. Include: Any instrument, apparatus or other article that is used to prevent, diagnose or treat a disease or to affect the structure of the human body
- If the device fails, but there is no harm to patient and/or change in treatment, the report **may not** have to be made to the FDA. But manufacturers will need to be notified and Risk Management and/or other legal counsel can assist in making these judgments

POLICY # 4 - 04

EMS System Policies:

Section # 05: Continuing Education

Continuing Education

05-01

Train the Trainer

05-02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

CONTINUING EDUCATION POLICY # 5 - 01

Page 1 of 5

PURPOSE:

To delineate for Trinity EMS personnel requirements for Continuing Education(CE)

POLICY:

I. Number and Type of Hours Required Per Year:

- A. The Illinois Department of Public Health, Division of EMS, publishes rules and regulations stipulating requirements for CE for each level of service. **Re-licensure will occur in accordance with the re-licensure policy when all of the following are complete.** It is recommend that CE be completed each year of licensure. No more than 25% of the CE may be in the same subject.
Trinity EMS System requires at least 50% of CE be in formal education hours

• First Responder-D	24
• EMT-B	60
• EMT-I	80
• EMT-P/PHRN	100
• ECRN	32
• Dispatcher	48
• CCP	20

- B. All CE records are logged and maintained at the service that the provider works for and made available to the System Resource Hospital. Each pre-hospital provider/pre-hospital RN is responsible for keeping their own records and maintaining a copy of time accrued. All CE records either obtained elsewhere or with the appropriate CE number and signature must be filed in the appropriate service file. **The responsibility for completing state required CE hours in a timely manner rests fully with the individual. Eligibility for system recommended re-licensure rests in great measure on the completion of these hours**
- C. All license levels are required to request license renewal from the Resource Hospital. The Resource Hospital will then review CE for appropriateness and endorse the provider to IDPH for license renewal

POLICY # 5 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



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CONTINUING EDUCATION POLICY # 5 - 01

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- D. All license renewals are due to the State office 30 days prior to expiration, therefore submit the request to the system resource hospital no later than 45 days prior to expiration. **There will be no requests for extensions from the resource hospital unless for illness or extreme circumstances.** The individual license holder is responsible to submit online the IDPH renewal in accordance with the renewal process. Upon completion the licensee will receive a confirmation page which should be submitted to the system office. The license renewal will be held by the state until CE is submitted to the system. Should the license expire during the time the department is awaiting CE submission to the system, the licensee cannot work following this expiration and will need to submit the appropriate late fee. IDPH will also not honor renewal attempts after the licensee renewal date

II. Approval of Hours:

- A. The EMS Medical Director (EMS MD) of the system in which the EMT/Pre-hospital RN functions shall determine whether a particular didactic CE program is acceptable for credit within that system. Approval for all hours rests with the system

III. Options for Accruing DIDACTIC HOURS in the TMC EMS System:

- A. At least half of the total didactic hours per year must be obtained within the system approved CE, unless prior authorization has been granted. This includes in-station CE, viewing videotapes, and attending classes conducted by a system provider or hospital. **All pre-planned continuing education classes need a State site code assigned before credit can be awarded.** The system EMS Coordinator/EMS MD must pre-approve agency CE before submission to IDPH for State site code. Use appropriate IDPH form for submission. CE is the responsibility of the service and the individual EMT. While the resource hospital may provide some CE, it will not determine monthly in-services and apply for them. Application for CE site codes/approvals must be obtained through the Regional EMS Coordinator (IDPH) after endorsement by Trinity EMS MD. Applications for approvals **must** be submitted **60 days** prior to the start date of the program. Trinity EMS System requires monthly CE requests to be submitted in October of each year for the subsequent year. All other CE requests must follow the 60 day request and be submitted to the Trinity EMS System office for approval prior to submission to the State

POLICY # 5 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



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CONTINUING EDUCATION POLICY # 5 - 01

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At least 3 objectives for each level are needed for each CE subject requested. Objectives are to be written on a form obtained from Trinity EMS and delineated into Basic, Intermediate, Paramedic or First Responder status

- B.** Verification of attendance at offerings not sponsored by the resource hospital or system agency with approval must be submitted by the sponsoring agency with accompanying site code to the TMC/EMS System office for documentation. All Illinois education with site code is acceptable, as is Iowa advanced training centers
- C. Video Taped Presentations-** hour for hour to a maximum of 4 didactic hours/year will be granted for viewing approved videotapes. The tapes may be viewed at any system hospital or in the provider's quarters with verification of viewing submitted by the provider EMS Coordinator or EMS Coordinator/Educator to the resource hospital
- D. CPR-** Must be recognized by American Heart Association (AHA) or Red Cross
- **2 hour of didactic credit** will be awarded for the renewal of CPR Healthcare provider recognition every year. Copies of current CPR cards must be provided to the EMS System office each year or every other year as required by the service
 - **4 hours of didactic credit** will be awarded once every two years for successful completion of a **CPR instructor** or re-recognition course for any level. The individual must submit a copy of the current CPR instructor card to receive credit
 - **4 hours of didactic credit** can be awarded/year for **teaching CPR**. Submit copies of the class roster(s) sent to the AHA Community Training Center(CTC)
- E. Teaching-** hour for hour credit, up to a **maximum of 10 hrs/year**, will be granted to individuals who participate in teaching EMT-B course, EMT-I/P course, auto extrication, hazardous materials, CISM, TNS, ACLS, PHTLS, BTLS, or first responder courses. The course director must verify the date, topic taught and the number of teaching hours. These hours may be credited as didactic or clinical time, depending on the subject matter, and approved by the EMS Medical Director/ Systems Coordinator(i.e. clinical with skills, or lecture)

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TRINITY EMS SYSTEM STANDARDS POLICY



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F. ACLS, ATLS, PALS/APLS, PHTLS, BTLS- Hour for hour up to 16 hours of didactic (8hrs) of clinical (8hrs) will be awarded for initial completion of one of the above courses. To receive credit, the Basic/Intermediate/Paramedic/Pre-Hospital RN shall submit a photocopy of the card received after successful completion of the course

G. Renewal- an individual can receive 4 hours total of didactic credit per course. To receive credit, submit a photocopy of the new card

H. Hazardous Materials- A one time award of **16 hours** time may be awarded for completion of the State site coded 40 hour HazMat operations level course. To receive credit, submit a photocopy of the State certificate or a letter from the department. Four hours of didactic time may be awarded every 2 years for Agency HazMat training with approved Site code number. Documentation of attendance is necessary to receive credit. CE credit will not be awarded in the same year as initial certification. Credit will also be given up to 16 hours for CE based on biological response

I. Drive, Trench, Rope Rescue and Confined Space Rescue- Two hours didactic time/year for initial or refresher training in these areas

J. EMT-P National Registry Exam and Refresher Training- A one time award of 8 hours didactic will be awarded for successful completion of the National Registry Paramedic Exam. To receive a credit, the Paramedic shall submit a photocopy of the card received. National Paramedic Refresher Training, with approval site code, will award hour for hour credit

K. Preceptors- Approved paramedic preceptors may be granted up to 10 hours didactic and 8 clinical hours of time/year for executing their duties appropriately. Eligibility will be confirmed by the Agency/EMS Coordinator/Physician with whom they communicate

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TRINITY EMS SYSTEM STANDARDS POLICY



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CONTINUING EDUCATION POLICY # 5 - 01

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IV. Out-Of System Hours:

A. A maximum of 50% of the total didactic hours per year may be obtained by attending classes sponsored outside of the System provided the content followings the US DOT Curriculum and the faculty is knowledgeable in pre-hospital concepts and treatment protocols. 50% must be obtained in TMC EMS System approved courses. Approval must be requested in advance from the Resource Hospital by submitting the program brochure outlining the dates, times, topics, and faculty. Verification of class attendance must be submitted to the Resource Hospital. Any Illinois EMS Region II System is acceptable for continuing education and is considered in system. Any education with an Illinois or Iowa approved site code is acceptable

B. College Courses: Select college courses may be considered for didactic credit toward yearly continuing education. Upon successful completion of a course, the Basic/Intermediate/Paramedic/Pre-Hospital RN must submit the following to receive credit:

- Copy of class outline/syllabus
- Number of credit hours achieved
- Name and credentials of instructor
- Name of educational institution
- Verification of successful course completion

The EMS MD or his designee will review the course for applicability to pre-hospital practice and determine eligibility for CE credit

V. Additional Time Options:

A. Mass Casualty Drills- Drill and Preparatory classes/workshops (hour for hour) can be obtained by participating in a System-recognized drill. To receive credit, submit a letter from the drill director or the drill sign-in sheet documenting type or participation, number of hours (8 hours maximum)

B. Prom Night- Two hours per year of didactic credit for participation in prom night activity in system

POLICY # 5 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

TRAIN THE TRAINER POLICY # 5 - 02

PURPOSE:

This is to define quarterly education information dissemination to all trainers at each EMS service of TMC System. The policy will also define the roles and responsibilities of the trainer

POLICY:

A. Definition:

- A trainer is the person who is responsible in the TMC EMS System Provider Service for education and monitoring of continuing education of the individual personnel of that service

This includes-

- EMS Coordinators, Training Officers

Levels Include-

- FR-D, EMT-B, EMT-I, EMT-P, Pre-Hospital RN

B. Method:

- Trainers will be given updated system/education/information as necessary. They are then responsible to disseminate this information and/or educate the individual personnel of their corresponding service
- Education will include, but not be limited to:
 - Cardiac Topics
 - Stroke Education
 - Pediatrics
 - Trauma Education
 - Protocol and Policy Guidelines
 - Monthly Service Education

C. Sessions-

- Will be taught by TMC staff, faculty or EMS Medical Director

POLICY # 5 - 02

EMS System Policies:

Section # 06: Quality Improvement

Run Review / Quality Improvement

06-01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

RUN REVIEW QUALITY IMPROVEMENT POLICY # 6 - 01

PURPOSE:

The Trinity EMS department holds the responsibility for monitoring the run reviews of the services and evaluating the quality of patient care by the prehospital care providers. The responsibility is then delegated to the EMS Coordinator/QI representative of the service and the EMS Department. It is the responsibility of the caregiver to participate in data collection and action planning

POLICY:

Providing care to patients in the prehospital setting involves much more than just rendering medical treatment. The following is to be reviewed in an ongoing manner by all services

1. The EMS Coordinator/Medical Director may audit any patient encounter for review and quality control/improvement
2. The EMS Coordinator/Director of the agency will be notified for any runs selected by the EMS System office to be reviewed and that Coordinator/Director will notify:
 - All crew members
 - Deputy chiefs, chiefs, or other officers will be notified after crew members and at the agency preference
3. Agency EMS Coordinator/Director will relay to the crew concerns, if any, from EMSS/Medical Director involved in runs selected by EMSS office
4. When a patient care encounter is selected for review because of request, concern, or patient care issues, the agency EMS Coordinator/Director will review the facts of the run privately with the appropriate crew members and relay the information to EMSS office. The EMSS retains the right to continue investigation if so necessary and make recommendations
5. All run reviews should be attended by the involved crew members, agency officers, Trinity EMS coordinator and/or Medical Director
6. All run reviews will be documented on a formatted run review sheet
7. All run review information will be kept confidential in the EMS system office
8. Due process will be offered, explained and documented
9. This is a quality improvement and is protected by the Medical Studies Act

POLICY # 6 - 01

EMS System Policies:

Section # 07: Mass Casualty Incident (MCI) / Disaster

<i>Mass Casualty Incident (MCI)</i>	07-01
<i>Mass Casualty Incident – Triage</i>	07-02
<i>School Bus Accidents</i>	07-03
<i>Poison Control Centers</i>	07-04

TRINITY EMS SYSTEM STANDARDS POLICY



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Director 2014

MASS CASUALTY INCIDENT POLICY # 7 - 01

PURPOSE:

To delineate for Trinity EMS system personnel responses to mass casualty incidents which the number of patients or severity of injuries may overwhelm the providers

POLICY:

A. Mass Casualty:

At times EMT's may find themselves in a situation where the number of injured patients exceeds the available personnel to care for them and resources available. In these situations the patients must be triaged according to the severity of their injuries in order to do the most good for the greatest number of patients. In such multiple casualty situations, several normal conventions may need to be set aside in order to meet the objective

B. MCI for FR-D/BLS/ILS/ALS-

1. Prioritize patients according to a recognized system
2. In mass casualty situations, the **S.T.A.R.T.** method of triage is recommended
3. Identify patient priority through the use of color coded triage tags
4. Rapidly assess (60 seconds or less) each patient, stopping only to open an airway or to control profuse bleeding. As you move through the scene, affix a triage tag to each patient according to their priority
5. Treat and transport those patients who are viable and have life-threatening injuries first, according to the resources available
6. Treat and transport those patients who have impending or potential life threats next
7. Walking wounded, those patients without life-threatening injuries, should be transported last. In some major incidents, these patients may even be transported by means other than ambulance
8. Non-viable patients, those in cardiac arrest or with obvious mortal wounds, should not be treated or transported unless adequate resources/personnel are available

*The unique situation of a **lightening strike** causing a mass causality event presents the exception to the above rule. In this situation, when the victims have been struck by lightening, the cardiac arrest victims are treated and transported. Victims not in cardiac arrest rarely deteriorate and can wait while those in arrest are given top priority*

POLICY # 7 - 01

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

MASS CASUALTY INCIDENT TRIAGE POLICY # 7 - 02

Page 1 of 2

PURPOSE:

To aid Trinity EMS system personnel in the rapid triage of MCI patients

POLICY:

Any disaster plan or program designed to handle a large volume of patients in a short period can only work if the triage process is rapid and efficient. The following method of prioritization should be used for triage, treatment and transport to maximize the percentage of victims surviving a disaster

Priority I- Immediate/Critical(RED)- Immediate Care:

Highest priority: victims requiring immediate care and transportation. These victims must be treated first at the scene and transported as soon as possible. Victims may have one or more of the following problems whose chances of survival depend on immediate emergency care:

- Airway and breathing difficulties
- Hemorrhage
- Open chest or abdominal wounds
- Severe head injuries or head injuries with decreasing level of consciousness
- Major or complicated burns
- Tension pneumothorax
- Pericardial tamponade
- Impending shock and complicating severe medical problems
- Diabetes with complications
- Poisonings
- Pregnancy

Priority II- Urgent(YELLOW)- Urgent Care:

Intermediate priority: victims whose treatment and transportation can be delayed temporarily. Victims may have one or more of the following problems that need medical attention prior to transportation, but do not need immediate care to survive

- Blunt abdominal or thoracic trauma
- Major extremity or soft tissue injury
- Dislocations
- Major burns and electrical burns

POLICY # 7 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



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MASS CAUSUALTY INCIDENT TRIAGE POLICY # 7 - 02

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Priority III- Delayed(**Green**)- Delayed Care:

Delayed or low priority(walking wounded); victims whose treatment can be delayed. Victims may have one or more of the following problems that require only simple emergency care or who appear to be uninjured and need only observation

- Fractures
- Sprains
- Lacerations
- Soft tissue injuries and other lesser injuries

Priority IV- Deceased(**Black**)-No Care Required:

Lowest priority; victims who are dead or are near death. Victims are already deceased or have such devastating injuries that they have little chance for survival

S.T.A.R.T. Triage System (Simple Triage and Rapid Transport)

Step 1: **CLEAR THE SCENE OF ANY WALKING WOUNDED**

- These patients are considered to be in the **DELAYED** category

Step 2: **ASSESS VENTILATIONS IN REMAINING PATIENTS**

- No respiratory effort: **Dead/Non-Salvageable**
- Respirations above 30: **Critical/Immediate**
- Respirations below 30: **Delayed**

Step 3: **ASSESS PERFUSION**

- No radial pulse: **Critical/Immediate**
- Pulse present: **Delayed**

Step 4: **ASSESS NEUROLOGICAL STATUS**

- Unconscious: **Critical/Immediate**
- Altered Level of consciousness: **Critical/Immediate**
- Altered mental processes: **Critical/Immediate**
- Normal mental processes: **Delayed**

POLICY # 7 - 02

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

SCHOOL BUS ACCIDENTS POLICY # 7 - 03

PURPOSE:

To manage school bus accidents with appropriate resources; to ensure the children involved are dispositioned accurately and injured children identified rapidly

POLICY:

1. Initiate appropriate personal protective equipment
2. Assess and establish scene safety
3. Establish triage area and triage victims
4. Determine the **Accident Category:**
 - A. Significant injuries present in one OR more children or there is a documented mechanism of injury that can be reasonably expected to cause significant injuries.
 - B. Minor injuries present in one or more children AND NO documented mechanism of injury that can be reasonably expected to cause significant injuries. Uninjured children are also present
 - C. No injuries present in any children AND NO mechanism of injury that can be reasonably expected to cause injury
 - D. Pediatric patients with special healthcare needs or communication issues
5. Determine responses to Accident Category and utilize the **School Bus Accident Special Response Protocol** and **School Bus Incident Release Form**
6. Discharge any uninjured children to the custody of a school official(s) of their designee(s). Complete the **School Bus Incident Release Form** approved by the system. Ensure signatures are in place before release of children
7. School officials or their designee(s) will then disposition the uninjured children according to their own policies and procedures
8. If school officials or their designee(s) have any objections to the release, transport all children to the appropriate facility by ambulance or bus if appropriate with appropriate number of EMS personnel on board

POLICY # 7 - 03

TRINITY EMS SYSTEM STANDARDS POLICY



Approved by EMS Medical
Director 2014

POISON CONTROL POLICY # 7 - 04

PURPOSE:

The state poison center may be utilized by the 911 centers and the responding EMS services to obtain assistance with the prehospital triage and treatment of patients who have a potential or actual poisoning. The purpose of this policy is to:

- Improve the care of patients with poisonings, envenomations, and environmental/biochemical terrorism exposures in the prehospital setting
- Provide for the most timely and appropriate level of care to the patient, including the decision to transport or treat on the scene
- Integrate the State Poison Center into the prehospital response for hazardous materials and biochemical terrorism responses

POLICY:

1. The 911 call center will identify and if EMD capable, complete key questions for the Overdose/Poisoning Animal Bites/Attacks, or Carbon Monoxide/Inhalation/HazMat emergency medical dispatch complaints and dispatch the appropriate EMS services and/or directly contact the State Poison Center for consultation
2. If no immediate life threat or need for transport is identified, EMS personnel may conference the patient/caller with the Poison Center Specialist at the **State Poison Center at 800-222-1222**. If possible, dispatch personnel should remain on the line during conference evaluation
3. The Poison Center Specialist at the State Poison Center will evaluate the exposure and make recommendations regarding the need for on-site treatment and/or hospital transport in a timely manner. If dispatch personnel are not on-line, the Specialist will re-contact the 911 center and communicate these recommendations
4. If the patient is determined to need EMS transport, the Poison Center Specialist will contact the receiving hospital and provide information regarding the poisoning, including treatment recommendations. EMS may contact medical control for further instructions or to discuss transport options
5. If the patient is determined not to require EMS transport, personnel will give the phone number of the patient/caller to the Poison Center Specialist. The Specialist will initiate a minimum of one follow-up call to the patient/caller to determine the status of patient
6. Minimal information that should be obtained from the patient for the State Poison Center includes:
 - Name and age of Patient •Substance(s) involved •Time of Exposure
 - Any treatment given •Signs and symptoms
7. Minimal information which should be provided to the State Poison Center for mass poisonings, including biochemical terrorism and HazMat, includes:
 - Substance(s) involved •Time of Exposure •Any treatment given •Signs and symptoms

POLICY # 7 - 04