

Clive Fire Department Emergency Medical Services

EMS PROTOCOLS

BLS and ALS Providers

(ADULT & PEDIATRIC)



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July 1, 2020**

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CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
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Clive Fire Department EMS Protocol and Procedure Authorization

Adopted: November 10, 2008

Reviewed: June 18, 2020

Last Modified: June 18, 2020

- Addition of ketorolac for pain
- Addition of tranexamic acid for hemorrhage

Effective: July 1, 2020

James Poole, D.O.
Medical Director

Date


Rick Roe, PM
Chief

Date

Brian Helland, PM, CCP
Assistant Chief - Operations

Date

Signatures on File

	<h1 style="text-align: center;">CLIVE FIRE DEPARTMENT</h1> <h1 style="text-align: center;">EMS CLINICAL PROTOCOLS</h1>	Effective Date: July 1, 2020
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The purpose of protocols in the out-of-hospital setting is to assure safe and effective intervention during the out-of-hospital phase of patient care. In consideration of the unique resources, needs, population, and geography of individual service programs in Iowa, physician medical directors may choose to enhance or omit portions of this protocol in accordance with Iowa Code, Chapter 147A. Medical directors are responsible to ensure that EMS personnel use protocols, have the training and skills required, and perform Continuous Quality Improvement.

Regardless of EMS provider level of certification, use of skills in the out of hospital setting are limited to the EMS provider's scope of practice in accordance to the skills and protocols approved by the physician medical director. The medical director must determine what skills within the level of service authorization and provider scope of practice are to be included and also which, if any, are not included for individual EMS services. The "Iowa EMS Scope of Practice" document, adopted by reference to the administrative rules outlines skills by certification level. It is available on the Bureau of EMS website, or by contacting the Bureau of EMS.

Protocols are essential to assure education, training, and standards of care meet the needs of patients. Ongoing review and update of protocols is necessary to keep pace with interventions known to be effective in out-of-hospital care. The challenge is for all EMS providers, out of hospital and in hospital, to keep current with the protocols so the EMS continuum of care can effectively reduce suffering, disability, death and costs from life-threatening illness and injury.

According to Iowa Administrative Code 641-132.9(2)(a) individual physician medical directors duties include "developing, approving, and updating protocols to be used by service program personnel that meet or exceed the minimum standard protocols developed by the department." Additionally, according to 641-132.8(3) (b) service programs shall "utilize department protocols as the standard of care. The service program medical director may make changes to the department protocols provided the changes are within the EMS provider's scope of practice and within acceptable medical practice. A copy of the changes shall be filed with the department."

The following authorization page and any changes or revisions made by the EMS service medical director must be on file with the State EMS System Coordinator.

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AUTHORITY:

According to Iowa Code, Chapter 147A, emergency medical personnel may only deliver emergency medical care under the direction of a physician medical director who is licensed to practice medicine in Iowa. The medical practice of out-of-hospital personnel is an extension of the medical director's license.

Protocols shall be approved, signed, and dated by the EMS service medical director prior to implementation. Any changes must be on file with your State EMS System Coordinator. Skills must be within the level of service authorization and EMS provider scope of practice. The scope of practice document can be found on the Bureau of EMS Website at www.idph.state.ia.us/ems.

The Service Physician Medical Director Must Approve The Protocol In Accordance With The Authorized Level Of Service.



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Clive Fire Department

Service Program Name

☒ Ambulance ☐ CCT Endorsement ☐ Non-transport

A. Level of Staffing:

☐ Ambulance TA (Transport Agreement) ☒ Minimum Basic 24/7

B. Level of Authorization:

☐ Emergency Medical Responder (EMR)

☐ EMT

☐ AEMT

☒ PM

☐ PM/CCT (attach protocol)

C. These protocols are to be considered a standing order. Radio communications are not required prior to performing any protocol action. EMT's/Paramedics should call in for further direction or confirmation of orders whenever the situation warrants.

YES

D. The emergency medical care provider present with the highest level of certification (on the transporting service) shall determine, based upon patient care needs, the appropriate level of provider to attend the patient during transport.

YES

E. APPROVAL OF SKILLS AND TRAINING LEVEL (Physician Medical Director must approve skills)

Circle Approved Skills

Initiation of organ donation	YES	NO	EMR
Esophageal/tracheal/double-lumen airway	YES	NO	EMR
IV maintenance	YES	NO	EMT
Glucose Monitor (Auto-lance for EMT)	YES	NO	EMT
EPINEPHRINE Auto-Injector Pen	YES	NO	EMT, AEMT
Gastric Tube Insertion	YES	NO	AEMT
Needle Thoracostomy	YES	NO	PM
Nasogastric Tube Insertion	YES	NO	PM
Urinary Catheterization	YES	NO	PM
Intraosseous Infusion	YES	NO	PM
Needle Cricothyrotomy	YES	NO	PM
RSI (attach protocol)	YES	NO	PM
Nasotracheal Intubation	YES	NO	PM
EKG Interpretation (multi lead or 12 lead)	YES	NO	PM
Thrombolytics (attach protocol)	YES	NO	PM
Assessment-based Spinal Immobilization	YES	NO	EMT

James Poole, DO
Medical Director

Date

Signatures on File

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DRUG LIST		Page 1 of 1 Revised Date: June 18, 2020

Drugs listed on this page are those referenced in the protocols. Additional drugs (such as those from current AHA/ACLS guidelines, or drugs used during interfacility transports) may be determined by the service program medical director, based upon the unique EMS system factors.

EMR, EMT, AEMT DRUG LIST

- ▲ Aspirin
- ▲ Glucose Paste
- ▲ Oxygen
- ✦ Hand-Held Nebulizer
- ✦ Nitroglycerin
- ✦ Epinephrine auto-injector

- ▲ All providers
- ✦ EMT / AEMT

Advanced Provider Drug List

(Includes list above)

Adenosine
 Albuterol
 Amiodarone
 Atropine
 Dextrose 50%
 Diphenhydramine HCl (Benadryl)
 Epinephrine
 Etomidate (Amidate)
 Fentanyl
 Glucagon
 Hydromorphone (Dilaudid)
 Ipratropium bromide (Atrovent)
 Ketamine
 Ketorolac
 Lidocaine 2%
 Magnesium Sulfate
 Methylprednisolone
 Metoprolol (Lopressor)
 Midazolam (Versed)
 Naloxone (Narcan)
 Ondansetron (Zofran) IV and Oral Dissolving Tabs
 Sodium Bicarbonate
 Succinylcholine
 Tranexamic Acid

I.V. SOLUTIONS LIST

0.9% sodium chloride

Substitutions to be used during shortages

Morphine
 Hydromorphone (Dilaudid)
 Dexamethasone
 Lorazepam (Ativan)
 Dextrose 10%



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
July 1, 2020

MEDICATION SUBSTITUTIONS

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Date Last Revised
Sept 18, 2019

Purpose:

Drug shortages are becoming more prevalent in emergency medicine, and are affecting hospitals and EMS agencies.

Unless specifically noted, these substitutions are applicable to all CFD protocols and procedures in which a specific medication is listed but not available.

Fentanyl:

Morphine and hydromorphone (Dilaudid) are both substitutions for fentanyl. Morphine is preferred over hydromorphone (Dilaudid). Neither have been studied extensively using the intranasal route – IV/IM/IO are preferred.

Morphine dose – adults: 2 – 5 mg slow IV/IO push or IM; may be repeated every 20 minutes. Pediatric: 0.05 mg/kg slow IV/IO push or IM; may be repeated every 20 minutes.

Hydromorphone (Dilaudid) dose – adults: 0.5 – 1 mg slow IV/IO push or IM; may be repeated in 20 minutes. Pediatric: 0.02 mg/kg slow IV/IO push or IM; may be repeated in 20 minutes.

Lorazepam / Midazolam

Seizures:

Lorazepam (Ativan) if available. Dose – adult 1 – 2 mg IV/IM/IN; repeat as needed to maximum of 6 mg. Pediatric dose 0.1 mg/kg IV/IM/IN up to maximum 2 mg single dose. Repeat to maximum of 3 doses.

Diazepam (Valium) if available. Dose – adult: 2-5 mg IV/IO/IM. Pediatric: 0.3 mg/kg IV/IO/IM/PR to max singular dose of 5 mg. Diazepam should not be administered via the IN route.

Medication Substitutions

Morphine for fentanyl

Adult:

- 2 – 5 mg slow IV/IO push or IM
- May repeat every 20 min.

Pediatric

- 0.05 mg / kg slow IV/IO push or IM
- May repeat every 20 min

Hydromorphone (Dilaudid) for fentanyl

Adult:

- 0.5 – 1 mg slow IV/IO push or IM
- May repeat every 20 min

Pediatric:

- 0.02 mg/kg slow IV/IO push or IM
- May repeat in 20 min

Lorazepam (Ativan) for Midazolam (Versed)

Adults:

- 1 – 2 mg IV, IN or IM
Repeat prn –max 6 mg

Pediatric:

- 0.1 mg/kg IV, IM or IN
Repeat prn -max 2.mg
-



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MEDICATION SUBSTITUTIONS

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Pain management:

Benzodiazepines should not be utilized as a stand alone substitute for narcotic analgesia without contacting medical control.

For severe anxiety that interferes with patient care:
Lorazepam (Ativan) if available. Dose – 2 mg IV/IM/IN; repeat as needed to maximum of 6 mg. Pediatric dose 0.1 mg/kg IV/IM/IN up to maximum 2 mg single dose. Repeat to maximum of 3 doses.

Metoprolol

There is no substitute planned for metoprolol. During the shortage, we have limited inventory to one dose per ambulance.

Methylprednisolone (Solu-Medrol)

Bronchoconstriction:

Dexamethasone can be substituted for methylprednisolone. Dose is 10 mg for adults; 0.15 mg/kg for pediatrics

Dextrose

Dextrose should be administered slowly IV. When 50% dextrose is not available, other concentrations can be used. 10% dextrose is supplied as 25 G in a 250 ml IV bag. The infusion can be attached to a saline lock or given as a piggyback into an existing IV line. It should not be hooked up directly to the IV catheter as the main IV infusion. Bags should be marked with tape or an IV additive sticker to draw attention to the fact this is not a regular bag of NS.

Medication Substitutions

Diazepam (Valium) for Lorazepam

Seizures

Adult:

- 2-5 mg IV/IO/IM

Pediatric

- 0.3 mg/kg IV/IO/IM/PR to max singular dose of 5 mg

Dexamethasone

Adult:

- 10 mg IV/IM/PO

Pediatric:

- 0.15 mg/kg IV/IM/PO


Dextrose 10%

Adult:

- Up to 25 G IV infusion

Pediatric:

- 1G/kg IV infusion (10 ml/kg)

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Always observe the following precautions and then perform the patient assessment and obtain the necessary information on all patients:

- ▶ Scene Size-Up: As you approach the scene, assure safety for yourself, your crew and the patient. Establish and follow Incident Command.
- ▶ BSI (Body Substance Isolation): Prior to patient assessment, employ precautions to prevent contact with potentially infectious body fluids or materials.

Age Statement

- ▶ Assessments and treatments should be specific to the patient's age. For purposes of medication administration use the following guideline.
 - Pediatric – under the age of 12 and/or less than 40 kg
 - Adult – 12 years of age and older and/or 40 kg or greater

Initial Assessment


- ▶ Perform initially on every patient to form a general impression of needs and priorities.
 - Assess patient's mental status. Maintain spinal immobilization if needed (reference appropriate protocols).
 - Begin by speaking to the patient and obtain consent for treatment.

Assess the Patient's Airway Status.

- ▶ Responsive patient - assess for adequacy of breathing
- ▶ Unresponsive patient - check for and maintain open airway
- ▶ Position the patient according to age and size.
- ▶ Trauma patients or those with unknown nature of illness, the cervical spine should be stabilized / immobilized and the jaw thrust maneuver performed as indicated.

Assess the Patient's Breathing.

- ▶ If breathing is adequate and the patient is responsive, oxygen may be indicated.
- ▶ All responsive patients breathing > 29 breaths per minute or < 10 breaths per minute should receive oxygen titrate to maintain SpO2 ≥ 92%.
- ▶ If the patient is unresponsive and the breathing is adequate, provide high concentration oxygen.
- ▶ If the breathing is inadequate, assist the patient's breathing and utilize basic and/or advanced airway adjuncts, and high flow oxygen.
- ▶ If the patient is not breathing, ventilate using high flow oxygen.
- ▶ COPD patients:
 - If in no distress, administer oxygen by NC (usually 2-4 LPM).
 - If in distress, use high flow oxygen by mask and be prepared to use ventilatory adjunct.
 - If utilizing pulse oximetry, titrate oxygen delivery to keep oxygen saturation ≥ 92%
- ▶ If utilizing endotracheal intubation:
 - a maximum of 3 attempts shall be made before an alternate airway is used.

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- confirm placement clinically by visualization, auscultation and the use of waveform capnography. ETCO2 detectors (color change) can be used if capnography is not available
- ▶ If using an extraglottic airway (e.g. iGel)
 - confirm placement clinically by auscultation and the use of waveform capnography. ETCO2 detectors (color change) can be used if capnography is not available
- ▶ Secure the airway with a manufactured tracheal tube holder if possible to prevent dislodgment
- ▶ Consider c-spine / head immobilization to prevent tube dislodgment.

Assess the Patient's Circulation.


- ▶ Check for pulse. If pulse absent, begin CPR. Utilize mechanical CPR device when available
- ▶ Check for major bleeding. If present, control.
- ▶ Check perfusion by evaluating skin color and temperature.

Assess the patient and determine if the patient has a life threatening condition.

- ▶ If a life threatening condition is found, treat immediately.
- ▶ Assess nature of illness or mechanism of injury.
- ▶ Monitor EKG and treat dysrhythmias following the appropriate protocol(s)/current AHA ACLS guidelines.


Identify Priority Patients.

- ▶ Consider:
 - Poor general impression
 - Breathing difficulty
 - Shock (hypoperfusion)
 - Childbirth
 - Chest pain with suspected MI
 - Sepsis
 - Severe pain
 - Stroke
 - Syncope
- ▶ Trauma Patients:
 - Follow the Out-of-Hospital Trauma Triage Destination Decision Protocol (Appendix A) for the identification of time critical injuries, method of transport and trauma facility resources necessary for treatment of those injuries.
- ▶ Conduct the appropriate focused history and physical examination.

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Treatment:

- ▶ Follow specific protocol(s) and standing orders approved by the service medical director.
- ▶ IV's should be started en route to the hospital, except when there is an unavoidable delay (i.e. long extrication, CPR, etc.) If Paramedic level intervention for an unstable patient requires IV access, the IV should be started as soon as feasible.
- ▶ Venous access can be achieved using:
 - Saline lock - used only on patients who have stable vital signs and do not require volume replacement.
 - IV of Normal Saline for IV fluid administration.
 - Intraosseous should be considered in a life threatening situation and other IV access not possible. (See EMS Procedures)
 - Use pre-existing venous port access during emergency. Examples: PICC, Accessed Infusaport
- ▶ IV fluid administration is at the following rates:
 - TKO - slow drip for patients that may need IV medication or fluid bolus.
 - Fluid Challenge - rapid 250-500 ml fluid bolus – maximum of 2 liters of IVF for patients with continuing signs of shock. Contact medical control for additional fluid administration. Observe for signs of CHF. Use caution in dialysis patients.
 - Pediatric: 20 ml/kg; Neonate: 10 ml/kg. May repeat once. Contact medical control for patients with continuing signs of shock after two fluid boluses.
 - Maintain IV flow rate as ordered by physician.
- ▶ Medication administration.
 - Before administration of a drug you must ask yourself the following questions as you select the medication and confirm that it is not expired.
 - Do I have the right patient?
 - Is this the right medication?
 - Is this the right dose?
 - Check for right expiration date.
 - Am I giving this medication by the right route of administration?

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Communications

- ▶ Contact medical direction as soon as feasible for further orders. For seriously injured or critically ill patients, give a brief initial report from the scene when possible, with a more detailed report given to medical direction while en route.
- ▶ Consider calling Poison Control for direction when called to a poisoning case. 1-800-222-1222
- ▶ When communicating with medical direction or the receiving facility, provide a brief report using the Pulsara app - include these essential elements when possible:
 - Patient's age, sex.
 - Patient's chief complaint.
 - Brief pertinent history of the present illness.
 - Major, pertinent past illnesses.
 - Baseline vital signs including mental status/GCS when appropriate.
 - Pertinent findings of the physical exam.
 - Emergency medical care given.
 - Patient response to emergency care given.
- ▶ Advise receiving facility of changes occurring in patient's status en route. Update patient status upon arrival at the receiving facility.

Transport / Tiering

- ▶ Patients should be transported as soon as feasible to an appropriate medical facility. Immediate transport with treatment en route is recommended for patients with significant trauma or unstable airways.
- ▶ Tier with an appropriate service if assistance or level of care needs exist and can be met timely through tiered response.

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ABDOMINAL PAIN		Page 1 of 1 Revised Date: June 18, 2020

- ▶ Follow Initial Treatment Protocol
- ▶ Emergency Medical Care:
 - Allow position of comfort.
 - BE ALERT for vomiting.
 - Give nothing by mouth.
 - Assessment of abdomen inspection, auscultation, and palpation.
 - Assessment of distal pulse, motor, and sensory systems.
 - Assessment of gynecological and obstetrical medical history.
 - Consider injury related pain and refer to appropriate protocol, or treat for SHOCK if indicated.

Basic Treatment Guidelines

- Transport in position of comfort.

Advanced Treatment Guidelines

- Consider monitoring rhythm if condition warrants.
- Allow patient to sit in a position of comfort.
- If patient's condition indicates, establish IV access and administer fluids at appropriate rate.
- Consider medications for pain relief (in no specific order)
 - Fentanyl
 - Ketamine
 - Ketorolac (Toradol)
- Consider ondansetron (Zofran)
- Pediatric patients – contact medical control for orders for pain relief

Medications

Fentanyl

Adults:

- 25 - 100 mcg IVP or IN every 3-5 minutes as needed for pain.
- Maximum volume 1 ml/nare per dose

Pediatric:

- 1-2 mcg/kg IVP with titration of 1 mcg/kg every 3-5 minutes as needed for pain.
- Alternate route IN (20-40 mcg)
- Maximum dose 2mcg / kg

Ondansetron (Zofran)

Adults:

- 4 mg IV/PO – may repeat every 5 minutes as necessary

Pediatric:

- 0.5 mg/kg IV
- Maximum 4 mg

Ketamine

Adult & Pediatric

- 0.3 mg/kg IV/IM


Ketorolac (Toradol)

Adult:

- 30 mg IV/IM
- No repeat dosing

Pediatric: (over 6 months age)

- 1 mg/kg IV/IM
- No repeat dosing

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ALLERGIC REACTION	Page 1 of 1	Revised Date: April 6, 2018

- ▶ Follow Initial Treatment Protocol.
- ▶ When safe and possible to do so, remove patient from exposure to allergen
- ▶ Emergency Medical Care:
 - Look for medical alert device.
 - Look for patient's medications.
 - Be prepared to initiate Basic Life Support measures.

Basic Treatment Guidelines

- Administer preloaded auto-injectable Epinephrine and transport.
- Continuously reassess airway, breathing and circulation status.
- If patient condition continues to worsen, give additional preloaded auto-injectable Epinephrine.
- Treat for shock and be prepared to initiate CPR and AED as necessary during transport. Continue transport without delay.
- Special Considerations
 - a. When using auto-injector remove safety cap and place tip of auto-injector against the patient's lateral thigh midway between the waist and the knee. Push the injector firmly against the thigh and hold firmly until the injector activates and medication is injected (10 count). If unable to use this site an alternative site is the shoulder at the fleshy portion of the upper arm.

Advanced Treatment Guidelines

- Monitor EKG and treat dysrhythmias following the appropriate protocol(s).
- If reaction is not life threatening consider administration of:
 - Diphenhydramine HCl (Benadryl)
 - IV fluid
- If bronchoconstriction present, consider administration of:
 - Albuterol
 - Ipratropium Bromide (Atrovent)
 - Methylprednisolone or dexamethasone
- If reaction is life threatening, consider administration of:
 - Epinephrine
 - Use caution in administration to geriatric patient or patient with cardiac history. Stop epi administration immediately for resolution of symptoms, chest pain or dysrhythmia.
 - Consider glucagon if hypotension is refractory to epinephrine and IV fluid and patient is on beta-blockers

Medications

Diphenhydramine HCl (Benadryl)

Adults:

- 25 – 50 mg IM or slow IVP

Pediatrics:

- 1 mg/kg IV or IM; max dose 50 mg

Albuterol

Adult and pediatric:

- 2.5mg inhaled via nebulizer; repeat as needed

Ipratropium Bromide (Atrovent)

Adult and pediatric:

- 0.5mg (500 mcg) inhaled via nebulizer

May give one dose only

Epinephrine Autoinjector

Pediatric

- 0.15 -0.3 mg auto-injectable IM

Adult

- 0.3 – 0.5 mg (1:1,000) IM Every 5 – 10 minutes, max 3 doses.

Methylprednisolone (SoluMedrol)

Adults:

- 125 mg IV/IM

Pediatrics:

- 1 mg/kg IV/IM

Dexamethasone (Decadron)

Adults:

- 10 mg IV/IM

Pediatrics:

- 0.15mg/kg IV/IM

Epinephrine

Adults:

- 0.3 to 0.5 mg (1:1000) intramuscular
- Contact Medical control for additional dosing. 0.3 to 0.5 mg (1:10,000) slow IVP

Pediatrics:

- 0.01mg/kg (1:1000) IM to max of 0.3 mg (0.3 ml)


Glucagon

Adults:

- 1 mg IV

Pediatrics:

- 0.5 mg IV

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ALTERED MENTAL STATUS	Page 1 of 1	Revised Date: June 18, 2020

Conscious Patient

- Follow Initial Treatment Protocol
- Emergency Medical Care
- Monitor airway closely.
- Check blood glucose level and treat accordingly.

Unconscious Patient

- Follow Initial Treatment Protocol
- Check blood glucose level and treat accordingly.

Basic Treatment Guidelines

- If conscious, transport in semi-setting position.
- If unconscious, transport immediately to medical facility.

Advanced Treatment Guidelines

- If hypoglycemic, refer to hypoglycemia protocol
- Administer naloxone, if appropriate. and observe for response. May be repeated as necessary to improve respiratory effort.
- Consider intubation
- Monitor ECG and treat arrhythmias as condition warrants

Pediatric Basic Treatment Guidelines

- Follow Initial Treatment Protocol.

Pediatric Advanced Treatment Guidelines

- If hypoglycemic, refer to hypoglycemia protocol
- Administer naloxone if appropriate and observe for response. May be repeated as necessary to improve respiratory effort.
- Consider intubation
- Monitor ECG and treat arrhythmias as condition warrants

Medications

Oral Glucose

Adults:
15 G buccally or PO

Pediatrics:
• 0.5 G/kg buccally or PO

Dextrose

Adults: D50 or D10

- 25 G slow IVP
- Pediatrics: D25 or D10
- D 25 -1 G/kg
 - (4 ml/kg)
 - D10 – 1G/kg
 - (10 ml/kg)


Glucagon

Adults:
• 1 mg IM

Pediatrics:
• < 6 y/o- 0.5 mg IM
• > 6 y/o – 1 mg IM


Naloxone

Adult and pediatric:
• 0.5 - 2 mg IV, IM, IN
titrate for effect –
repeat as needed

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APPARENT DEATH		Page 1 of 1 Revised Date: June 18, 2020

- ▶ Follow Initial Treatment Protocol
- ▶ Apparent death indications can be one or more of the following:
 - ▶ Signs of trauma are conclusively incompatible with life.
 - ▶ There is physical decomposition of the body.
 - ▶ There is rigor mortis
 - ▶ There is dependent lividity
- ▶ If death is confirmed, then continue as follows:
 - ▶ No resuscitation attempt is required
 - ▶ If any of the findings are different than those described above, resuscitation should be initiated and medical control contacted for direction.
 - ▶ Local law enforcement will be contacted. They will make contact with the county Medical Examiner
 - ▶ Consider deceased a possible organ donor, and follow guidelines as approved by medical direction. (appendix G). If cleared by Law Enforcement, contact Iowa Donor Network at 800-831-4131.
 - ▶ At least one EMS provider should remain at the scene until a law enforcement officer or representative from the medical examiner's office is present.
 - ▶ Provide psychological support for grieving survivors.
 - ▶ Consider for Clive Chaplin to be dispatched to scene of incident.
 - ▶ Document reason no resuscitation was initiated.
 - ▶ Consider use of cardiac monitor to document asystole (ALS).
 - ▶ If EMS providers have provided treatment and leave the scene prior to ME Office examiner arrival, leave contact information for the crew in case they have questions.
- ▶ Preserve the crime scene if necessary.

Medications

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BEHAVIORAL EMERGENCIES	Page 1 of 2	Revised Date: April 6, 2018

- Follow Initial Treatment Protocol. (BE ALERT for your own safety!)
- The Fire Department has an obligation to treat and transport patients who may be suffering from an illness or injury that impairs their ability to make an informed decision. These patients will often refuse treatment or transport to a medical facility. In circumstances where an acute illness or injury impairs a patient's ability to make an informed decision AND the patient is in need of medical treatment or evaluation to prevent further significant illness or injury, the patient shall be transported to an emergency department for further evaluation. There are certain circumstances where a patient's condition or behavior pose an immediate threat to the health and safety of themselves or others around them. In these circumstances, the patient should be safely and humanely restrained and continuously monitored during restraint. Patient restraint and transport "against will" should never be taken lightly. Every individual has a legal and moral right to refuse medical treatment, even if that refusal results in potential harm. It is our responsibility to make sure the patient is making an informed decision and that the patient causes no harm to his/herself or others as a result of their behavior.

Indications:


- Patients deemed unable to make an informed decision and are considered a harm to his/herself and others.
- Severe agitation / combativeness where provider safety is in question.

Contraindications:

- Patients who are able to make informed decisions and are not a threat to his/herself or others.

Procedure:

- Determine scene safety. Attempts to physically restrain a patient should be made (when possible) with law enforcement assistance.
- Determine that a potentially harmful condition exists. If the condition is immediately life-threatening, the patient should be treated and transported as soon as safely possible.
- **Determine patient's competency to make informed decision using the following:**
 - Is the patient alert and oriented to person, place, time?
 - Does the patient understand his/her illness or injury and the potential for adverse outcome?
 - Can the patient describe his/her condition to you?
 - Does the patient understand consequences (including death) of not treating his/her illness or injury?
 - Does the patient understand the alternatives to immediate care by EMS?
 - Does the patient have any physical findings suggestive of impaired physiology that could effect decision making (hypotension, hypoxia, head injury, alcohol / drug intoxication, evidence of CVA, symptoms of psychiatric decompensation).

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If based on provider assessment, the patient is not capable of making an informed decision (because of abnormalities defined above) AND the patient has a potentially harmful illness or injury, the patient should be extensively counseled regarding the need for medical care. If the patient STILL refuses further care / evaluation, or is a harm to him/herself or others, the patient should be physically restrained by EMS personnel (with law enforcement assistance, if available)

- Patient restraints may be implemented to patients who display behaviors that endanger themselves or others.
 - Physical restraints should be safe and humane. At no time should a patient be struck or managed in such a way as to purposefully impose pain. Restrain in a position that considers both comfort and safety. Assure your safety. Patient should not be maintained in a prone position or with hand cuffs attached to ankle cuffs behind the subjects back (i.e hog tie or hobble position.)
 - Without exception, care providers will thoroughly document on patient's care record the reason for restraint, the mental status exam, options attempted, and method of restraint.
- Chemical restraint (i.e. sedation) may be implemented in cases where physical restraints are either impractical or may result in further danger to the patient or emergency providers
 - Consider Ketamine
 - Consider Midazolam
- Obtain detailed history specific to Incident
 - Alcohol or drug use
 - Recent mental or physical stressors to patient.
 - Suicidal or homicidal ideation
 - Do not allow patient to be alone or unattended
 - Remove any items of danger including weapons.
 - History of mental illness or treatment.
- Assess and consider medical/trauma causes and treat with appropriate protocol(s).
- Detailed Physical Exam: additional assessment and treatment as situation permits.
 - Obtain a blood glucose level.
- Keep environment as calm/quiet as possible.
- Special Considerations
 - One EMS provider should assume control of situation and establish contact with patient to reduce confusion and minimize stress.
 - Use a calm, quiet voice, and talk to the patient. Be honest, direct, and non-threatening.
 - Move slowly, and explain what you are doing. Avoid remarks that could be perceived to be judgmental.
 - Transport patient to appropriate medical facility.

Medications

Midazolam (Versed)

Adult

- 2-5 mg IV or IM
- 5 – 10 mg IN
 - 1 ml per nare

Pediatric

0.3 mg / kg IV, IM or
Doses may be repeated as
necessary for combativeness

Ketamine

Adult

- 2 mg/kg IV, IM

Pediatric

- 3mg/kg IV, IM



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CARDIAC

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Acute Coronary Syndrome (ACS)

Acute Coronary Syndrome encompasses all patients who are experiencing any group of clinical symptoms compatible with acute myocardial ischemia. This is usually characterized by chest pain or discomfort, however consideration should also be given to patients with the following symptoms (angina equivalents)

- Unexplained respiratory distress.
- Atypical cardiac pain (i.e., shoulder, arm, or jaw pain in absence of chest pain, especially in women, patients having past cardiac history, diabetes, elderly, abdominal pain or irregular pulse).
- Nausea and/or vomiting
- Weakness
- Syncope

Basic Treatment Guidelines

- ▶ Follow initial care protocol
- ▶ If trauma related, refer to trauma protocol.
- ▶ Place patient in position of comfort, loosen tight clothing, and reassure.
- ▶ If signs of respiratory distress administer high flow oxygen. (Titrate to keep SpO₂ > 92%)
- ▶ Obtain 12 lead ECG; if suspicious for AMI, then transmit to receiving ED using Pulsara and initiate a cardiac alert
- ▶ Administer Aspirin, if the patient has not taken at least 162 mg in the past 24 hours
- ▶ Administer Nitroglycerin if:
 - chest pain consistent with angina
 - Systolic blood pressure (SBP) > 90 mm/Hg.
 - 12 lead ECG has been obtained
 - NO erectile dysfunction meds have been taken in the past 48hours (Viagra, Cialis, Levitra, Revatio)

Advanced Treatment Guidelines

- ▶ Consider Fentanyl for pain refractory to first nitroglycerin.
 - Titrate to effect with repeat doses every five minutes.
 - If any of the following occur, hold further administration of Fentanyl.
 - Respiratory depression
 - Pain is alleviated

Medications

Aspirin

- 81mg chewable tablets x4 orally

Fentanyl

- 25 - 100 mcg IVP, repeat every 5 min.

Nitroglycerin

- 0.4 mg sublingual.
- Repeat 3 – 5 minutes to.
- Maintain SBP > 90 mmHg

Metoprolol (Lopressor)

- 5 mg slow IVP every 5 minutes.
- Maintain SBP > 90 mmHg and HR > 60 beats / minute.



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- ▶ Consider metoprolol if:
 - Angina is suspected with hypertension and/or tachycardia (hyperdynamic state)
 - No cocaine use in past 24 hours
 - AMI is suspected with noted elevation in two contiguous leads,
- ▶ If time allows, establish second IV line and infuse as patient condition warrants.
- ▶ If time allows, obtain follow-up ECG.

Special Considerations

- ▶ Patients should be transported to a hospital with a cardiologist and cardiac catheterization capability (listed alphabetically) Iowa Lutheran, Iowa Methodist, MercyOne Medical Center Des Moines or MercyOne West Des Moines.
- ▶ 12 lead ECG should be transmitted via Pulsara to receiving hospital as early as time allows

Chest Pain (non-cardiac)

- ▶ Follow Initial Treatment Protocol
- ▶ If trauma related, refer to trauma protocol
- ▶ Place patient in position of comfort, loosen tight clothing, and reassure
- ▶ Monitor vital signs and initiate cardiac monitoring
- ▶ Obtain 12 lead ECG; if suspicious for AMI, treat as ACS above
- ▶ Assess for other potential life threatening causes (aortic aneurysm, pulmonary embolus, pneumothorax, cardiac tamponade)
- ▶ Check for history of illicit drugs, such as Cocaine and Methamphetamine use
 - Consider utilization of midazolam, (Medical Control)

Congestive Heart Failure

- Follow "Initial Protocols For All Patients"
- Place patient in position of comfort, typically sitting up, loosen tight clothing and reassure
- Consider use of CPAP
- Consider nitroglycerin

Medications

Aspirin

- 81mg chewable tablets x4 orally

Fentanyl

- 25 - 100 mcg IVP, repeat every 5 min.

Nitroglycerin

- 0.4 mg sublingual.
- Repeat 3 – 5 minutes
- Maintain SBP > 90 mmHg

Metoprolol (Lopressor)

- 5 mg slow IVP every 5 minutes.
- Maximum of three doses (15 mg)
- Maintain SBP > 90 mmHg and HR > 60 beats / minute.

Midazolam (Versed)

Adults:

- 1 – 2mg IV, IN or IM
- Repeat prn – max 5 mg

Pediatrics:

- 0.3 mg/kg IV, IM or IN
- Repeat prn – max 5mg



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Cardiac Dysrhythmias

- Treat all dysrhythmias according to American Heart Association (AHA) guidelines for ACLS or PALS care.
- Record a rhythm strip to assist in the interpretation of the dysrhythmias, and before and after all treatment.
- A 12-lead ECG should be obtained on every patient presenting with a dysrhythmias unless doing so might cause a significant delay in emergent intervention (cardioversion, pacing, urgent airway or perfusion issues, etc). A 12-lead ECG should also be obtained following successful dysrhythmias conversion.
- Conduct an appropriate history/physical examination, determine patient stability, and treat appropriately.
- Consider non-cardiac causes for any dysrhythmias and treat those underlying causes according to the appropriate protocol.
- STABLE: level of consciousness is appropriate and there are no significant signs of inadequate perfusion (see below)
- STABLE PATIENTS REGARDLESS OF DYSRHYTHMIA:
 - Observe, continue searching for underlying cause or causes, continue reassessment of stability, and transport
 - Note: This is the basic treatment for stable dysrhythmias. Please refer AHA guidelines to additional treatments under the category for each dysrhythmia.
- UNSTABLE: one or more signs/symptoms of inadequate perfusion; examples include: altered level of consciousness, hypotension, chest pain, dyspnea, pulmonary edema, etc.
 - Narrow complex – consider adenosine prior to cardioversion
 - Wide complex – proceed to electrical therapy

WHEN ELECTRICAL THERAPY IS INDICATED:

- Midazolam for sedation as indicated
- Fentanyl for analgesia as indicated
- Adult energy levels for the Philips MRx are as follows: 100, 150, 200J
- Adult energy levels for the Zoll (X and E-Series) are as follows: 70, 120, 150 200J.
- Pediatric energy levels remain 2 to 4J/kg respectively and are not monitor specific
- When various methods of QRS sensing have failed while attempting to perform synchronized cardioversion, the patient should be defibrillated at the appropriate energy setting.
- If a dysrhythmia recurs following successful electrical therapy, utilize the energy level that previously converted the patient.

Medications

Amiodarone

Adult

- 150 mg slowly IV over 10 minutes

Pediatric

- 5 mg/kg slowly over 20 – 60 minutes if perfusing rhythm

Adenosine

Adult

- 6 mg rapid IV push; may repeat at 12 mg rapid IV push

Pediatric

- 0.1 mg/kg (max 6 mg) rapid IV push; may repeat at 0.2 mg/kg (max 12 mg) rapid IV push

Magnesium sulfate

Adult

- 1-2 G slowly IV over 10 minutes

Pediatric

- 25 – 50 mg/kg IV over 10 – 20 minutes;
- 25 – 50 mg/kg slow IVP in torsades. Max dose 2G

Atropine

Adult

- 0.5mg IV, repeat as needed to maximum 3 mg

Pediatric

- 0.02 mg/kg IV/IO

Epinephrine – with online medical direction

Adult

- 2-10 mcg/min IV infusion or 5-10 mcg IV push

Pediatric

- 0.1–1 mcg/kg/min IV infusion or 5-10 mcg IV push

Fentanyl

Adult

- 25 –100mcg slow IVP, IN

Pediatric

- 1-2 mcg/kg IVP with titration of 1 mcg/kg every 3-5 minutes as needed for pain.



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- Alternate route IN (20-40 mcg)

Midazolam

Adult

- 1 – 2 mg slow IVP/IN with titration of 1mg every 5 minutes.
- Maximum dose of 5mg.


Pediatric

- 0.3 mg / kg IV, IM or IN
- Repeat prn – max 5mg

Ketamine

Adult and Pediatrics

- 2 mg/kg IV/IM

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CARDIAC ARREST	Page 1 of 1	Revised Date: April 22, 2016

Basic Treatment Guidelines

- Follow Initial Treatment Protocol
- Provide CPR according to current performance guidelines.

Advanced Treatment Guidelines

- Establish IV or IO access, infuse as patient condition indicates.
- Follow current AHA ACLS guidelines.

Special Considerations

- ◆ Successful resuscitations have been documented after prolonged periods of cold water submersion.
- ◆ Victims of traumatic cardiac arrest have a dismally low survival rate. Careful evaluation of the risk versus benefit of transporting a traumatic cardiac arrest victim should be made by the most experienced provider on scene.



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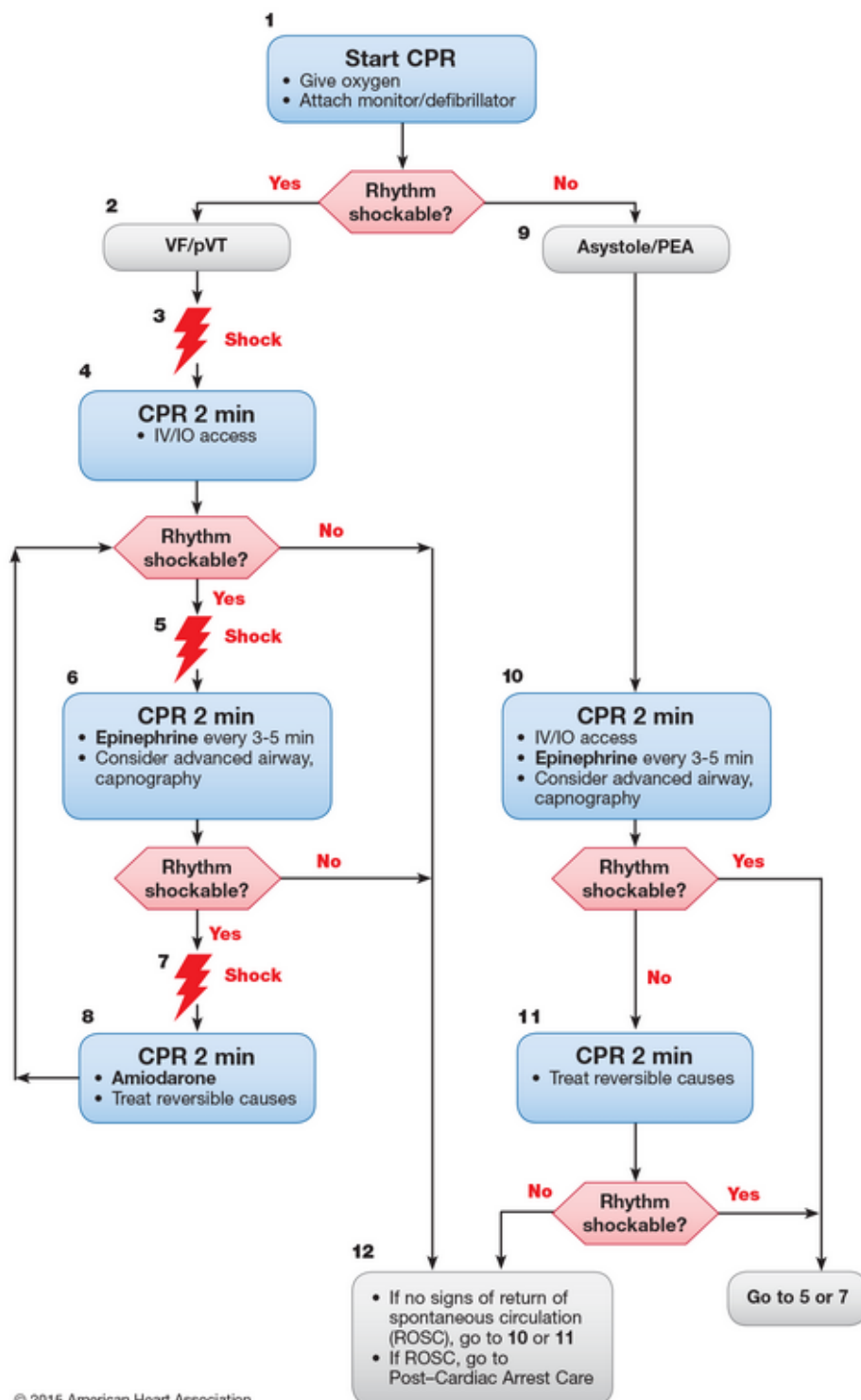
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ACLS ALGORITHMS

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Revised Date:
June 18, 2020

Adult Cardiac Arrest Algorithm—2015 Update



CPR Quality

- Push hard (at least 2 inches [5 cm]) and fast (100-120/min) and allow complete chest recoil.
- Minimize interruptions in compressions.
- Avoid excessive ventilation.
- Rotate compressor every 2 minutes, or sooner if fatigued.
- If no advanced airway, 30:2 compression-ventilation ratio.
- Quantitative waveform capnography
 - If PETCO₂ <10 mm Hg, attempt to improve CPR quality.
- Intra-arterial pressure
 - If relaxation phase (diastolic) pressure <20 mm Hg, attempt to improve CPR quality.

Shock Energy for Defibrillation

- **Biphasic:** Manufacturer recommendation (eg, initial dose of 120-200 J; if unknown, use maximum available. Second and subsequent doses should be equivalent, and higher doses may be considered.
- **Monophasic:** 360 J

Drug Therapy

- **Epinephrine IV/IO dose:** 1 mg every 3-5 minutes
- **Amiodarone IV/IO dose:** First dose: 300 mg bolus. Second dose: 150 mg.

Advanced Airway

- Endotracheal intubation or supraglottic advanced airway
- Waveform capnography or capnometry to confirm and monitor ET tube placement
- Once advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions

Return of Spontaneous Circulation (ROSC)

- Pulse and blood pressure
- Abrupt sustained increase in PETCO₂ (typically ≥40 mm Hg)
- Spontaneous arterial pressure waves with intra-arterial monitoring

Reversible Causes

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



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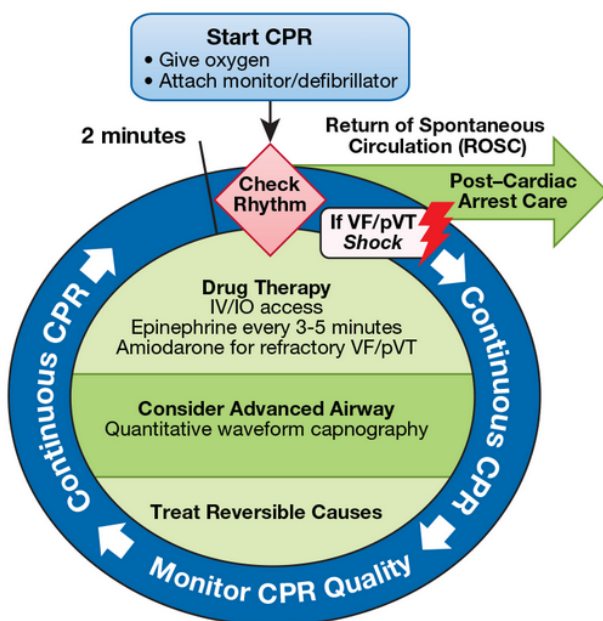
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Adult Cardiac Arrest Circular Algorithm— 2015 Update



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CPR Quality

- Push hard (at least 2 inches [5 cm]) and fast (100-120/min) and allow complete chest recoil.
- Minimize interruptions in compressions.
- Avoid excessive ventilation.
- Rotate compressor every 2 minutes, or sooner if fatigued.
- If no advanced airway, 30:2 compression-ventilation ratio.
- Quantitative waveform capnography
 - If $PETCO_2$ <10 mm Hg, attempt to improve CPR quality
- Intra-arterial pressure.
 - If relaxation phase (diastolic) pressure <20 mm Hg, attempt to improve CPR quality.

Shock Energy for Defibrillation

- **Biphasic:** Manufacturer recommendation (eg, initial dose of 120-200 J); if unknown, use maximum available. Second and subsequent doses should be equivalent, and higher doses may be considered.
- **Monophasic:** 360 J

Drug Therapy

- **Epinephrine IV/IO dose:** 1 mg every 3-5 minutes
- **Amiodarone IV/IO dose:** First dose: 300 mg bolus. Second dose: 150 mg.

Advanced Airway

- Endotracheal intubation or supraglottic advanced airway
- Waveform capnography or capnometry to confirm and monitor ET tube placement
- Once advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions

Return of Spontaneous Circulation (ROSC)

- Pulse and blood pressure
- Abrupt sustained increase in $PETCO_2$ (typically ≥ 40 mm Hg)
- Spontaneous arterial pressure waves with intra-arterial monitoring

Reversible Causes

- | | |
|---------------------------|-------------------------|
| • Hypovolemia | • Tension pneumothorax |
| • Hypoxia | • Tamponade, cardiac |
| • Hydrogen ion (acidosis) | • Toxins |
| • Hypo-/hyperkalemia | • Thrombosis, pulmonary |
| • Hypothermia | • Thrombosis, coronary |



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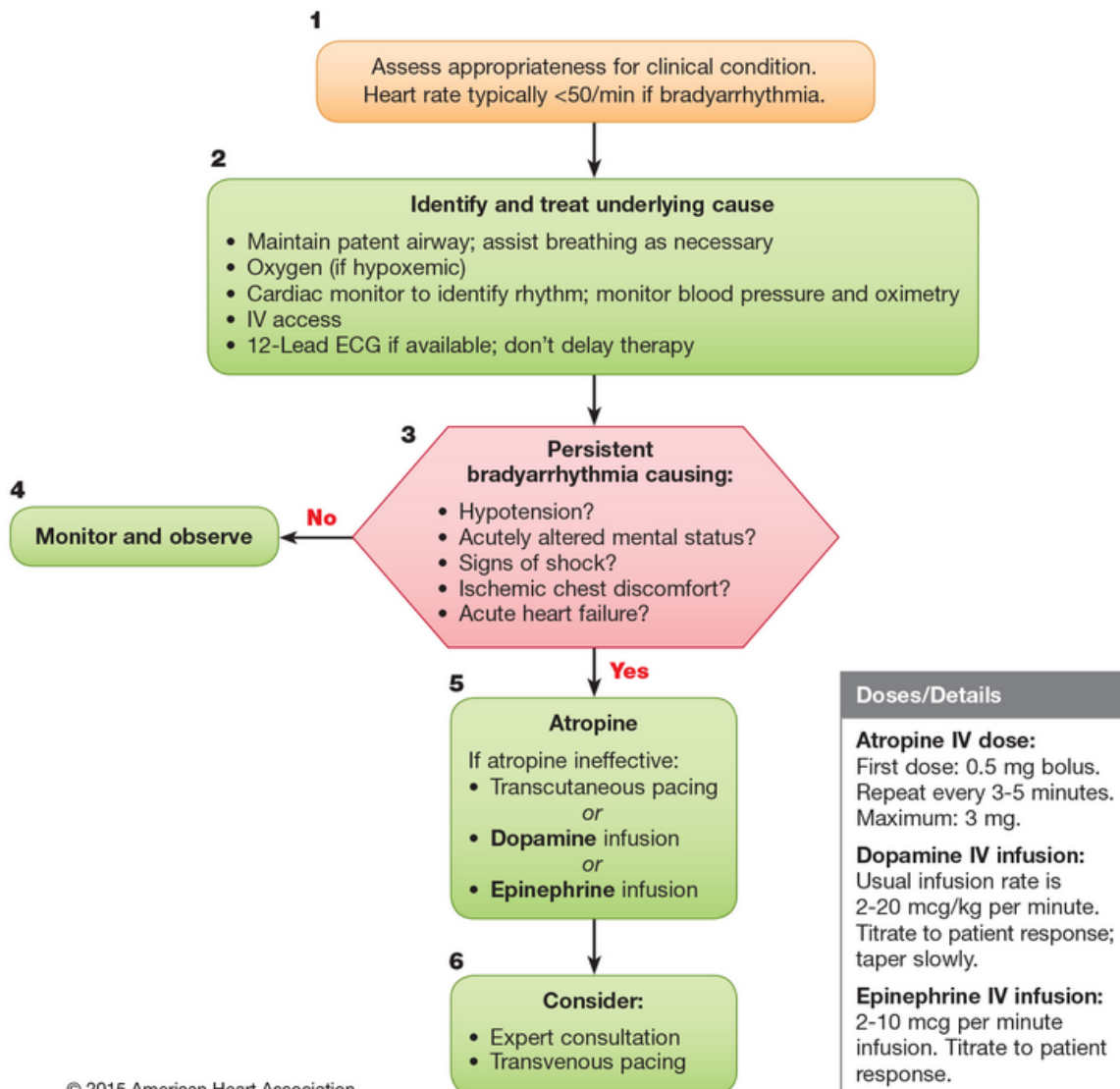
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Adult Bradycardia With a Pulse Algorithm





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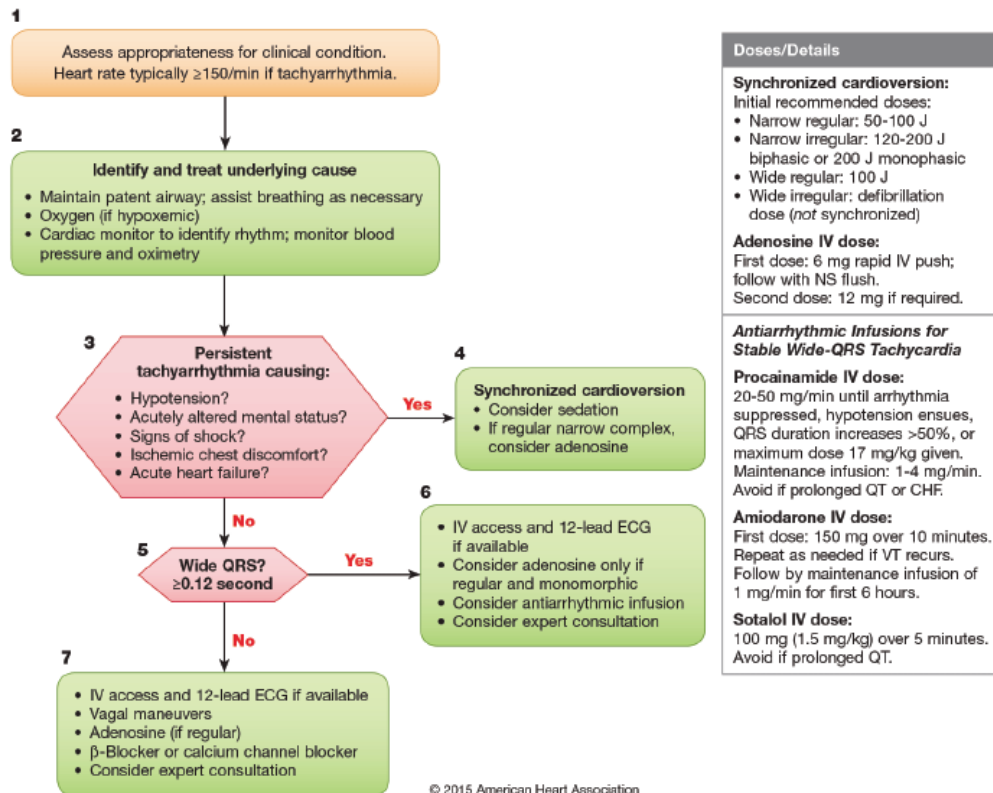
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Figure 4: Adult Tachycardia With a Pulse Algorithm

Adult Tachycardia With a Pulse Algorithm





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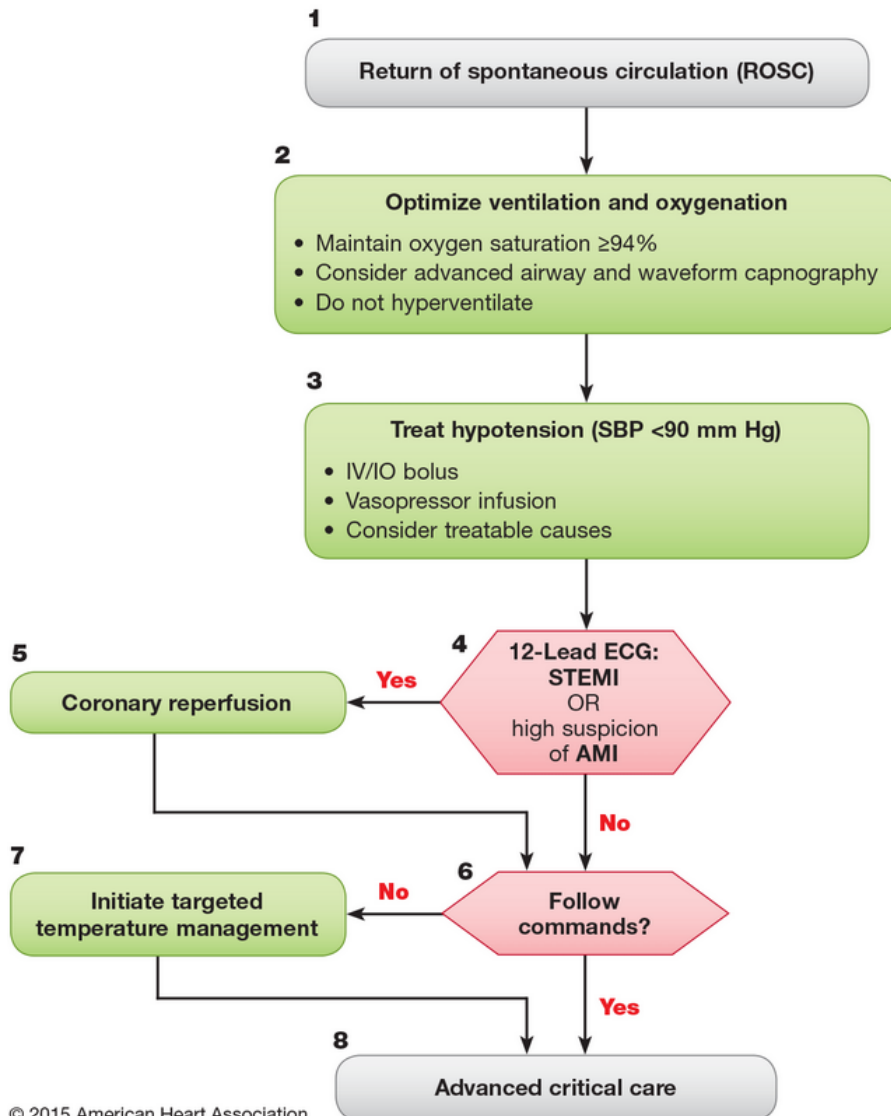
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Adult Immediate Post-Cardiac Arrest Care Algorithm—2015 Update



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Doses/Details

Ventilation/oxygenation:
Avoid excessive ventilation. Start at 10 breaths/min and titrate to target PETCO₂ of 35-40 mm Hg. When feasible, titrate FIO₂ to minimum necessary to achieve SpO₂ $\geq 94\%$.

IV bolus:
Approximately 1-2 L normal saline or lactated Ringer's

Epinephrine IV infusion:
0.1-0.5 mcg/kg per minute (in 70-kg adult: 7-35 mcg per minute)

Dopamine IV infusion:
5-10 mcg/kg per minute

Norepinephrine IV infusion:
0.1-0.5 mcg/kg per minute (in 70-kg adult: 7-35 mcg per minute)

Reversible Causes

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



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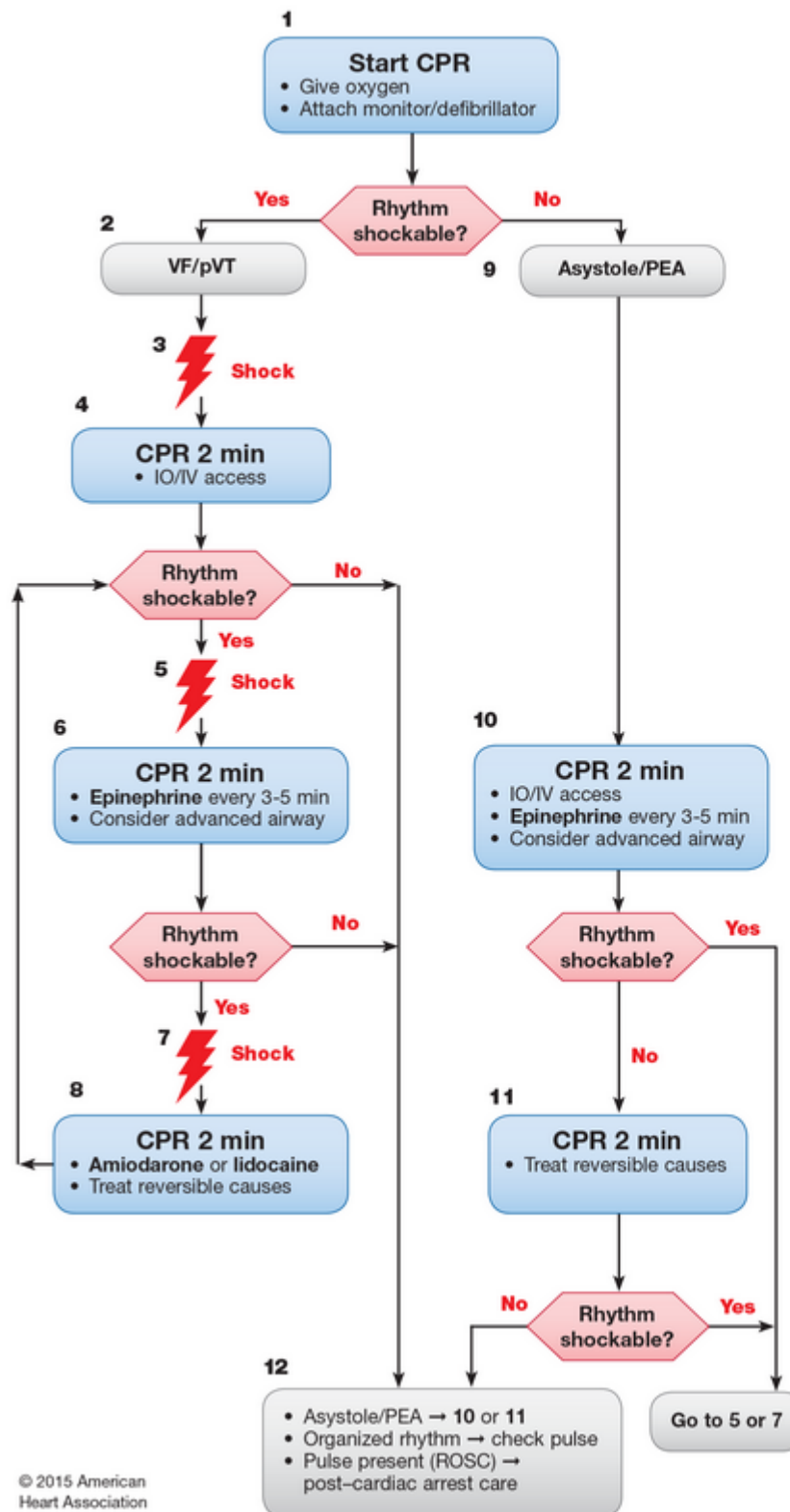
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PALS ALGORITHMS

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Revised Date:
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Pediatric Cardiac Arrest Algorithm—2015 Update



CPR Quality

- Push hard ($\geq \frac{1}{2}$ of anteroposterior diameter of chest) and fast (100-120/min) and allow complete chest recoil.
- Minimize interruptions in compressions.
- Avoid excessive ventilation.
- Rotate compressor every 2 minutes, or sooner if fatigued.
- If no advanced airway, 15:2 compression-ventilation ratio.

Shock Energy for Defibrillation

First shock 2 J/kg, second shock 4 J/kg, subsequent shocks ≥ 4 J/kg, maximum 10 J/kg or adult dose

Drug Therapy

- **Epinephrine IO/IV dose:** 0.01 mg/kg (0.1 mL/kg of 1:10 000 concentration). Repeat every 3-5 minutes. If no IO/IV access, may give endotracheal dose: 0.1 mg/kg (0.1 mL/kg of 1:1000 concentration).
- **Amiodarone IO/IV dose:** 5 mg/kg bolus during cardiac arrest. May repeat up to 2 times for refractory VF/pulseless VT.
- **Lidocaine IO/IV dose:** Initial: 1 mg/kg loading dose. Maintenance: 20-50 mcg/kg per minute infusion (repeat bolus dose if infusion initiated >15 minutes after initial bolus therapy).

Advanced Airway

- Endotracheal intubation or supraglottic advanced airway
- Waveform capnography or capnometry to confirm and monitor ET tube placement
- Once advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions

Return of Spontaneous Circulation (ROSC)

- Pulse and blood pressure
- Spontaneous arterial pressure waves with intra-arterial monitoring

Reversible Causes

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



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Pediatric Bradycardia With a Pulse and Poor Perfusion Algorithm

1

Identify and treat underlying cause

- Maintain patent airway; assist breathing as necessary
- Oxygen
- Cardiac monitor to identify rhythm; monitor blood pressure and oximetry
- IO/IV access
- 12-Lead ECG if available; don't delay therapy

2

Cardiopulmonary compromise?

- Hypotension
- Acutely altered mental status
- Signs of shock

No

Yes

3

CPR if HR <60/min
with poor perfusion despite
oxygenation and ventilation

4a

- Support ABCs
- Give oxygen
- Observe
- Consider expert consultation

No

4

Bradycardia persists?

Yes

5

- **Epinephrine**
- **Atropine** for increased vagal tone or primary AV block
- Consider transthoracic pacing/transvenous pacing
- Treat underlying causes

6

If pulseless arrest develops, go to Cardiac Arrest Algorithm

Doses/Details

Epinephrine IO/IV dose:
0.01 mg/kg (0.1 mL/kg of 1:10 000 concentration). Repeat every 3-5 minutes. If IO/IV access not available but endotracheal (ET) tube in place, may give ET dose: 0.1 mg/kg (0.1 mL/kg of 1:1000).

Atropine IO/IV dose:
0.02 mg/kg. May repeat once. Minimum dose 0.1 mg and maximum single dose 0.5 mg.



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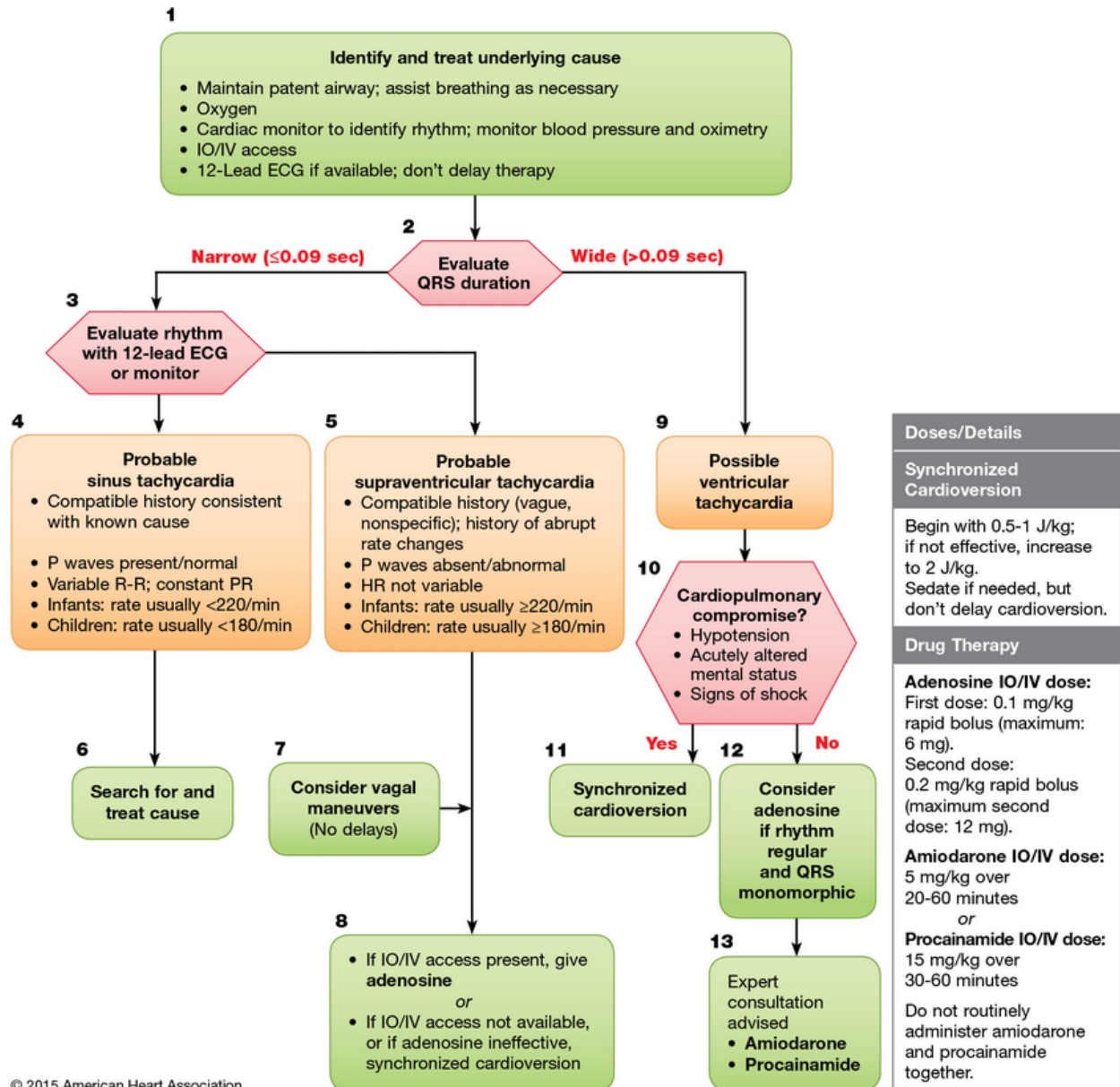
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Pediatric Tachycardia With a Pulse and Poor Perfusion Algorithm





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HYPO / HYPERGLYCEMIA

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Follow Initial Treatment Protocol

Determine previous history of insulin-dependent or non-insulin dependent diabetes.

Hypoglycemia: (suspected or confirmed, based on history and/or signs & symptoms. (typically < 60 mg/dl)

Treatment – note IV treatment can/should be titrated to patient response

- ▶ Oral glucose agents to patients who are not at risk for aspiration
- ▶ Dextrose 25% for infants and children and repeat as indicated
- ▶ Dextrose 50% for adults
- ▶ Dextrose 10% if other concentrations are not available
- ▶ Glucagon if IV access is unobtainable

Providers must address the following in cases of a patient refusal of transport

- ▶ Patients receiving oral diabetes management medications may have a relapse of hypoglycemia – they must be left with a responsible person to watch them
- ▶ No apparent disease process other than hypoglycemia
- ▶ Patient is without further complaint or symptoms
- ▶ Blood Glucose has been corrected to >80
- ▶ Patient is capable of eating complex carbohydrates/protein after treatment
- ▶ A responsible adult is present to monitor patient
- ▶ If a medication dosing/pump error contributed to the hypoglycemia, the problem has been identified and corrected
- ▶ Patient's insulin dose has not changed in previous 10 days
- ▶ Patient has been instructed to:
 - Contact PCP as soon as possible
 - Withhold insulin dosing until contact with PCP
 - Recheck Blood Glucose every hour for 2 checks, then every 2 hours for 2 checks

Hyperglycemia: (Confirmed BG >250)

- ▶ Consider fluids if DKA is suspected
- ▶ Consider potential causes (MI, PE, trauma, other major metabolic stressor)
- ▶ Perform 12 lead ECG

Medications

Oral glucose:

- 15 G PO

Dextrose:

- Age <6: D25% 1G/kg IV/IO (4 ml/kg)
- Age <6: D10% 1G/kg IV/IO (10 ml/kg)

Dextrose:


- Age ≥6: D50% 25G IV/IO
- Age >6: D10% 25G IV/IO (250 ml)

Glucagon:

- Age <6: 0.5 mg IM
- Age ≥6: 1 mg IM

Fluid Challenge

- <1 mo: 10 ml/kg
- ≥1 mo: 20 ml/kg

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HYPERTHERMIA	Page 1 of 1	Revised Date: June 18, 2020

Exposure to Heat

- ▶ Follow Initial Treatment Protocol.
- ▶ Remove the patient from the hot environment and place in a cool environment.
- ▶ Loosen or remove clothing.
- ▶ Place in recovery position

Special Considerations

- ▶ Not all heat emergencies are environmental in nature. They may have febrile or neurological etiology.
- ▶ High body temperature may cause mental status changes and / or seizures.

Basic Treatment Guidelines

- Consider cooling patient by applying water and fanning, and apply cool packs to neck, groin and armpits if temperature greater than 104 degrees Fahrenheit
- If patient is alert, stable and not nauseated, have the patient slowly drink small sips of water.
- If the patient is unresponsive or is vomiting, transport to an appropriate medical facility

Advanced Treatment Guidelines

- If patient's condition indicates, establish IV.
- For dehydration therapy, consider fluid challenge 20 ml/kg until vitals stable
- Monitor EKG and treat dysrhythmias following the appropriate protocol(s).

Medications



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HYPOTHERMIA

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Exposure to Cold:

- ▶ Follow Initial Treatment Protocol
- ▶ Remove the patient from the cold environment - protect from further heat loss.
- ▶ Remove wet clothing and cover with blanket, including scalp, and keep warm.
- ▶ Handle the patient gently; cardiac dysrhythmias may occur due to increased myocardial irritability
- ▶ Do not allow the patient to exert them self.
- ▶ The patient should not be given anything by mouth.
- ▶ Do not massage extremities.
- ▶ Do not re-expose to the cold.
- ▶ Remove jewelry.

Special Considerations

- ▶ Unwarmed high flow oxygen may cause hypothermia.
- ▶ The hypothermic heart may be unresponsive to defibrillation and medications. After failed initial resuscitative measures, avoid defibrillation until temp is greater than 86 degrees Fahrenheit.

Basic Treatment Guidelines

- Obtain blood glucose level if altered LOC.
- Monitor ECG
- Apply heat packs to groin, axilla, neck as needed for rewarming

Advanced Treatment Guidelines

- Monitor EKG and treat dysrhythmias following Cardiac protocol.

Medications



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
July 1, 2020

MEDICATION ASSISTED AIRWAY MANAGEMENT

Page 1 of 2

Date Last Revised
June 18, 2020

Indications

1. Conscious patient in severe respiratory failure requiring ventilatory assistance or control.
2. Complete obstruction of the airway appears eminent.
3. Provide control of the airway of head injured patients with signs of increased intracranial pressure (ie posturing, seizure, patterned resp)
4. Inability of patient to protect airway

Contraindications

1. Inability to oxygenate or ventilate using BVM device

Relative Contraindications to paralytics

1. Patients with hyperkalemic states: renal failure, crush injuries > 72 hrs old
2. Patients with muscle wasting conditions: ALS, myasthenia gravis, MD, spinal cord injury resulting in paralysis.
3. Anticipated difficult intubation or severe maxillo-facial trauma
4. Known or suspected pre-existing hyperkalemia

Preparation

- 1) Prepare equipment
 - Oxygen
 - BVM / Ventilator Endotracheal tube and holder
 - Prepare medications
 - Suction
 - Waveform capnography
 - Secondary Airway options (backup plan)
 - a. Examples include, but not limited to: King Vision, King LT, Bougie, cricothyrotomy
- 2) Pre-oxygenate with 100% O₂ via NRM for 1-2 minutes
- 3) Assist with ventilations as needed prior to medications
- 4) Patent IV access
- 5) SP0₂, capnography and cardiac monitoring.
- 6) Administer atropine if bradycardic or pt. is < 2 y/o
- 7) Administer fentanyl
- 8) Administer one of the sedative choices below:
 - a) etomidate (best all around choice)
 - b) ketamine (if hypotensive, severe bronchoconstriction or etomidate not available)
 - c) midazolam (last choice)
- 9) Consider succinylcholine
- 10) Place patients head in a sniffing position unless c-spine injury is suspected.
- 11) Perform endotracheal intubation
- 12) Confirm ETT placement using two techniques and waveform capnography
- 13) Secure tube with appropriate device
- 14) Consider use of cervical collar to help maintain tube placement
 - a) If used, ensure documentation is included in the hospital copy of the written PCR
- 15) Consider ketamine or midazolam as needed for sedation

Medications

Fentanyl:

- all ages: 1 mcg/kg IV

Atropine:

- Adult - 0.5 mg IV
- Peds – 0.02 mg/kg IV

Etomidate:

- all ages: 0.3 mg/kg IV

Midazolam:

- all ages: 1-5 mg IV prn sedation

Ketamine:

- all ages: 2 mg/kg IV

Succinylcholine:

- all ages: 2 mg/kg IV



CLIVE FIRE DEPARTMENT EMS CLINICAL PROCEDURES

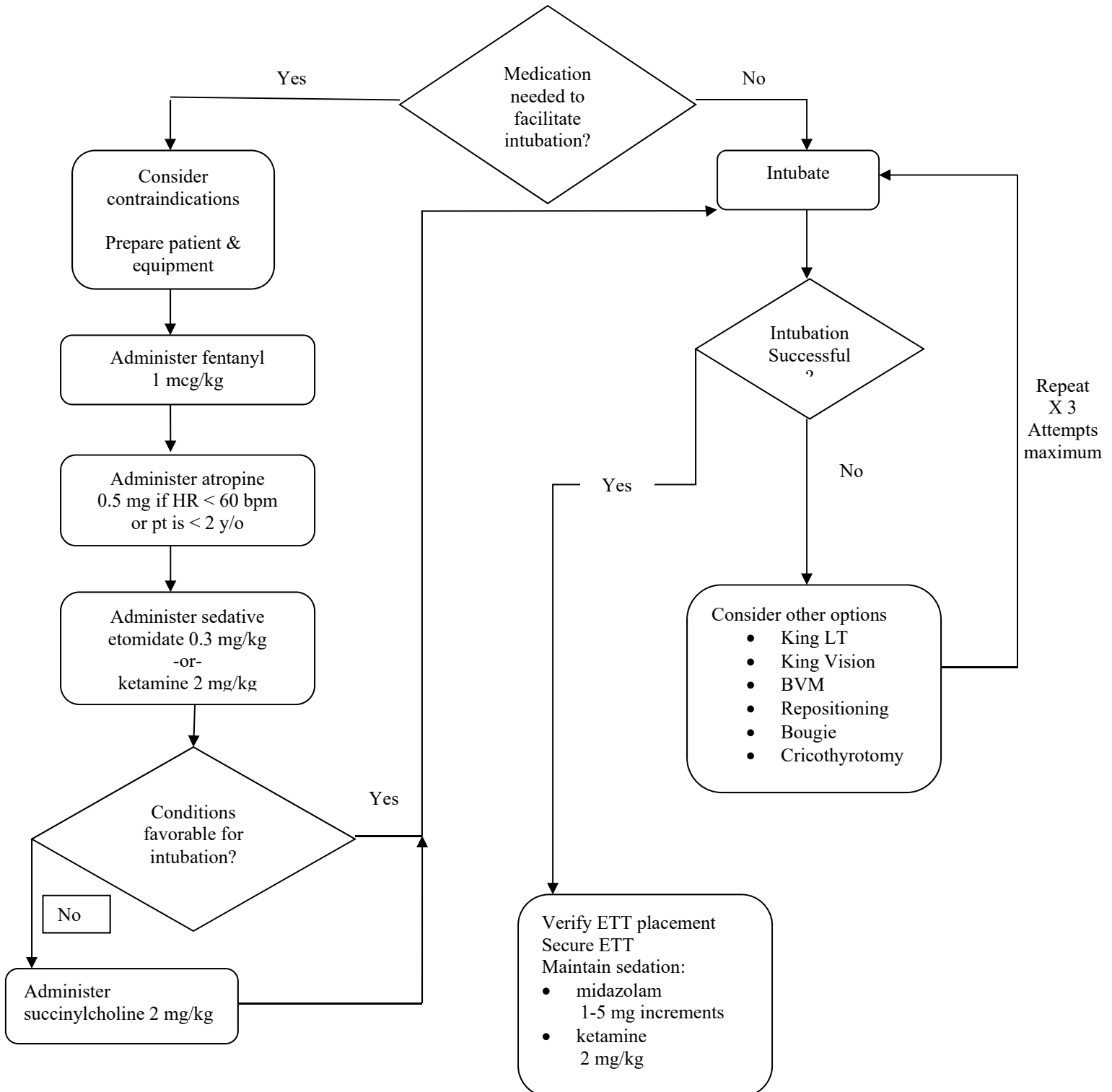
Effective Date:
June 1, 2016


MEDICATION ASSISTED AIRWAY MANAGEMENT

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Date Last Revised
December 15, 2013

Medicated Airway Management Protocol



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NAUSEA AND VOMITING		Page 1 of 1 Date Last Revised: June 18, 2020

When treating patients with certain medical conditions, nausea and vomiting may be present, and in many cases, the nausea and vomiting may be causing patients more distress than the actual illness itself. Providing relief to these patients will be beneficial. Possible medical conditions that may be present but are not limited to:

- AMI
- Chemotherapy
- Flu
- Pancreatic and gall bladder disease
- Inner ear disorders
- GI bleeding
- Patients that may become nauseated due to motion sickness

Remember that nausea and vomiting are a symptom and may be due to a serious underlying trauma or medical condition. It is important to obtain a thorough medical history on all patients to ensure that a more serious condition does not exist. Do not hesitate to consult with medical control.

Basic Treatment Guidelines

1. Follow Initial Treatment Protocol
2. If other conditions exist refer to appropriate protocol
3. Transport in a position of comfort
4. Be alert for airway compromise caused by vomiting
5. Keep the patient NPO

Advanced Treatment Guidelines

1. If patient condition warrants, establish IV access, infuse as patient condition indicates
2. Consider cardiac monitoring
3. Consider 12-lead ECG
4. Consider ondansetron (Zofran)

Medications


Ondansetron (Zofran)

Adult

- 4 mg IV / PO – may repeat every 5 minutes as necessary

Pediatric

- 0.1 mg/kg IV/IM
- Max dose 4 mg

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OBSTETRICS		Page 1 of 2 Revised Date: June 18, 2020

Uncomplicated Childbirth

- ▶ Follow Initial Treatment Protocol
- ▶ If delivery is imminent with crowning, prepare for delivery and immediate transport post delivery.
- ▶ Prepare equipment and patient for normal cephalic delivery.
- ▶ Have mother lie with knees drawn up and spread apart.
- ▶ Elevate buttocks - with blankets or pillow.
- ▶ Create sterile field around vaginal opening with sterile towels or paper barriers.
- ▶ When the infant's head appears during crowning, place fingers on bony parts of skull (not fontanel or face) and exert very gentle pressure to prevent explosive delivery. Use caution to avoid fontanels.
- ▶ If the amniotic sac does not break, or has not broken, use an instrument to puncture or twist the sac to rupture and push it away from the infant's head and mouth as they appear.
- ▶ When the infant's head appears during crowning, place fingers on bony part of skull (not on fontanels or face) and exert very gentle pressure to prevent explosive delivery. Use caution to avoid pressing on fontanels.
- ▶ As the infant's head is delivered, determine if the umbilical cord is around the infant's neck; if it is, apply gentle pressure to the infant's head to remove pressure from the cord, and slip the cord over the head. If cord cannot be removed and entire head is delivered, then clamp and cut the cord
- ▶ After the infant's head is delivered, support the head; suction the mouth two or three times and the nostrils. Use caution to avoid contact with the back of the mouth.
- ▶ Deliver baby
- ▶ Observe for delivery of placenta. Wrap placenta in plastic bag; transport placenta to hospital with mother.
- ▶ Gently massage mother's lower abdomen to assist uterine contraction
- ▶ Consider fentanyl for post-partum pain
- ▶ Record time of delivery.


Care of Newborn Patient

- ▶ Stimulate the newborn to breathe. Continue to stimulate newborn if not breathing by flicking soles of feet, or rubbing infants back. If the newborn does not begin to breathe or continues to have breathing difficulty after one minute, consider the need for additional measures.
- ▶ Ensure open and patent airway.
- ▶ Ventilate at a rate of 40 breaths per minute with room air. (no supplemental oxygen for first several minutes unless resuscitation is not successful)
- ▶ Reassess after 30 seconds.
- ▶ If the heart rate is <60 BPM after 30 seconds of adequate assisted ventilation, second rescuer should start chest compression with 2 thumbs and encircling fingers. (Follow AHA Guidelines for resuscitation)
- ▶ Prevent/minimize heat loss to maintain normothermia:
- ▶ Dry the infant thoroughly, removing the wet linen immediately after drying.

Medications

Fentanyl

- 25 - 100 mcg IVP or IN every 3-5 minutes as needed for pain.
- Maximum volume 1 ml/nare

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- ▶ Wrap infant in a blanket or silver swaddler. If mother and baby are stable, then allow mother to nurse, if desired. This helps stimulate uterine contractions for delivery of placenta.
- ▶ Repeat suctioning if necessary, and continue to monitor and support baby's respiratory/ circulatory status.
- ▶ Determine APGAR one minute and five minutes after delivery.

Obstetrical Emergencies

- ▶ Frank Breech Delivery (buttocks presentation):
 - Allow spontaneous delivery.
 - Support infant's body as it's delivered.
 - If head delivers spontaneously, proceed as in uncomplicated childbirth
 - If head DOES NOT deliver within 3 minutes, insert gloved hand into the vagina, keeping your palm TOWARD baby's face, form a "V" with your fingers and push wall of vagina AWAY from baby's face, thereby creating an airway for baby.
 - DO NOT REMOVE YOUR HAND UNTIL RELIEVED BY HOSPITAL STAFF.
- ▶ Limb Delivery
 - Place mother in head down position.
 - Administer high flow oxygen to mother.
- ▶ Prolapsed Cord:
 - Place mother in head down position, and administer high flow oxygen.
 - Insert gloved hand into the vagina and gently push up on the baby's head to take pressure off the cord. DO NOT REMOVE YOUR HAND UNTIL RELIEVED BY HOSPITAL STAFF.
 - Keep cord moist in sterile, saline soaked dressing
- ▶ Multiple Birth:
 - BE ALERT for the multiple birth possibility. Monitor your patient closely.
 - Deliver as you would for normal delivery of one infant.
 - Consider requesting additional resources.
- ▶ Heavy Vaginal Bleeding Following Delivery:
 - Control bleeding - massage lower abdomen firmly and intermittently.
 - Treat for Shock.
 - Consider putting baby to mother's breast. (i.e. Nurse the infant)
- ▶ Miscarriage / Spontaneous Abortion / Stillborn:
 - May result in profuse vaginal bleeding.
 - Provide emotional support to mother, and treat her as needed for shock.
 - Save all expelled tissues, and transport with patient.
- ▶ Pre-eclampsia and /or Eclampsia:
 - Place patient in a position of comfort, maintain a quiet environment with minimal movement and external stimuli.
 - Consider magnesium sulfate, 1 -2 G for symptomatic pt.
 - Treat seizures with Magnesium Sulfate 4 G slowly IV

Medications

Magnesium Sulfate – symptomatic patient

- 1 – 2 G IV slowly
IV over at least 10 minutes

Magnesium Sulfate – Seizures secondary to eclampsia

- 4 G IV slowly
over 15 min



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
July 1, 2020

PAIN AND/OR ANXIETY

Page 1 of 1

Date Last Revised
June 18, 2020

Indications:

- ▶ Palliative measures for a painful condition.
- ▶ Condition may include, but are not limited to, fractures, burns, and other traumatic injuries.

Basic Treatment Guidelines:

- ▶ Consider splinting, positioning, cold application and patient reassurance as appropriate.

Advanced Treatment Guidelines:

- ▶ Supplemental oxygen to maintain SpO₂ > 92%.
- ▶ Consider cardiac monitoring.
- ▶ Pain control - consider medications for pain relief (in no specific order)
 - Fentanyl
 - Ketamine
 - Ketorolac (Toradol)
- ▶ Anxiolytic / muscle spasm
 - Consider midazolam (Versed)
- ▶ Reversal of narcotic analgesia:
 - Consider naloxone (Narcan)

Contraindications for fentanyl and/or ketamine

- ▶ Significant depressed mental status
- ▶ Concern for respiratory drive or airway control
- ▶ Significant hypotension (systolic <90)

Contraindications for ketorolac

- ▶ Peptic ulcer disease; age <6 months; pregnancy, active bleeding

Complications:

- ▶ Hypotension.
- ▶ Loss of respiratory drive with need for reversal or airway control.

Medications

Fentanyl

Adults:

- 25 - 100 mcg IVP or IN every 3-5 minutes as needed for pain.
 - Maximum volume 1 ml/nare
- May also be given IM – repeat doses are every 10 – 15 minutes

Pediatric:

- 1-2 mcg/kg IVP with titration of 1 mcg/kg every 3-5 minutes as needed for pain.
- Alternate route IN (20-40 mcg)

Ketamine

Adult and pediatric

- 0.3 mg/kg IV/IM

Ketorolac (Toradol)

Adult:

- 30 mg IV/IM
- No repeat dosing

Pediatric: (over 6 months age)

- 1 mg/kg IV/IM
- No repeat dosing

Midazolam

Adult

- 1-2 mg slow IV or IM/IN
- Repeat 1 mg every 5 min to max of 5 mg

Pediatric

- 0.3 mg/kg slow IV or IM/IN
- Repeat dose every 5 min to max of 5 mg

Naloxone (Narcan)

Adults:

- 0.5-2.0 mg IVP, IN or IM

Pediatrics:

- 0.1 mg/kg IVP, IN or IM



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
July 1, 2020

RESPIRATORY DISTRESS

Page 1 of 3

Date Last Revised
June 18, 2020

Breathing Difficulty

- ▶ If patient has a physician-prescribed, hand-held, metered-dose inhaler:
 - Assure medication is prescribed for patient.
 - Is patient alert enough to take treatment?
 - Check expiration date.
 - Shake inhaler vigorously several times.
 - Have patient exhale as deeply as possible and put lips around inhaler opening.
 - Depress inhaler and have patient slowly inhale as deeply as possible; have them hold their breath as long as possible to facilitate medication absorption.
- ▶ Replace oxygen and allow patient to breathe a few times.
- ▶ Reassess patient and repeat second dose if necessary per medical direction.

Basic Treatment Guidelines

- ▶ Follow Initial Treatment Protocol
- ▶ Titrate oxygen to maintain $SpO_2 \geq 92\%$, or patient's baseline oxygen saturation, if known
- ▶ Place patient in position of comfort; loosen any restrictive clothing

Advanced Treatment Guidelines

Allergic Reaction

- ▶ Treat according to **Allergic Reaction Protocol**.

Asthma Attack

- ▶ Keep the patient at rest.
- ▶ Place the patient in a sitting position, allowing for proper drainage from the mouth. It often helps if the patient can support himself by the forearms when in a sitting position.
- ▶ Provide emotional support.
- ▶ Consider albuterol
- ▶ Consider ipratropium
- ▶ Consider CPAP
- ▶ Consider epinephrine for severe, persistent bronchospasm
 - Use caution in administration to geriatric patient or patient with cardiac history. Stop epi administration immediately for resolution of symptoms, chest pain or dysrhythmia.
- ▶ Consider methylprednisolone or dexamethasone
- ▶ Consider magnesium sulfate IV for severe asthma refractory to other treatments

Medications

Albuterol

- 2.5mg via nebulizer- may repeat as needed

Ipratropium bromide (Atrovent)

- 0.5 mg via nebulizer – combined with albuterol for initial dose only

Epinephrine

Adults:

- 0.3 to 0.5 mg (1:1000) IM
- Contact Medical control for additional dosing.
- 0.3 to 0.5 mg (1:10,000) slow IVP

Pediatrics:

- 0.01mg/kg (1:1000) IM
- max of 0.3 mg (0.3 ml)
- Contact Medical control for additional dosing.

Methylprednisolone (SoluMedrol)

Adults:

- 125 mg IV/IM

Pediatrics:

- 1 mg/kg IV/IM

Dexamethasone (Decadron)

Adults:

- 10 mg IV/IM

Pediatrics:

- 0.15mg/kg IV/IM

Magnesium Sulfate

Adults:

- 1 – 2 G slowly IV over minimum 10 minutes

Pediatrics:

- 50 mg/kg slowly IV over minimum 20 minutes



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RESPIRATORY DISTRESS

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- Chronic Obstructive Pulmonary Disease (COPD)
 - ▶ Administer oxygen 2-4 liters per minute via nasal canula titrating for SpO₂ ≥ 92%.
 - ▶ Assist patient with administration of prescribed metered dose inhaler.
 - ▶ Ipratropium bromide combined with Albuterol as initial dose of nebulized treatment.
 - ▶ Albuterol nebulizer for additional nebulized treatment if needed.
 - ▶ Methylprednisolone or dexamethasone
 - ▶ Consider CPAP
 - ▶ If condition is life threatening, consider administration of:
 - Epinephrine
 - Caution: Administration to geriatric patient or patient with cardiac history. Stop epi administration immediately for resolution of symptoms, chest pain or dysrhythmia.
 - Magnesium Sulfate
 - Administer slowly for cases refractory to epinephrine

Croup (Stridor)

- ▶ Allow the patient to assume a position of comfort
- ▶ Assist patient with administration of prescribed Albuterol inhaler.
- ▶ Albuterol nebulizer for additional nebulized treatment if needed.
- ▶ Should the patient deteriorate into respiratory arrest, be prepared to support respirations according to current CPR guidelines.

Epiglottitis

- If signs and symptoms of epiglottitis are present in pediatric patient, allow patient to assume position of comfort. DO NOT attempt to assess or manage the patient unless clinical status deteriorates.

Hyperventilation

- ▶ Consider metabolic causes of hyperventilation and treat as appropriate
- ▶ Emotional support and coaching patient to slow / controlled breathing pattern.
- ▶ If unsuccessful with coaching techniques and patient becomes symptomatic (hyperesthesia, carpal / pedal spasms, etc.) may initiate expired air re-breathing techniques.

Medications

Albuterol

- 2.5mg via nebulizer- may repeat as needed

Ipratropium bromide (Atrovent)

- 0.5 mg via nebulizer – combined with albuterol for initial dose only

Epinephrine

Adults:

- 0.3 to 0.5 mg (1:1000) IM
- Contact Medical control for additional dosing.
- 0.3 to 0.5 mg (1:10,000) slow IVP

Pediatrics:

- 0.01 mg/kg (1:1000) IM max of 0.3 mg (0.3 ml)
- Contact Medical control for additional dosing.

Methylprednisolone (SoluMedrol)

Adults:

- 125 mg IV/IM

Pediatrics:

- 1 mg/kg IV/IM

Dexamethasone (Decadron)

Adults:

- 10 mg IV/IM

Pediatrics:

- 0.15mg/kg IV/IM

Magnesium Sulfate

Adults:

- 1 – 2 G slowly IV over minimum 10 minutes

Pediatrics:

- 50 mg/kg slowly IV over minimum 20 minutes



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
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RESPIRATORY DISTRESS

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Pulmonary Edema

- ▶ Cardiogenic pulmonary edema
 - Consider positive pressure ventilation utilizing high flow oxygen as indicated.
 - Consider nitroglycerin
 - Consider CPAP

Obstructed Airway

- ▶ If unable to ventilate, follow current AHA guidelines for obstructed airway.
- ▶ Consider direct laryngoscopy of airway in attempt to visualize obstruction and utilization of Mac Gill forceps to remove obstruction.
- ▶ Perform needle cricothyrotomy for airway obstruction unrelieved by less invasive means in the apneic patient.

Pneumothorax (Tension)

- ▶ Needle decompression for rapidly deteriorating patient.

Pneumonia

- IV Fluids – 250 ml bolus – repeat as needed for hypotension
- CPAP is contraindicated
- Follow Sepsis protocol as indicated by pt condition

Medications

Nitroglycerin

- 0.4 mg sublingual
- If SBP \geq 90 mmHg
- Repeat every 5 min PRN



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Effective Date:
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SEIZURE

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June 18, 2020

- ▶ Follow Initial Treatment Protocol.
- ▶ Protect patient from injury, by clearing area of all possible hazards.
- ▶ Look for underlying causes
 - Pre-existing seizure history
 - Head injury
 - Obtain blood glucose level; and treat according to **Hypoglycemia and Hyperglycemia** management protocol.
 - Meningitis / encephalitis
 - Obstetrics/Eclampsia – treat according to **Obstetrics** protocol
 - Fever
 - Drug interaction / overdose
- ▶ Apply cardiac monitor – treat arrhythmias according to Cardiac protocol
- ▶ Obtain 12 lead ECG
- ▶ Continuing seizures are a true LIFE-THREATENING emergency and require IMMEDIATE transport!
- ▶ Consider midazolam

Medications

Midazolam (Versed)

Adults:

- 2 mg IV or IM
Repeat prn for seizure control
- 5 mg IN

Pediatric:

- 0.3 mg/kg IV or IM up to 2 mg max singular dose
- 0.3 mg/kg IN up to 5 mg singular dose



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Effective Date:
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SEPSIS

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Date Last Revised:
June 3, 2016

Indications

If sepsis is documented or suspected, and the patient exhibits two or more of the following symptoms:

1. Fever >100.9 F
2. Hypothermia < 96.8 F
3. HR >100
4. RR >20
5. EtCO₂ <32
6. SBP <90 mmHg or MAP <70 mmHg
7. Blood Glucose >140 mg/dl in a non-diabetic patient

Basic Treatment Guidelines

1. Follow Initial Treatment Protocol.
2. If other conditions exist refer to appropriate protocol.
3. Transport in a position of comfort

Advanced Treatment Guidelines

1. Administer fluid for hypotension, up to 30 mg/kg. Vasopressors should not be used until fluid resuscitation is complete
2. Consider cardiac monitoring.
3. Consider 12-lead ECG.
4. If airway management is required, consider Ketamine instead of Etomidate

Medications:

Epinephrine

Adult

- 2-10 mcg/min IV infusion
or 5-10 mcg IV push

Pediatric

- 0.1 – 1 mcg/kg/min IV
infusion



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Effective Date:
July 1, 2020

SEXUAL ASSAULT (ALLEGED)

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Revised Date:
December 15, 2013

- ▶ Follow Initial Treatment Protocol
- ▶ Identify yourself to the patient; assure patient that they are safe and are in no further danger.
- ▶ Do NOT burden patient with questions about the details of the crime; you are there to provide emergency medical care.
- ▶ BE alert to immediate scene and document what you see
- ▶ Do not disturb any evidence unless necessary for treatment of patient. (If necessary to disturb evidence, DOCUMENT WHY and how it was disturbed).
- ▶ Treat injuries and illnesses as indicated.
- ▶ Preserve evidence, such as clothing you may have had to remove for treatment, and make sure that it is NEVER left unattended at any time, to preserve "chain of evidence".
- ▶ Contact local Law Enforcement if not present.
- ▶ Crewmembers of the same gender may relate better to the patient in time of such emotional crisis. Accurately record your observations and conversations with the patient.
- ▶ DO NOT allow the patient to bathe, douche, change clothes, or go to the bathroom.

Medications



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STROKE

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Revised Date:
June 18, 2020

- ▶ Follow Initial Treatment Protocol
- ▶ Calm and reassure the patient.
- ▶ Keep patient NPO
- ▶ **Obtain a history for time of onset of symptoms.**
- ▶ Use the Miami Emergency Neurological Deficit (MEND) Exam or Rapid Arterial occlusion Exam (RACE) when evaluating a Stroke patient

Treatment Guidelines

- ▶ Monitor and maintain patent airway, including intubation, if necessary
- ▶ Protect affected limbs from injury during transport, and take care to maintain body heat
- ▶ Obtain blood glucose level; treat according to **Hypoglycemia / Hyperglycemia** protocol.
- ▶ Monitor EKG and treat dysrhythmias following appropriate protocol.
- ▶ Obtain 12 lead ECG if time allows.
- ▶ Do not treat hypertension in the acute stroke patient
- ▶ Transport with head of bed elevated 20 – 30 degrees if pt. is not hypotensive
- ▶ **If acute stroke is suspected, and onset is within 4.5 hours, then transport to a Primary Stroke Center (MercyOne Des Moines or Iowa Methodist)**
 - Notify receiving facility as early as possible about a possible stroke in progress using Pulsara Stroke Alert module

Medications

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TASER TREATMENT		Page 1 of 2 Revised Date: December 15, 2013

Basic Treatment Guidelines:

- ▶ Assure your safety. Encourage police to secure the subject with handcuffs behind his/her back but the patient should not be maintained in a prone position or with hand cuffs attached to ankle cuffs behind the subjects back (i.e. hog tie or hobble position.)
- ▶ Follow Initial Treatment Protocol.
- ▶ Provide oxygen as needed for respiratory distress
- ▶ Barbs may be removed unless they are in the eye, testicle, neck or female breast. Keep in mind that barbs embedded overlying vascular structures may involve underlying vessels. (i.e. volar, wrist, groin, armpit.) If barbs are removed from these areas monitor for bleeding or hematoma formation. If bleeding or a hematoma occurs use direct compression to the area.
- ▶ Removed barbs shall be returned to the police department as evidence.
- ▶ Check for other injuries and treat appropriately. Consider occult trauma or potential for toxic ingestions
- ▶ Continued physical restraint is likely necessary to ensure your safety and that of the patient.

Advanced Treatment Guidelines:

- ▶ Obtain IV access with IV fluids.
- ▶ Consider chemical sedation with Midazolam
- ▶ Consider Sodium Bicarbonate if the patient is showing signs of hemodynamic instability or cardiac dysrhythmia (i.e. bradycardia, QRS widening or frequent ectopy)

Special Considerations

- ▶ Patients that continue to aggressively fight against physical restraint are at risk for acidosis and death. Keep in mind that benzodiazepines are the first line treatment of sympathomimetic (cocaine, methamphetamine, and crack) toxicity which commonly precipitates excited delirium.
- ▶ In a case series of patients that suffered extreme acidosis from resisting arrest IV administration of sodium bicarbonate may help preserve cellular function.
- ▶ Signs suggestive of extreme acidosis after extreme physical exertion include altered mental status, and increased respiratory rate or volume. In the late stages, respiratory depression and hemodynamic instability occurs and often results in death.
- ▶ An ominous finding in the excited delirium patient is a period of tranquility after the struggle. The patient suddenly becomes quiet with deep respirations. This period was noted just prior to death in many cases.

Medications:

Midazolam (Versed)

Adults:

- 2 – 5 mg IVP/IM
- Obtain therapeutic level of sedation for pt safety
- Max dose 10mg.

Pediatrics:

- 0.3mg/kg IM
- Max 10mg.

Sodium Bicarbonate

- 1-3 amps(50-150 mEq) IVP


Ketamine

Adult

- 2 mg/kg IV, IM

Pediatric

- 3mg/kg IV, IM
- 5 mg/kg IN

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TASER TREATMENT		Page 2 of 2 Revised Date: December 15, 2013

Release or Transport to Hospital Considerations

It is generally accepted that releasing patients to jail after Taser deployment is safe if the subject is

- ▶ No longer combative
- ▶ Alert and conversant
- ▶ Has no evidence of significant bodily injury
- ▶ Does not appear to be in physiologic danger from alcohol or drug intoxication
- ▶ Taser darts have been removed from approved sites without bleeding or hematoma formation
- ▶ Follow patient refusal guidelines for releasing patient

Sometimes it will be necessary for patients to be further evaluated at the hospital.

- ▶ Patients that have obtained benzodiazepines for agitation shall be transported to the hospital
- ▶ Patients with continued agitation despite physical restraints should be transported to hospital
- ▶ Patients with alteration in mental status, significantly abnormal vital signs or an abnormal EKG should be transported to the hospital
- ▶ Patients that have swallowed drugs in an attempt to evade recognition by police should be transported to the hospital
- ▶ Patients that admit to or are suspected of drug “packing” should be transported to the hospital
- ▶ All patients under the age of 18 should be transported to the hospital
- ▶ Pregnant women should be transported to the hospital



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
July 1, 2020

TOXICOLOGY

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Date Last Revised
August 25, 2016

- ▶ Follow Initial Treatment Protocol
- ▶ Identify hazardous environment and obtain information of toxic substance(s)
 - Maintain safety of all personnel
 - Remove patient from hazardous environment.
- ▶ Obtain detailed history including, but not limited to, route, time, amount, quantity, and substance of exposure.
- ▶ Transport the substance, container, etc. of toxin in question, if this can be done safely without risk spreading contamination, or take picture of label or contents
- ▶ Obtain blood glucose level; treat according to **Hypoglycemia / Hyperglycemia** protocol.
- ▶ Treat any organ system abnormality within the applicable EMS protocol.
- ▶ Consider utilization of naloxone for unresponsive patient with history of opiate use or unknown history.
- ☒ Consider sodium bicarbonate for Tricyclic Anti-depressant overdose with QRS widening greater than 100 ms
- ☒ Consider glucagon and IV fluids in addition to bradycardia protocol for ingestion of beta blocker overdose.
- ☒ Consider atropine for treatment of organophosphate and other cholinergic toxic overdose.
 - Repeat every 3 minutes for improvement of symptomatic effects of toxic levels.
- ☒ Assess Carboxyhemoglobin level with RAD 57 for suspected CO exposure
 - Administer oxygen at 15 lpm via NRB for spontaneously breathing patients with elevated CO levels, regardless of SpO₂
- ☒ **POISON CONTROL PHONE: 1-800-222-1222**

Medications

Naloxone

Adult and pediatric:

- 0.5 - 2 mg IV, IM, IN
titrate for effect –
repeat as needed

Sodium Bicarbonate

Adult:

- 50 mEq IVP

Pediatric:

- 1 mEq / kg IVP

Glucagon

Adult:

- 1- mg IV bolus

- Pediatric: 0.5 mg if less than 6 y/o;

- 1 mg. if > 6 y/o

Atropine

Adult:

- 0.5-2 mg IVP/IM

Pediatric:

- 0.1mg/kg IVP/IM every 3 – 5 min prn

	<h1>CLIVE FIRE DEPARTMENT</h1> <h2>EMS CLINICAL PROTOCOLS</h2>	Effective Date: July 1, 2020
<h3>TRAUMA</h3>	Page 1 of 3	Revised Date: June 18, 2020

- ▶ Follow Initial Treatment Protocol
- ▶ Immediate transport is critical for patient with signs and symptoms of shock (hypoperfusion, pallor, dyspnea, tachycardia, low blood pressure, or altered mental status).
- ▶ Frequent reassessment is indicated in the critically ill trauma patient
- ▶ It is necessary that all First Responders and EMTs use the Glasgow Coma Score and the Iowa Trauma System Out-Of-Hospital Trauma Triage Destination Decision Protocol (See Appendix A).

Basic Treatment Guidelines

- ▶ If severe deformity of extremity with distal symptomatic changes including cyanosis, pulselessness, and/ or paralysis, parasthesia; realign with gentle traction before splinting.
- ▶ Immediate transport is critical for patients with signs and symptoms of shock.
- ▶ Maintain constant manual in-line immobilization until the patient is properly secured to a backboard with the head immobilized.

Advanced Treatment Guidelines

- ▶ IV lines should be started en route to the hospital, except when there is an unavoidable delay as a result of a prolonged extrication, etc.
- ▶ Establish large bore IV. Consider fluid challenge for signs of inadequate perfusion. Be aware that aggressive rehydration can increase blood loss by hemodilution.
- ▶ Consider intraosseous infusion, if patient condition warrants.
- ▶ Start second large bore IV with severe trauma.
- ▶ Monitor EKG and treat dysrhythmias if indicated following the appropriate protocol.
- ▶ Evaluation and treatment according to **Pain / Anxiety** protocol.
- ▶ Consider sedation, with advisement from medical control, for patients with delay in treatment secondary to prolonged extrication or other circumstances.

Special Considerations

Patients should be transported to a level I or level II trauma center based on the the Out of Hospital Trauma Triage Destination Decision Protocol (appendix A) These hospitals are listed in alphabetical order

- Iowa Methodist
- Mercy (main)

Patients who do not meet trauma criteria can be transported to the hospital of their choice.

Medications

Fentanyl

Adults:

- 25 - 100 mcg IVP or IN every 3-5 minutes as needed for pain.
- Maximum volume 1 ml/nare

Pediatric:

- 1-2 mcg/kg IVP with titration of 1 mcg/kg every 3-5 minutes as needed for pain.
- Alternate route IN (20-40 mcg)
- Maximum dose 2mcg / kg

Ketamine

Adults and Pediatrics:

- 0.3 mg/kg IV, IM

Midazolam (Versed)

Adults:

- 1-2 mg IVP or IN with titration of 1 mg every 3 - 5 minutes
- Maximum dose of 5 mg.

Pediatric:

- 0.05-0.1 mg/kg IVP or IN

Naloxone (Narcan)

Adults:

- 0.5-2.0 mg IVP or IN

Pediatrics:

- 0.1 mg/kg IVP or IN

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- **Shock (Hypoperfusion)**
 - ▶ Prevent loss of body heat by covering the patient.
 - ▶ Consider administration of IV fluids
 - ▶ Consider administration of tranexamic acid if HR \geq 110 or systolic BP \leq 100
 - ▶ External Bleeding:
 - Control bleeding by applying pressure directly on the point of bleeding.
 - Elevation of bleeding extremity may be used in conjunction with direct pressure if no contraindication exists to move extremity.
 - If bleeding persists, consider appropriate arterial pressure points in upper and lower extremities.
 - Use tourniquets for life threatening hemorrhage in an extremity not stopped with direct pressure or pressure points. Note and document time applied.
 - ▶ Internal Bleeding:
 - Comfort, calm, and reassure the patient.
 - Keep the patient warm.

Chest Injuries

- ▶ Seal open chest wounds IMMEDIATELY. Use occlusive dressing taped down on three sides. If the patient's breathing becomes worse, lift one corner of the dressing to release pressure, and then re-seal.
- ▶ Treat cardiac dysrhythmias according to AHA / ACLS guidelines.
- ▶ Consider airway control and positive pressure ventilation for patients with large flail segments

Pneumothorax (Tension)

- ▶ Needle decompression for rapidly deteriorating patient.

Penetrating Injury

- ▶ Impaled objects must be left in place to prevent further damage from occurring, and should be stabilized by building up around object with multi-trauma dressings, etc.,
 - Penetrating objects may be removed from cheek if causing airway problems
 - Penetrating objects may be removed from chest if interfering with CPR – see cardiac arrest protocol

Head / Cervical / Spinal Injuries:

- ▶ Establish and maintain manual spinal stabilization.
- ▶ Place the head in a neutral in-line position unless the patient complains of pain or the head is not easily moved into position.
- ▶ Apply cervical collar and maintain manual stabilization according to selective spinal immobilization procedure
- ▶ Monitor airway closely, taking care to suction secretions; be prepared for vomiting (log roll using manual stabilization as needed).

Medications

Tranexamic Acid

Adults:

- 1G IV over 10 minutes

Pediatric:

- 10 mg/kg IV over 10 minutes



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Medications

Burns

Thermal:

- ▶ Stop the burning process, initially with water or saline.
- ▶ Remove smoldering clothing and jewelry.
- ▶ Continually monitor the airway for evidence of obstruction.
- ▶ Prevent further contamination.
- ▶ Cover the burned area with a dry sterile dressing
- ▶ Saran Wrap may be considered to cover wound.
- ▶ DO NOT use any type of ointment, lotion, or antiseptic.
- ▶ DO NOT break blisters.

Chemical:

- ▶ Brush off powders prior to flushing.
- ▶ Immediately begin to flush with large amounts of water.
- ▶ Do not contaminate uninjured areas while flushing!
- ▶ Attempt to identify contaminant.

Toxin in eye:

- ▶ Flush eye(s) with water or saline.
- ▶ Use caution to not contaminate other body areas.
- ▶ Continue irrigation when en route to the receiving facility.
- ▶ Attempt to identify contaminant.

Electrical Burns:

- ▶ Treat soft tissue injuries associated with the burn with dry dressing.
- ▶ Treat for shock if indicated.
- ▶ Apply cardiac monitor; treat dysrhythmias as necessary

Special Considerations

- ▶ Burns pose greater risks to infants and children. This is because their body surface area is greater in relation to their total body size. This results in greater fluid and heat loss than would be found in an adult patient.
- ▶ To estimate percent of body surface area injured you can also use the "Rule of Palm". The patient's palm equals approximately 1 percent of the body surface area.



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APPENDIX A OUT OF HOSPITAL TRAUMA TRIAGE DESTINATION DECISION PROTOCOL

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Date Last Revised
November 4, 2008

ADULT

OUT OF HOSPITAL TRAUMA TRIAGE DESTINATION DECISION PROTOCOL (OOHTTDDP)

ADULT

The following criteria shall be utilized to assist the EMS provider in the identification of time critical injuries, method of transport and trauma care facility resources necessary for treatment of those injuries

Step 1 - Assess for Time Critical Injuries: Level of Consciousness & Vital Signs

Glasgow Coma Score <14
Heart Rate >120

Respiratory diff./rate <10 or >29
Systolic B/P <90

If ground transport time to a Resource (Level I) or Regional (Level II) TCF is less than 30 minutes,

Transport to the nearest **Resource (Level I)** or **Regional (Level II)** Trauma Care Facility.
If greater than 30 minutes ground transport time to Resource (Level I) or Regional (Level II), Transport to the nearest appropriate Trauma Care Facility.

If time can be saved or level of care needs exist, tier with ground or air ALS service program

If step 1 does not apply, move on to step 2

Step 2 - Assess for Anatomy of an Injury

All Penetrating injury to head, neck, torso, and extremities proximal to elbow and knee

Partial or full thickness Burns > 10% TBSA or involving face/airway

Amputation proximal to wrist or ankle

Paralysis or Parasthesia

Suspected two or more long bone fractures

Suspected pelvic fracture

Crushed, degloved, or mangled extremity

Flail chest

Any open long bone fracture

Open or depressed skull fracture

EMS provider judgment for possible abdominal or thoracic injuries.

If ground transport time to a Resource (Level I) or Regional (Level II) TCF is less than 30 minutes,

Transport to the nearest **Resource (Level I)** or **Regional (Level II)** Trauma Care Facility.
If greater than 30 minutes ground transport time to Resource (Level I) or Regional (Level II), Transport to the nearest appropriate Trauma Care Facility.

If time can be saved or level of care needs exist, tier with ground or air ALS service program

If step 2 does not apply, move on to step 3

Step 3 - Consider Mechanism of Injury & High Energy Transfer

Falls – Adult: > 20 ft. (1 story = 10 ft)

High-risk auto crash:

Intrusion: > 12 in, occupant site; > 18 in, any site, Ejection (partial or complete) from automobile

Death in same passenger compartment, Vehicle telemetry data consistent with high risk of injury

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

Motorcycle crash > 20 mph

Rollover (unrestrained occupant)

Bicyclist into handlebars

Transport to the nearest appropriate Trauma Care Facility, need not be the highest level trauma care facility.

If step 3 does not apply, move on to step 4

Step 4 - Consider risk factors:

Age > 55 yrs (Risk of injury/death increases)

Time-sensitive extremity injury

EMS provider judgment

Anticoagulation and bleeding disorders

Pregnancy > 20 weeks

Transport to the nearest appropriate Trauma Care Facility, need not be the highest level trauma care facility.

If none of the criteria in the above 4 steps are met, follow local protocol for patient disposition.

When in doubt, transport to nearest trauma care facility for evaluation.

For all Transported Trauma Patients

Contact receiving trauma care facility:

1. Give patient report to include: MOI, Injuries, Vital Signs & GCS, Treatment, Age, Gender and ETA
2. Obtain further orders from Medical Control as needed.



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

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APPENDIX A OUT OF HOSPITAL TRAUMA TRIAGE DESTINATION DECISION PROTOCOL

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PEDIATRIC OUT OF HOSPITAL TRAUMA TRIAGE DESTINATION DECISION PROTOCOL (OOHTTDDP) PEDIATRIC

The following criteria shall be utilized to assist the EMS provider in the identification of time critical injuries, method of transport and trauma care facility resources necessary for treatment of those injuries

Step 1 - Assess for Time Critical Injuries: Level of Consciousness & Vital Signs

Abnormal Responsiveness: abnormal or absent cry or speech. Decreased response to parents or environmental stimuli. Floppy or rigid muscle tone or not moving. **Verbal, Pain, or Unresponsive** on AVPU scale.

OR

Airway/Breathing Compromise: obstruction to airflow, gurgling, stridor or noisy breathing. Increased/excessive retractions or abdominal muscle use, nasal flaring, stridor, wheezes, grunting, gasping, or gurgling. Decreased/absent respiratory effort or noisy breathing. Respiratory rate outside normal range.

OR

Circulatory Compromise: cyanosis, mottling, paleness/pallor or obvious significant bleeding. Absent or weak peripheral or central pulses; pulse or systolic BP outside normal range. Capillary refill > 2 seconds with other abnormal findings.

If ground transport time to a TCF is less than 30 minutes,

Transport to the nearest **Resource (Level I)** or **Regional (Level II)** Trauma Care Facility.
If time can be saved or level of care needs exist, tier with ground or air ALS service program

If step 1 does not apply, move on to step 2

Step 2 - Assess for Anatomy of an Injury

All Penetrating injury to head, neck, torso, and extremities proximal to elbow and knee

Partial or full thickness burns > 10% TBSA or involving face/airway

Amputation proximal to wrist or ankle

Crushed, degloved, or mangled extremity

Paralysis or Parasthesia

Flail chest

Suspected two or more long bone fractures

Any open long bone fracture

Suspected pelvic fracture

Open or depressed skull fracture

EMS provider judgment for possible abdominal or thoracic injuries.

If ground transport time to a TCF is less than 30 minutes,

Transport to the nearest **Resource (Level I)** or **Regional (Level II)** Trauma Care Facility.
If time can be saved or level of care needs exist, tier with ground or air ALS service program

If step 2 does not apply, move on to step 3

Step 3 - Consider Mechanism of Injury & High Energy Transfer

Falls – > 10 feet or

Pediatric: > 2-3 times the victims height.

High-risk auto crash:

Intrusion: > 12 in, occupant site; > 18 in, any site, Ejection (partial or complete) from automobile

Death in same passenger compartment, Vehicle telemetry data consistent with high risk of injury

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

Motorcycle crash > 20 mph

Rollover (unrestrained occupant)

Any intentional injury

Bicyclist into handlebars

Transport to the nearest **(Any Level)** Trauma Care Facility.

If step 3 does not apply, move onto step 4

Step 4 - Consider risk factors:


Age <5 yrs (Risk of injury/death increases)

ETOH/drugs

Time-sensitive extremity injury

Transport to the nearest **(Any Level)** Trauma Care Facility.

1. Give patient report to include: MOI, Injuries, Vital Signs & GCS, Treatment, Age, Gender and ETA
2. Obtain further orders as needed

	CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS	Effective Date: July 1, 2020
APPENDIX B EMS OUT OF HOSPITAL DO NOT RESUSCITATE		Page 1 of 1 Date Last Revised December 15, 2013

Purpose: This protocol is intended to avoid unwarranted resuscitation by emergency care providers in the out-of-hospital setting for a qualified patient.¹ There must be a valid Out-Of-Hospital Do-Not-Resuscitate (OOH DNR) order signed by the qualified patient's attending physician or the presence of the OOH DNR identifier indicating the existence of a valid OOH DNR order.

No resuscitation: Means withholding any medical intervention that utilizes mechanical or artificial means to sustain, restore, or supplant a spontaneous vital function, including but not limited to:

1. Chest compressions,
2. Defibrillation,
3. Esophageal/tracheal/double-lumen airway; endotracheal intubation, or
4. Emergency drugs to alter cardiac or respiratory function or otherwise sustain life.

Patient criteria: The following patients are recognized as qualified patients to receive no resuscitation:

1. The presence of the uniform OOH DNR order or uniform OOH DNR identifier, or IPOST form
2. The presence of the attending physician to provide direct verbal orders for care of the patient.

The presence of a signed physician order on a form other than the uniform OOH DNR order form approved by the department may be honored if approved by the service program EMS medical director. However, the immunities provided by law apply only in the presence of the uniform OOH DNR order or uniform OOH DNR identifier. When the uniform OOH DNR order or uniform OOH DNR identifier is not present contact must be made with on-line medical control and on-line medical control must concur that no resuscitation is appropriate.

Revocation: An OOH DNR order is deemed revoked at any time that a patient, or an individual authorized to act on the patient's behalf as listed on the OOH DNR order, is able to communicate in any manner the intent that the order be revoked. The personal wishes of family members or other individuals who are not authorized in the order to act on the patient's behalf shall not supersede a valid OOH DNR order.

Comfort Care (♥): When a patient has met the criteria for no resuscitation under the foregoing information, the emergency care provider should continue to provide that care which is intended to make the patient comfortable (a.k.a. ♥ Comfort Care). Whether other types of care are indicated will depend upon individual circumstances for which medical control may be contacted by or through the responding ambulance service personnel.

♥ **Comfort Care** may include, but is not limited to:

1. Pain medication.
2. Fluid therapy.
3. Respiratory assistance (oxygen and suctioning).

¹ *Qualified Patient* means an adult patient determined by an attending physician to be in a terminal condition for which the attending physician has issued an Out of Hospital DNR order in accordance with the law. Iowa Administrative Code 641-142.1 (144A) Definitions.

IPOST PROCESS Emergency Medical Services

Overview

- IPOST form **belongs** to the patient.
- IPOST form is **valid** as a medical order statewide regardless of where the patient resides.
- IPOST is appropriate for an individual who is frail and elderly, or who has a chronic, critical medical condition or terminal illness.

Use of form

- **Ask every facility if resident has IPOST form prior to transfer.**
- **Ask every patient/family member in the home if they have an IPOST form prior to transfer.**
- IPOST form is salmon in color and printed on cardstock.
- No copies for permanent medical record.
- Do not label or sticker form.
- Inpatient units (ward clerks, secretaries etc) **MUST** ensure form is sent with patient at discharge – **please verify prior to transfer to facility/home.**
- If patient has Advance Directive that is known to be in conflict with IPOST form, AD takes precedence.

Documentation

- Document any indicated treatments that have been deferred as related to IPOST form instructions.
- Document IPOST form was received and to whom the form was transferred to at the receiving facility.

Copies/Faxes

- Copies/faxes of signed IPOST forms are legal and valid; **HOWEVER** our process does **NOT** recommend copies under most circumstances.
- A copy/fax may be valid only if original form was not sent with patient. If in-patient facility validates with receiving facility that copy/fax is the most recent for a patient, it may be used. An example: if patient transfers from facility to Emergency Department and IPOST did not arrive with patient; ED may accept fax of IPOST after validation with facility it is most recent version. **Use of original form is strongly encouraged!**
- Documentation in the medical record must reflect this has occurred.



Iowa Physician Orders for Scope of Treatment (IPOST)

First follow these orders, **THEN** contact the physician, nurse practitioner or physician's assistant. This is a medical order sheet based on the person's current medical condition and person's treatment preferences. Any **section not completed implies full treatment for that section**. Everyone shall be treated with dignity and respect.

Last Name

First/Middle Name

Date of Birth

A
Check
one

CARDIOPULMONARY RESUSCITATION (CPR): Person has no pulse **AND** is not breathing.

- ☐ CPR/Attempt Resuscitation
☐ DNR/Do Not Attempt Resuscitation

B
Check
one

MEDICAL INTERVENTIONS: Person has a pulse **AND/OR** is breathing.

- ☐ **COMFORT MEASURES ONLY** Use medication by any route, positioning, wound care and other measures to relieve pain and suffering. Use oxygen, suction and manual treatment of airway obstruction as needed for comfort. **Patient prefers no transfer to hospital for life-sustaining treatment. Transfer if comfort needs cannot be met in current location.**
- ☐ **LIMITED ADDITIONAL INTERVENTIONS** Includes care described above. Use medical treatment, cardiac monitor, oral/IV fluids and medications as indicated. **Do not** use intubation, or mechanical ventilation. May consider less invasive airway support (BiPAP, CPAP). May use vasopressors. **Transfer to hospital if indicated, may include critical care.**
- ☐ **FULL TREATMENT** Includes care described above. Use intubation, advanced airway interventions, mechanical ventilation and cardioversion as indicated. **Transfer to hospital if indicated. Includes critical care.**

Additional Orders: _____

C
Check
one

ARTIFICIALLY ADMINISTERED NUTRITION Always offer food by mouth if feasible.

- ☐ No artificial nutrition by tube.
☐ Defined trial period of artificial nutrition by tube.
☐ Long-term artificial nutrition by tube.

D

MEDICAL DECISION MAKING

Directed by: (listed in order of Iowa Code/Statute for Priority of Surrogates; check only one)

- ☐ Patient
☐ Durable Power of Attorney for Health Care
☐ Spouse
☐ Majority of Adult Children
☐ Parents
☐ Majority rule for nearest relative
☐ Other: _____

Rationale for these orders: (check all that apply)

- ☐ Advance Directives
☐ Patient's known preference
☐ Limited treatment options
☐ Poor prognosis
☐ Other: _____

Physician/ARNP/PA signature
(mandatory)

Print Physician/ARNP/PA Name

Date

Phone Number

Patient/Resident or Legal Surrogate for Health Care Signature as identified above
(mandatory)

Date

SEND IPOST WITH PERSON WHENEVER TRANSFERRED OR DISCHARGED

DOCUMENT THAT IPOST FORM WAS TRANSFERRED WITH PERSON

HIPAA PERMITS DISCLOSURE OF IPOST TO OTHER HEALTH CARE PROVIDERS AS NECESSARY

Information for Person named on this Form Person's Name (print) _____

This form records your preferences for life-sustaining treatment in your **current** state of health. It can be reviewed and updated by your health care professional at any time if your preferences change. If you are unable to make your own health care decisions, the orders should reflect your preferences as best understood by your surrogate.

Contact Information

Surrogate (optional)	Relationship	Phone Number
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Directions For Health Care Professionals

Completing IPOST

- Must be completed by a health care professional based on patient preferences and medical indications.
- IPOST must be signed by a physician, nurse practitioner or physician's assistant to be valid. Verbal orders are acceptable with follow-up signature by physician, nurse practitioner or physician's assistant in accordance with facility/community policy.
- Use of original form is strongly encouraged. Photocopies and FAXes of signed IPOST forms are legal and valid.

Using IPOST

- Any section of IPOST not completed implies full treatment for that section.
- A semi-automatic external defibrillator (AED) should not be used on a person who has chosen "Do Not Attempt Resuscitation."
- Deactivate internal defibrillators if comfort measures only are in effect.
- Medications by alternative routes of administration to enhance comfort may be appropriate for a person who has chosen "Comfort Measures Only."

Voiding IPOST

- A person with capacity, or the valid surrogate of a person without capacity, can void the form and request alternative treatment.
- To void this form, draw line through sections A through C and write "VOID" in large letters across the form and sign and date that line if IPOST is replaced or becomes invalid.
- Any changes require a new IPOST.

Transferring/Discharging with IPOST

- The IPOST form belongs to the person.
- The IPOST form **MUST** accompany the person upon all transfers between care settings.
- Document that the IPOST was sent with the person.
- Recommended use at home [to complete based on subcommittee recommendations]

Reviewing IPOST

- This IPOST should be reviewed periodically whenever:
 1. The person is transferred from one care setting or care level to another, or
 2. There is a substantial change in the person's health status, or
 3. The person's treatment preferences change, or
 4. Health care provider visits

Reviewed by:	Date:	Reviewed by:	Date:

Prepared by:

Health Care Professional Preparing Form	Preparer Title	Phone Number	Date Prepared
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**ORIGINAL TO ACCOMPANY PERSON IF TRANSFERRED OR DISCHARGED
DOCUMENT THAT IPOST FORM WAS TRANSFERRED WITH PERSON**



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
July 1, 2020

APPENDIX C PHYSICIAN ON SCENE

Page 1 of 1

**Date Last
Revised**
December 15, 2013

This protocol is to be utilized when a physician presents him/herself on an emergency scene to offer assistance. This protocol is not to be used when the patient is in a healthcare setting and already under the care of a physician or mid-level practitioner.

Your offer of assistance is appreciated. However, this EMS service, under law and in accordance with nationally recognized standards of care in Emergency Medicine, operates under the direct authority of a Physician Medical Director. Our Medical Director and his or her physician designees have already established a physician-patient relationship with this patient. To ensure the best possible patient care, and to prevent on your part inadvertent patient abandonment or interference with an established physician-patient relationship, please comply with our established protocols.

Please review the following if you wish to assume responsibility for this patient:

1. You must be recognized or identify yourself as a qualified physician.
2. You must be able to provide proof of licensure and identify your specialty.
3. If requested, you must speak directly with the on-line medical control physician to verify transfer of responsibility for the patient from that physician to you.
4. EMS personnel, in accordance with State law, can only follow orders that are consistent with the approved protocols.
5. You must accompany this patient to the hospital, unless the on-line medical control physician agrees to re-assume responsibility for this patient prior to transport.



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
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APPENDIX D TERMINATION OF RESUSCITATION

Page 1 of 1

Date Last Revised
November 4, 2008

INDICATIONS TO CONSIDER TERMINATION OF RESUSCITATION:

- **Medical Arrest:**

Patient is in full arrest with no signs of life present.

Patient is considered an adult.

Full ACLS has been instituted (Paramedic level) to include rhythm analysis and defibrillation if indicated, advanced airway management, and drugs given per protocol.

No return of circulation or shockable rhythm exists.

Correctable causes or special resuscitation circumstances have been considered and addressed.

- **Traumatic Arrest:**

Patient is in full arrest with no signs of life present

Patient is victim of blunt force trauma

Correctable causes or special resuscitation circumstances have been considered and addressed.

TERMINATION OF RESUSCITATION:

- 1) Patient meets all criteria under 'indications' above, or patient is terminally ill/DNR where CPR was started prior to knowledge of resuscitation status.
- 2) *Physician on-line medical direction* is contacted (while care continues) to discuss any further appropriate actions.
3. Resuscitation may be discontinued if *physician on-line medical direction* authorizes.

OTHER CONSIDERATIONS:

- 1) Documentation must reflect that the decision to terminate resuscitation was determined by *physician on-line medical direction*.
- 2) An EMS/health care provider must attend the deceased until the arrival of law enforcement or medical examiner representative.
- 3) All IVs, tubes, etc. should be left in place until the medical examiner authorizes their removal.
- 4) Implement survivor support plans related to coroner notification, funeral home transfer, leaving the body at the scene, and death notification/grief counseling for survivors.

Physician on-line medical direction includes either of the following:

- 1) Hospital based physician contact via phone or radio.
- 2) Patient's primary care physician or on call physician contact via phone or radio.

Special Considerations

Patients with profound hypothermia or drug or toxin overdose may benefit from continued resuscitation.



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

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APPENDIX E S.T.A.R.T. TRIAGE

Page 1 of 1

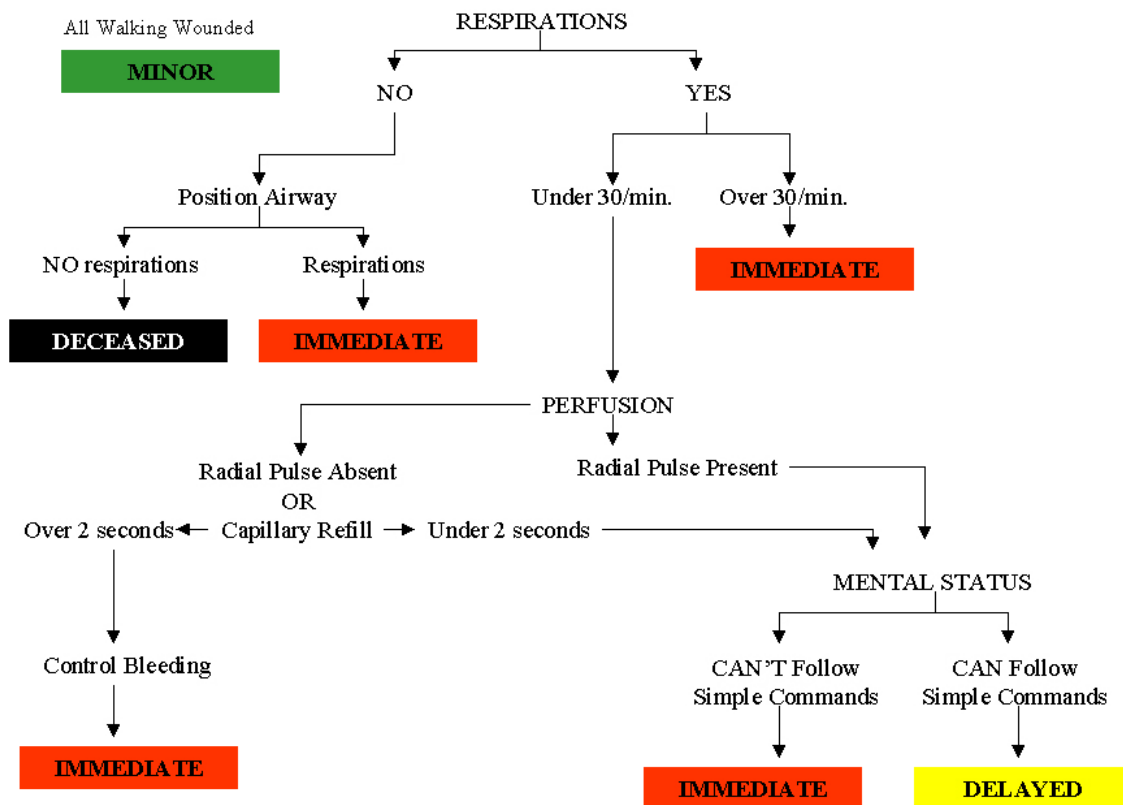
**Date Last
Revised**
November 4, 2008

S T A R T

(Simple Triage and Rapid Treatment)

1. Respirations
2. Perfusion
3. Mental Status

The following are guidelines for initial tactical triage using the START method. START is most useful in initially clearing the disaster zone where there are numerous casualties. **It focuses on respiration rate, perfusion, and mental status and takes under one minute to complete.** Once the patient moves toward a higher level of care (evacuation), a more detailed approach to triage may be needed.





CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

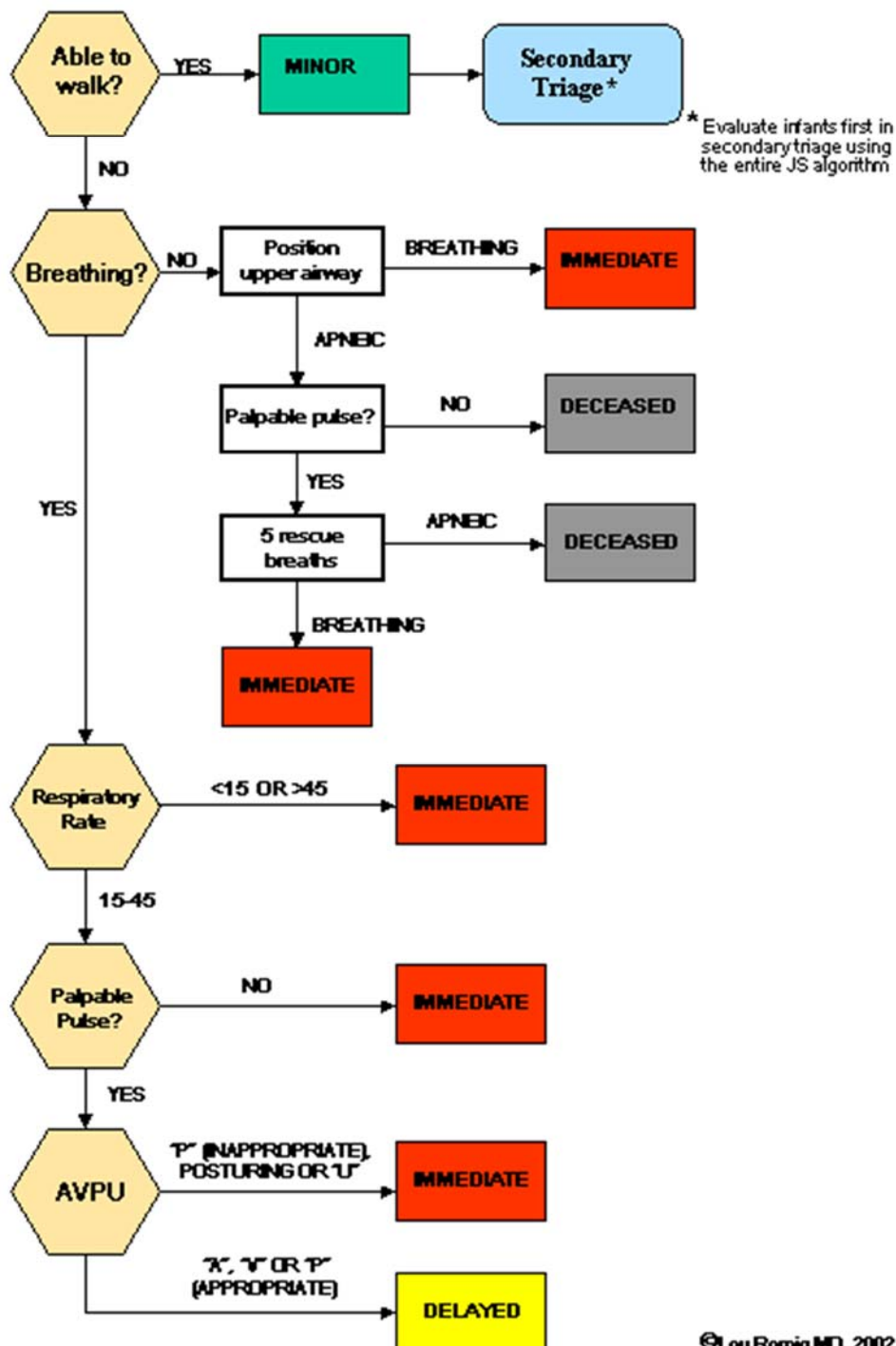
Effective Date:
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APPENDIX F JUMP START PEDIATRIC TRIAGE

Page 1 of 1

Date Last
Revised
November 4, 2008

JumpSTART Pediatric MCI Triage®





CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
July 1, 2020

APPENDIX G ORGAN DONATION

Page 1 of 1

**Date Last
Revised**
November 4, 2008

Guidelines for EMS Provider Initiating Organ Donation At the Scene of the Deceased

- All appropriate patient care protocols will be enacted to assure patient care is provided according to prevailing standards.
- Do not continue resuscitative efforts solely based on the status of organ donation. Once the patient has suffered a cardiac arrest, organs are generally not deemed as transplantable. Tissue specimens are still viable even without continued resuscitation, and an organ donation organization should be contacted if the patient was designated as a donor.
- If resuscitation efforts are unsuccessful, or if upon arrival the patient is deceased and without indications to initiate resuscitation, then on-line medical direction will be contacted to confirm that no further medical care is to be given.
- Contact Iowa Donor Network at 800-831-4131.
 - *As per Iowa Code 142C.7 a medical examiner or a medical examiner's designee, peace officer, fire fighter, or emergency medical care provider may release an individual's information to an organ procurement organization, donor registry, or bank or storage organization to determine if the individual is a donor.*
 - *As per Iowa Code 142C.7 Any information regarding a patient, including the patient's identity, however, constitutes confidential medical information and under any other circumstances is prohibited from disclosure without the written consent of the patient or the patient's legal representative.*

At least one EMS provider should remain at the scene until the appropriate authority (medical examiner, funeral home, public safety, etc.) is present.



CLIVE FIRE DEPARTMENT EMS CLINICAL PROTOCOLS

Effective Date:
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APPENDIX H PATIENTS WITH SPECIAL HEALTHCARE NEEDS

Page 1 of 1

**Date Last
Revised**
November 4, 2008

Guidelines for EMS Providers responding to a patient with special needs (This Protocol is not intended for interfacility transfers.)

These guidelines should be used when an EMS provider, responding to a call, is confronted with a patient using specialized medical equipment that the EMS provider has not been trained to use, and the operation of that equipment is outside of the EMS provider's scope of practice. The EMS provider may treat and transport the patient, as long as the EMS provider doesn't monitor or operate the equipment in any way while providing care.

When providing care to patients with special needs, EMS personnel should provide the level of care necessary, within their level of training and certification. When possible, the EMS provider should consider utilizing a family member or caregiver who has been using this equipment to help with monitoring and operating the special medical equipment if necessary during transport.

Some examples of special medical devices:

- PCA (patient controlled analgesic)
- Chest Tube