

State of Alabama EMS Patient Care Protocol Update Training

Eighth Edition
2015 Revisions



ADPH OEMS November 2015



Naloxone

Naloxone: Summary

Due to the increasing numbers of opiate overdoses, naloxone use is now expanded to include the EMT level.

Intranasal naloxone will now be a mandatory drug for BLS transport agencies.

EMTs will also be allowed to assist the patient with his or her own naloxone if the patient has it. This may be encountered as an auto-injection, sublingual, or intranasal delivery method.

Naloxone: places you will see the changes

- Scope of Practice 1.01: Naloxone added to EMT scope of practice
- Altered Mental Status 3.05: Naloxone intranasal added for the EMT
- Poisons and Overdoses 3.27: Naloxone intranasal added for the EMT



Spinal Injury

Spinal Injury: Summary

- Updated recommendations for management of spinal injury to de-emphasize the use of hard backboards in order to prevent patient injury.
- Defined Spinal Precautions as an alternative to Spinal Motion Restriction (SMR)

Spinal Injury: places you will see the changes

Spinal Injury 3.32:

- Under Complaints of Pain or Examination Tenderness first bullet point, change “full SMR” to “spinal precautions.”
- Under Key Points, change first key point to bold print to emphasize, “Full SMR as an automatic response to trauma may not always be in the patient’s best interest.”
- Under Key Points, add to third key point, “If a backboard device is used only to move the patient, it should be removed as soon as practical. “

Spinal Injury: places you will see the changes

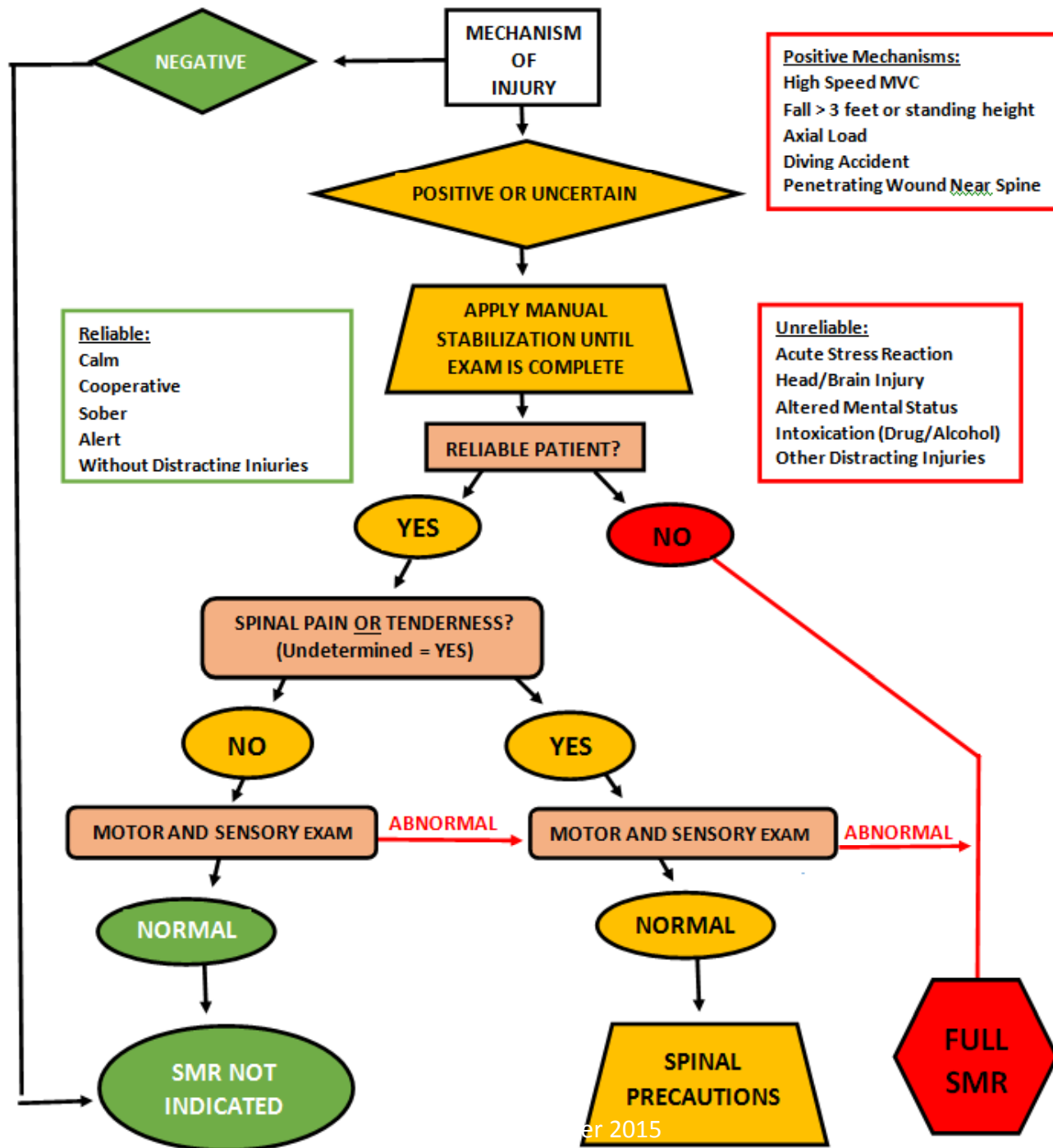
Spinal Injury 3.32 (continued):

- Under Key Points, strike first sentence in third key point. Change fourth bullet to read, “When implementing SMR, do not secure the head to the backboard before securing the body because this can cause torsion on the neck.”
- Under Key Points, add a key point and make it the new second key point, “Patients with penetrating trauma to the head, neck, or torso and no evidence of spinal injury do not require full SMR.”

Spinal Injury: places you will see the changes

Spinal Injury 3.32 (continued):

- Under Treatment, add the definition of spinal precautions:
“Spinal Precautions: Spinal precautions include the use of a cervical collar and securing the patient firmly to the EMS stretcher maintaining the spine in neutral alignment. Spinal precaution may be appropriate for patients found ambulatory at the scene, patients who must be transported for a prolonged amount of time, or patients for whom a backboard is not otherwise indicated per the protocol algorithm.”
- Under Drugs/Procedures, add “Spinal Precautions” in the EMT box.
- Scope of Practice 1.01: Add Spinal Precautions to EMT





Trauma System

Trauma System: Summary

- Since trauma system is now statewide, delete references to regions not operating under the trauma system
- Clarify that all trauma related cardiac arrests that are treated or transported should be entered into the trauma system
- Updated trauma system entry criteria to be consistent with 2011 CDC Field Triage Guidelines

Trauma System: places you will see the changes

Trauma System 1.16:

- Deletion of reference to regions not operating under the trauma system
- Clarify that physiologic criteria for trauma system entry includes any trauma related cardiac arrest that will be treated or transported to the hospital

Trauma System: places you will see the changes

Trauma System 1.16 (continued):

- Change Anatomical Criteria #3 to read: “The patient has penetrating trauma to the head, neck, torso or extremities proximal to the elbow or knee.”
- Add Anatomical Criteria #9: “The patient has a crushed, degloved, mangled, or pulseless extremity”
- Add Anatomical Criteria #10 “ The patient has an open or depressed skull fracture”



Seizure

Seizure: Summary

- Addition and emphasis of intranasal midazolam for pediatric patients
- Emphasis of intramuscular midazolam for adults
- Simplification of pediatric intravenous dosages to avoid confusion

Seizure: places you will see the changes

Seizure 3.30:

- Under TREATMENT second bullet, add “Establish IV access if required to administer IV medication. Do not delay treatment in order to establish an IV if other methods of drug delivery are available and appropriate for the patient.”
- Under TREATMENT fifth bullet, change to, “Diazepam IV/PR, Lorazepam IV, or Midazolam IV/IM/IN for Active Seizures. Note: Midazolam IN is the preferred drug for pediatric patients, if it is available.”

Seizure:

Diazepam:

5-10 mg IV or 0.2 mg/kg per rectum, MAX 20 mg for PR

Pediatric

IV: 0.1 mg/kg slow IV

Rectal: 0.5 mg/kg PR

MAX 5 mg (Cat B) 📞

Lorazepam:

1-2 mg slow IV

Pediatric:

IV: 0.1 mg/kg slow IV

MAX 2 mg (Cat B) 📞

Midazolam:

2 mg IV or IM

Pediatric:

IV/IM: 0.1 mg/kg slow IV or IM

IN (PREFERRED): 0.2 mg/kg IN via atomizer

MAX 5 mg (Cat B) 📞



Albuterol

Albuterol: Summary

- Albuterol dosage inconsistencies in current protocols corrected

Albuterol: places you will see the changes

Respiratory Distress 3.29:

- Dosage of Albuterol corrected from 3mg to 2.5 mg
- Notation made that Paramedics may substitute Albuterol with Ipratropium for Albuterol

Albuterol and Ipratropium 5.02

- Same correction made



CPAP

CPAP: Summary

- Expansion of CPAP to the EMT level
- Addition of BiPAP as an option for those services that wish to use it
- CPAP will be added as mandatory equipment for BLS transport agencies by June 1, 2016

CPAP: places you will see the changes

Scope of Practice 1.01:

- Moved CPAP to EMT Scope of Practice

Congestive Heart Failure 3.15, Near Drowning 3.25, and Respiratory Distress 3.29:

- Moved CPAP to EMT

CPAP 4.05:

- Indicated “When desired and approved by the service medical director, BiPAP may be substituted for CPAP”



Dextrose

Dextrose: Summary

- Clarification that different concentrations of dextrose may be administered for the treatment of hypoglycemia

Dextrose: places you will see the changes

Hypoglycemia 3.21 and Dextrose 50% 5.07 and Thiamine 5.29:

- All changed to reflect that different concentrations of dextrose may be used when approved by the service medical director



Amiodarone

Amiodarone: Summary

- Clarification to note that amiodarone can be diluted in small amounts of IV fluid if this does not delay care

Amiodarone: places you will see the changes

Amiodarone 5.03:

- Vfib/Pulseless Vtach: Notation made that amiodarone may be diluted in 20cc of D5@ or NS prior to administration in order to prevent hypotension and bradycardia
- Wide Complex Tachycardia with a Pulse: Notation made to dilute amiodarone in 20cc of NS or D5W and administer over 10 minutes as slow IV push OR inject into a 100cc bag of NS or D5W and infuse over 10 minutes.



Magnesium

Magnesium: Summary

- Magnesium added as a treatment for wheezing as a Category B drug

Magnesium: places you will see the changes

Respiratory Distress 3.29 and Magnesium Sulfate 5.19:

- Magnesium Sulfate added as a consideration for severe refractory asthma given as 2 gm diluted in 250 cc NS IV/IO over 20 minutes
- Category B drug



Allergic Reaction

Allergic Reaction: Summary

- Simplified protocol by combining moderate and major reactions into a new “moderate/severe” category
- Emphasis placed on IM instead of IV epinephrine

Allergic Reaction: places you will see the changes

- Allergic Reaction 3.04
 - Moderate and Major Reactions combined into “Moderate/Severe Reaction” defined as skin rash with presence of respiratory symptoms such as wheezing. Can include severe respiratory distress including airway compromise or signs of shock.
 - Notation made that Epinephrine 1:1000 IM is the preferred first line medication for Moderate/Severe Reaction



Intraosseous Insertion Site

Intraosseous Insertion Site: Summary

- Added proximal humerus as insertion site for intraosseous lines

Intraosseous Insertion Site: places you will see the changes

Intraosseous Therapy 4.11:

- Addition of the proximal humerus as an insertion site for intraosseous devices



Hemostatic Agents

Hemostatic Agents: Summary

- Addition of Nustat as an acceptable hemostatic agent

Hemostatic Agents: places you will see the changes

Hemostatic Agent 6.03: Nustat Gauze added to the list



Hyperthermia

Hyperthermia: Summary

- Updated protocol to reflect the current practice of allowing cooling of hyperthermic patients on the scene when cooling capabilities are present

Hyperthermia: places you will see the changes

Hyperthermia 3.20: sentence deleted that discourages cooling in the field



Shock

Shock: Summary

- Updated protocol to reflect the current practice of permissive hypotension during resuscitation

Shock: places you will see the changes

Shock 3.31: changed goal BP from 120 mmHg to 90 mm Hg



Death in the Field

Death in the Field: Summary

- Clarified that if the Online Medical Director (OLMD) declares death in the field during transport, the destination hospital must be notified because sometimes the OLMD is not at the destination hospital

Death in the Field: places you will see the changes

Death in the Field 1.03:

Under Traumatic Cardiac Arrest Special Considerations , add Item #3: “If OLMD stops resuscitation during transport, the patient must be taken to that OLMD physician to be pronounced dead. In some circumstances, it is possible that OLMD may not be working in the receiving facility. If the OLMD is not at the receiving facility and resuscitation is terminated during transport, you must notify the receiving facility as soon as possible. The physician on staff at the receiving facility should pronounce death upon arrival.”

Death in the Field: places you will see the changes

Death in the Field 1.03 (continued):

Under DETERMINING DEATH IN CARDIAC MEDICAL ARREST, Item #1d, add the following sentence: “In some circumstances, it is possible that OLMD may not be working in the receiving facility. If the OLMD is not at the receiving facility and resuscitation is terminated during transport, you must notify the receiving facility as soon as possible. The physician on staff at the receiving facility should pronounce death upon arrival.”



Cardiac Arrest

Cardiac Arrest: Summary

Updated to be consistent with AHA guidelines released
October 2015

Cardiac Arrest: places you will see the changes

Cardiac Arrest (Adult) 3.09:

- Encourage high quality chest compressions at a rate of 100-120/minute with 2 inch depth and full chest recoil along with early defibrillation. A metronome may be used if needed.
- Consider treatment for opiate overdose if suspected
- Delete Vasopressin

Cardiac Arrest: places you will see the changes

Cardiac Arrest (Pediatric) 3.10:

- Encourage high quality chest compressions at a rate of 100-120/minute with 1.5 inch depth in infants and 2 inch depth in children and full chest recoil along with early defibrillation. A metronome may be used if needed.
- Consider treatment for opiate overdose if suspected
- Delete Vasopressin

Cardiac Arrest: places you will see the changes

Newborn 3.26:

Treatment algorithm for newborn change to the following:
Assess infant's breathing and heart rate.

- Bag valve mask ventilation with 100% oxygen at a rate of 30 breaths/minute if infant is gasping or apneic or if heart rate is <100/minute.
- Chest compressions at a rate of 90/minute if heart rate <60.
- Consider endotracheal intubation.

Cardiac Arrest: places you will see the changes

Newborn 3.26 (continued):

- APGAR Scoring recommendations changed to: “Record APGAR score at birth and at 1 and 5 minutes.”
- Bag-valve-mask ventilation change from “40-60/min” to “30/min.” Under Under Chest Compressions, change “120 events /min” to “90/min”.

Cardiac Arrest: places you will see the changes

Vasopressin 5.30:

Deleted

Optional Medications and Procedures 1.11

Vasopressin deleted

Questions?

ADPH Office of EMS Website:

www.adph.org/ems

Your Regional EMS Office