Table of Contents

Acceptable Abbreviations ............................................................................................................................. 5
Communications Flow ................................................................................................................................. 7
Patient Radio Report .................................................................................................................................... 8
Miscellaneous Guidelines ............................................................................................................................ 9
Cardiac Care .................................................................................................................................................. 10
  ROUTINE CARDIAC CARE ........................................................................................................................ 10
  CHEST PAIN ............................................................................................................................................. 11
  CARDIOPULMONARY ARREST ................................................................................................................. 12
  CARDIOPULMONARY ARREST – VENTRICULAR FIBRILLATION/TACHYCARDIA .................................... 13
  CARDIOPULMONARY ARREST – PULSELESS ELECTRICAL ACTIVITY ................................................ 14
  CARDIOPULMONARY ARREST – ASYSTOLE ......................................................................................... 15
  CARDIOGENIC SHOCK ........................................................................................................................... 16
  VENTRICULAR ECTOPY (SYMPTOMATIC) (More than 6/min, couplets, triplets) .................................... 17
  WIDE COMPLEX TACHYCARDIA - STABLE .......................................................................................... 18
  WIDE COMPLEX TACHYCARDIA - UNSTABLE .................................................................................... 19
  NARROW COMPLEX TACHYCARDIA – STABLE (HR>150) .................................................................... 20
  NARROW COMPLEX TACHYCARDIA – UNSTABLE (HR>150) .............................................................. 21
  BRADYCARDIA – STABLE (HR<60) ........................................................................................................ 22
  BRADYCARDIA – UNSTABLE (Sinus Bradycardia, 1st Degree Heart Block, 2nd Degree Type I Heart Block) .......................................................................................................................... 23
  BRADYCARDIA – UNSTABLE (2nd Degree Type II Heart Block, 3rd Degree Heart Block) ....................... 24
Medical Care .................................................................................................................................................. 25
  ROUTINE MEDICAL CARE ..................................................................................................................... 25
  ACUTE PULMONARY EDEMA ................................................................................................................... 26
  HYPERTENSIVE CRISIS (Systolic BP > 200 mmHg OR Diastolic BP > 120) ............................................. 27
  ASTHMA/COPD .................................................................................................................................... 28
  ANAPHYLAXIS ....................................................................................................................................... 29
  ALLERGIC REACTION (NON-ANAPHYLAXIS) ..................................................................................... 30
  UNCONSCIOUSNESS/ALTERED LEVEL OF CONSCIOUSNESS/SYNCOPE ........................................ 31
Acceptable Abbreviations

1° first degree
2° second degree
3° third degree
♀ female
♂ male
@ at
abdomen
AC antecubital
ACS acute coronary syndrome
AED automated external defibrillator
AEMT advanced emergency medical technician
a-fib atrial fibrillation
a-flutter atrial flutter
AHA American Heart Association
ALS advanced life support
AM between 12 midnight & 12 noon
A.M.A. against medical advice
AMI acute myocardial infarction
amount
ant anterior
approx. approximately
ARC American Red Cross
AROM active range of motion
ASA aspirin (acetylsalicylic acid)
AV arteriovenous (as in AV graft or AV shunt)
BLS basic life support
blood pressure
beats per minute
bag valve mask
degrees Celsius
coronary artery bypass graft
conscious, alert, oriented
Critical Care Transport
congestive heart failure
central nervous system
complaint(s) of
chronic obstructive pulmonary disease
chest pain
continuous positive airway pressure
cardiopulmonary resuscitation
cerebrovascular accident (stroke)
change
dead at scene
discontinue
deciliter
do not resuscitate (order)
dead on arrival
5% dextrose in water
electrocardiogram
emergency communications radio nurse
emergency department
emergency medical responder
emergency medical services
emergency medical technician
emergency medical technician - basic
emergency medical technician - intermediate
emergency medical technician - paramedic
endotracheal tube
estimated time of arrival
alcohol
degrees Fahrenheit
foreign body
first responder
first responder – defibrillation
foot/feet
Glasgow coma score
gastro esophageal reflux disease
gastro-intestinal
ground-level fall
Gravida (number of pregnancies)
gunshot wound
drops
history
intensive care unit
insulin dependent diabetes mellitus
intermediate life support
intramuscular
intra-nasal
intraosseous
irregular
intravenous
intravenous push
Joules
jugular vein distention
kilogram
liter
pound
left lower quadrant
last menstrual period
LSB  long spine board  PEA  pulseless electrical activity
LOC  loss of consciousness  per  by way of
lpm  liters per minute  PERRL  pupils equal round and react to
LR  Lactated Ringer's  light
Lt or  left  PM  between 12 noon & 12 midnight
LUQ  left upper quadrant  po  per os (by mouth)
MAE  moves all extremities  POLST  Physician Orders for Life Sustaining
MCA  motorcycle accident  Treatment
MCAEMS(S)  McLean County Area EMS (System)  pr  per rectal
mcg  microgram  PSVT  paroxysmal supraventricular
mEq  milliequivalent  tachycardia
mg  milligrams  pt.  patient
M.I.  myocardial infarction  PTCA  percutaneous thrombolytic
min  minute  coronary angioplasty
ml  milliliter  PVC  premature ventricular contraction
mmHg  millimeters of mercury  PVD  peripheral vascular disease
MVC  motor vehicle collision  Q or q  every
NC  nasal cannula  RR  respiratory rate
NIDDM  non-insulin dependent diabetes  ROM  range of motion
mellitus  ROSC  return of spontaneous circulation
NKA  no known allergies  rt or  right
NG  nasogastric  RUQ  right upper quadrant
NRB  nonrebreather mask  SBP  systolic blood pressure
NS  normal saline (0.9% saline)  SL  sublingual
NSR  normal sinus rhythm  SMO  standing medical order
NTG  nitroglycerin  SMR  spinal motion restriction
N/V/D  nausea/ vomiting/ diarrhea  SpO2  saturation of peripheral oxygen
Ø  no, none  (pulse oximetry)
O2  oxygen  SQ  subcutaneous
O.D.  right eye  SVT  supraventricular tachycardia
OD  overdose  T  temperature
OG  Orogastric  TBSA  total body surface area
O.S.  left eye  TKO  to keep open
O.U.  both eyes  TXA  Tranexamic Acid
P  pulse  VF  ventricular fibrillation
para  children (number of live births)  VT  ventricular tachycardia
PAT  paroxysmal atrial tachycardia  X  times
PCS  pediatric coma score  y.o.  year old
P.E.  physical exam
PE  pulmonary embolism

Version 1.2: 03/01/2015
Communications Flow

NO RESPONSE FROM RECEIVING HOSPITAL

If you receive no response from the destination hospital after repeated attempts, contact the Resource Hospital for patient report. If the Resource Hospital is the hospital not responding, contact the Alternate Resource Hospital.

A written explanation (Incident Report Form) of each occurrence of radio communication failure must be completed by the involved prehospital provider and submitted to the MCAEMS System Office within 24 hours after the occurrence.
Patient Radio Report

Contact should be made with the receiving hospital in a timely manner and the following information about each patient should be relayed. UNDERLINED information shall be relayed on all patients.

1) MERCI Identifier, highest level of care available on the unit (BLS, ILS, ALS)
2) Age, sex, family physician, patient weight.

3) Present complaint:
   a) Chief complaint/mechanism of injury/nature of illness.
   b) History of present illness or injury.

4) Physical exam/vital signs (repeated every 5 - 15 min.):
   a) Loss of consciousness/mental status
   b) Head to toe exam results
   c) Blood pressure
   d) Pulse
   e) Respirations/lung sounds
   f) Skin condition
   g) Pupils
   h) Other findings

5) History, including:
   a) Symptoms
   b) Allergies
   c) Medications
   d) Pertinent past medical history
   e) Last meal (if pertinent to condition)
   f) Events leading to this incident

6) ECG/12-lead findings, if applicable and pertinent.

7) Treatment provided and responses to treatment

8) ETA to hospital (actual transport time).

Points to remember:
- Transmit patient’s initials only if requested by receiving hospital. If a name is requested, call receiving hospital on a secure telephone line.
- Radio transmissions need to be concise and include only pertinent information.
- If patient’s condition precludes gathering all the above information, an initial report may be made with pertinent information. Then contact with more information and an update in patient’s condition.
- If patient meets trauma, STEMI, or stroke criteria, receiving hospital shall be notified immediately with an early notification.
Miscellaneous Guidelines

AV FISTULAS, SHUNTS, AND GRAFTS
- Can be utilized in cardiac arrest if an IO cannot be established. Refer to AV Fistulas, Shunts, and Grafts procedure.

BLIND AIRWAY INSERTION DEVICES (BIAD)
- Only BIADs approved by the EMS System may be utilized.

IV ATTEMPTS
- No more than two (2) peripheral IV attempts shall be made while at scene. Up to two (2) more attempts may be made while en route, if indicated. Peripheral IVs include IVs initiated on the extremities.
- Except during actual entrapment, all vascular access attempts on “load and go” patients shall be made while enroute to the receiving facility.

BLOOD DRAWS
- Labs should be drawn on all patients with IV/IO access. Refer to Blood Draw procedure for further guidance.

EXTERNAL JUGULAR IV ACCESS
- External jugular vein access can be considered only after IO and IV attempts have been exhausted. Eternal jugular access should be considered as a last resort. External jugular access is a paramedic-only skill.

INTRAOSSEOUS INFUSIONS
- Intraosseous access may only be attempted by advanced providers. Only two attempts to establish an intraosseous infusion may be made.
- Intraosseous access may be utilized initially on any hemodynamically unstable patient. Providers are limited to 1 peripheral IV attempt on hemodynamically unstable patients.
- Intraosseous access shall be utilized initially on cardiac arrest patients.
- Only intraosseous access devices approved by the EMS System may be utilized.

MEDICAL CONTROL
- ECRNs may give medical control orders after consultation with an attending physician.

ENDOTRACHEAL INTUBATION
- No more than 2 attempts per advanced provider or 3 attempts total per patient shall be made.
- An attempt is defined as the laryngoscope blade inserted into the oral cavity unless a foreign obstruction was encountered.
- Bougie® Blind Intubation assistance device may be used in intubation attempts.
- Only intubation assist devices approved by the EMS System may be utilized.

STANDARD PRECAUTIONS
EMS personnel should use common-sense precautions against transmission of infectious/contagious diseases when caring for any patient. Appropriate personal protective equipment must be worn when exposure to blood or other potentially infectious materials is reasonably anticipated. Reference the Communicable Disease Policy for more information. Providers shall be familiar with their agency's infection control policies and procedures.
Cardiac Care

ROUTINE CARDIAC CARE

BLS

1. Determine patient level of consciousness.
2. Establish/confirm airway patency.
3. Assess breathing and circulation.
4. Obtain pulse oximetry reading.
5. Administer supplemental OXYGEN per Oxygen Administration procedure.
6. Obtain vital signs.
7. Apply and obtain 12-lead ECG and transmit (required for all transport vehicles). Repeat 12-leads should be obtained every 10 minutes or during any change in patient condition. Provide and early notification to receiving hospital for positive STEMI findings.
8. Loosen patient's restrictive clothing.
10. Initiate advanced level intercept.
11. Obtain patient history (including DNR/POLST status).
12. Reassess patient every 5 minutes.

NOTES:

- It is recommended for non-transport vehicles to have 12-lead ECG capabilities if closest transport vehicle is greater than 10 minutes away.
Cardiac Care

CHEST PAIN

BLS

1. *Routine Cardiac Care* protocol.
2. Administer ASA (total dose 324 mg) chewable tablets.
3. If systolic BP >90mmHg and patient continues to have chest pain, administer **NITROGLYCERIN** sublingual. May repeat every 5 minutes up to 3 times as long as systolic BP remains above 90mmHg.
4. Provide an early notification to receiving hospital with patient condition.

NOTES:

- DO NOT give ASA to a patient with a history of ASA allergy. Consult Medical Control before administering if patient has a history of ulcer disease or asthma.
- ASA shall not be administered if appropriate dose was given immediately prior to arrival. If ASA was administered immediately prior to arrival, but total dose was under 324mg, administer additional ASA to ensure cumulative dose of 324 mg.
- Do not give nitroglycerin to patients who have taken phosphodiesterase inhibitors (For example Viagra, Cialis, or Levitra) within the past 48 hours. Contact medical control for orders.
- Contact medical control prior to administering nitroglycerin if heart rate is greater than 130.
- IM medication should be avoided in patients with suspected AMI.
Cardiac Care

CARDIOPULMONARY ARREST

BLS

1. Initiate CPR if not already in progress. Follow AHA guidelines.
2. Utilize BVM for ventilatory support.
3. Check for pulse after 2 minutes. If no pulse resume CPR.
4. As soon as available, apply defibrillator/AED. Follow prompts on AED.
5. Administer EPINEPHRINE auto-injector IM. May repeat epinephrine auto injector in 3-5 minutes in opposite leg if patient remains pulseless.
6. Insert system approved blind insertion airway device (BIAD). Once in place, ventilate with BVM with 15 l supplemental oxygen at a rate of 8-10 breaths per minute.
7. Request advanced intercept early.
8. Prepare patient for rapid transport; remain on scene if ALS intercept is within 15 minutes.
9. If core body temperature is less than 30°C (86°F), limit defibrillations to 3.
10. Initiate Induced Hypothermia procedure.

NOTES:

- Interruptions in chest compressions shall be minimized.
- Intercepting units shall board the BLS unit with all advanced equipment, including cardiac monitor.
- Always consider and treat the H’s and T’s: Hypovolemia, Hypoxia, Hydrogen ion (acidosis), Hypo-/Hyperkalemia, Hypothermia, Tension pneumothorax, Tamponade (cardiac), Toxins, Thrombosis (pulmonary and coronary).
- When appropriate, institute Cardiac Resuscitation vs. Cease Efforts and Coroner Notification policy.
Cardiac Care

CARDIOPULMONARY ARREST – VENTRICULAR FIBRILLATION/TACHYCARDIA

BLS


NOTES:

• Providers should follow appropriate protocol based on rhythm.
Cardiac Care

CARDIOPULMONARY ARREST – PULSELESS ELECTRICAL ACTIVITY

BLS


NOTES:

- Consider contacting medical control early in cases of traumatic PEA.
Cardiac Care

CARDIOPULMONARY ARREST – ASYSTOLE

BLS


NOTES:

- Do not transport patients in asystole.
Cardiac Care

CARDIOGENIC SHOCK

BLS

1. Routine Cardiac Care.
Cardiac Care

VENTRICULAR ECTOPY (SYMPTOMATIC)
(More than 6/min, couplets, triplets)

BLS

1. Routine Cardiac Care.

NOTES:

- Hypoxia is the leading cause of ventricular ectopy. Be sure to maintain adequate oxygenation for patient.
Cardiac Care

WIDE COMPLEX TACHYCARDIA - STABLE

BLS

1. Routine Cardiac Care.

NOTES:

- STABLE: Patient is Conscious, alert, and oriented per their normal mentation AND hemodynamically stable
Cardiac Care

WIDE COMPLEX TACHYCARDIA - UNSTABLE

BLS

1. Routine Cardiac Care.

NOTES:

- UNSTABLE: decreased level of consciousness, hypotension, severe chest pain, or severe pulmonary congestion.
Cardiac Care

NARROW COMPLEX TACHYCARDIA – STABLE
(HR>150)

BLS

1. Routine Cardiac Care.

NOTES:

• STABLE: Patient is Conscious, alert, and oriented per their normal mentation AND hemodynamically stable
Cardiac Care

NARROW COMPLEX TACHYCARDIA - UNSTABLE
(HR>150)

BLS

1. Routine Cardiac Care.

NOTES:

- UNSTABLE: decreased level of consciousness, hypotension, severe chest pain, or severe pulmonary congestion.
Cardiac Care

BRADYCARDIA – STABLE
(HR<60)

BLS

1. Routine Cardiac Care.

NOTES:

- STABLE: Patient is Conscious, alert, and oriented per their normal mentation AND hemodynamically stable.
- Bradycardia may be a normal finding.
Cardiac Care

BRADYCARDIA – UNSTABLE
(Sinus Bradycardia, 1st Degree Heart Block, 2nd Degree Type I Heart Block)

BLS

1. Routine Cardiac Care.

NOTES:

• “Improvement” is defined as an increase in heart rate with a corresponding increase in mentation and hemodynamic stability (blood pressure).
• UNSTABLE: decreased level of consciousness, hypotension, severe chest pain, or severe pulmonary congestion.
Cardiac Care

BRADYCARDIA – UNSTABLE
(2nd Degree Type II Heart Block, 3rd Degree Heart Block)

BLS

1. Routine Cardiac Care.

NOTES:

- If patient remains hypotensive, refer to the Cardiogenic Shock Protocol.
- “Improvement” is defined as an increase in heart rate with a corresponding increase in mentation and hemodynamic stability (blood pressure).
- UNSTABLE: decreased level of consciousness, hypotension, severe chest pain, or severe pulmonary congestion.
Medical Care

ROUTINE MEDICAL CARE

BLS

1. Determine patient level of consciousness.
2. Establish/confirm airway patency.
3. Assess breathing and circulation.
4. Obtain pulse oximetry reading.
5. Administer supplemental OXYGEN per Oxygen Administration Procedure.
6. Obtain vital signs.
7. Loosen restrictive clothing.
8. Place patient in position of comfort. Treat patient in a calm, confident manner to prevent fear, panic, or other complications.
9. If patient condition warrants, initiate advanced level intercept.
10. Obtain patient history (including DNR/POLST status).
11. Reassess patient every 15 minutes (stable) or 5 minutes (unstable).
Medical Care

ACUTE PULMONARY EDEMA

BLS

1. Routine Medical Care.
2. Apply, obtain, and transmit 12-lead ECG.
3. If systolic blood pressure is greater than 100 mmHg, NITROGLYCERIN 0.4 mg SL.
4. Apply CPAP at 5 cm H₂O pressure. Contact MEDICAL CONTROL prior to initiating CPAP if systolic blood pressure is less than 100 mmHg.
5. NITROGLYCERIN PASTE (1") may be applied with order from MEDICAL CONTROL.
6. Activate advanced level intercept.

NOTES:

- Continuously monitor respiratory adequacy. If patient condition continues to deteriorate, manually assisted ventilations with BVM may be needed.
- Immediately discontinue NTG paste and/or NTG infusion if SBP drops below 100 mmHg.
- Once NTG paste or infusion is initiated, do not administer NTG SL.
Medical Care

HYPERTENSIVE CRISIS (Systolic BP > 200 mmHg OR Diastolic BP > 120)

BLS
1. Routine Medical Care.
2. Obtain and transmit 12-lead ECG.
3. If patient is conscious/alert, does not have any neurologic deficit, and CVA is not suspected, administer 0.4 mg NITROGLYCERIN SL. May repeat ONCE in 5 minutes if patient remains in hypertensive crisis.
4. Call for advanced level intercept.

NOTES:
- Consider underlying causes and treat appropriately (CHF, CVA, OD, eclampsia, etc.).
- Symptomatic hypertension may include: chest pain, respiratory distress, syncope, headache, or mental status changes.
- All symptomatic patients with hypertension should be transported with head elevated.
Medical Care

ASTHMA/COPD

BLS

1. Routine Medical Care.
2. **ALBUTEROL SULFATE**, 2.5 mg in 3 ml normal saline via nebulizer. Albuterol may be repeated every 5 minutes if respiratory distress persists.
3. If patient has administered at least two (2) albuterol treatment prior to EMS arrival, apply CPAP at 5 cm H₂O pressure along with **ALBUTEROL SULFATE**, 2.5 mg in 3 ml normal saline with **MEDICAL CONTROL** order.
4. If no relief after one (1) EMS-administered albuterol treatments, apply CPAP at 5 cm H₂O pressure along with **ALBUTEROL SULFATE**, 2.5 mg in 3 ml normal saline with **MEDICAL CONTROL** order.
5. **SUSPECTED ASTHMA ONLY**: If condition does not improve with albuterol, **EPINEPHRINE** auto-injector (Epi-Pen), 0.3 mg may be administered with **MEDICAL CONTROL** order.

NOTES:
- If patient requires BVM assist, use in-line nebulizer.
Medical Care

ANAPHYLAXIS

BLS

1. Routine Medical Care.
2. Administer **EPINEPHRINE** auto-injector (Epi-Pen). If no improvement, contact **MEDICAL CONTROL** for a repeat dose order.
3. If respiratory distress continues, administer **ALBUTEROL SULFATE** 2.5 mg in 3 ml NS via nebulizer.
4. Initiate advanced level intercept.

NOTES:
- Anaphylaxis is defined as hemodynamic instability and/or pending respiratory failure caused by an allergen.
Medical Care

ALLERGIC REACTION (NON-ANAPHYLAXIS)

BLS

1. Routine Medical Care.
Medical Care

UNCONSCIOUSNESS/ALTERED LEVEL OF CONSCIOUSNESS/SYNCOPE

BLS

1. Routine Medical Care.
2. Conduct FAST screen if neurologic cause suspected.
3. Check blood glucose level.
4. If narcotic overdose is suspected, NALOXONE 2 mg IN (½ each nare).
5. Obtain and transmit 12-lead ECG.

NOTES:

- Altered level of consciousness can be caused by numerous conditions. Perform a physical exam and solicit a complete history to help determine underlying cause. Treat cause as appropriate.
Medical Care

DIABETIC EMERGENCY

BLS

1. Routine Medical Care.
2. If blood sugar is less than 60 mg/dL (or less than 80 mg/dL and exhibiting signs of hypoglycemia) and patient is conscious and able to swallow, administer ORAL GLUCOSE. Alternatively, beverages or food items high in simple sugar content may be utilized.
3. If blood sugar is less than 60 mg/dL (or less than 80 mg/dL and exhibiting signs of hypoglycemia) and patient is NOT conscious and able to swallow, administer GLUCAGON 2 mg IN (1/2 each nare).
4. Initiate advanced level intercept if patient remains altered or is not responsive to initial treatment. Do not delay transport.
5. Repeat blood glucose analysis.

NOTES:

• Providers should also reference Altered Level of Consciousness Protocol.
Medical Care

STROKE/CVA

BLS

1. Routine Medical Care.
2. Protect paralyzed limbs from injury.
3. Provide an early notification to receiving hospital of a positive FAST exam.
4. Position patient with head elevated 20 to 30 degrees unless systolic BP < 90 mmHg or trauma is present.
5. Initiate advanced level intercept. Do not delay transport.

NOTES:

- Providers should also reference the Altered Level of Consciousness Protocol.
- Patient transport shall be initiated as soon as possible once the provider suspects the patient is having a CVA.
- Leave initial FAST stroke worksheet at receiving facility.
- Patients shall be transported to a stroke center. See Patient Destination policy.
Medical Care

SEIZURES

BLS

1. Routine Medical Care.

NOTES:

• Do not force anything between the teeth.
• Create safe surroundings for the patient (ensure patient’s limbs and head do not strike other objects, remove moveable objects from around the patient, etc.). DO NOT RESTRAIN PATIENT.
**Medical Care**

**SUSPECTED POISONING - ORGANOPHOSPHATE**

**BLS**

1. Routine Medical Care.
2. Transport as soon as possible after decontamination.

**NOTES:**

- Common organophosphates: insecticides (malathion, parathion, diazinon, ethion, etc.), herbicides (tribufos, merphos, etc.), nerve gases (sarin, soman, VX, etc.)
- Signs and symptoms of organophosphate poisoning can be remembered with the acronym SLUDGE: Salivation, Lacrimation, Urination, Defecation, Gastrointestinal upset, and Emesis.
- ENSURE APPROPRIATE DECONTAMINATION. Do not transport patients prior to decontamination, as an enclosed environment with a contaminated patient can be extremely dangerous to providers. NOTIFY THE RECEIVING FACILITY AS SOON AS POSSIBLE FOR ACTIVATION OF THEIR DECONTAMINATION TEAM. DO NOT ENTER THE FACILITY UNLESS SPECIFICALLY ORDERED TO DO SO.
- Consider calling for additional advanced units (for additional atropine) if prolonged patient contact time is anticipated.
Medical Care

SUSPECTED POISONING OR DRUG OVERDOSE

BLS

1. Routine Medical Care.
2. If narcotic overdose is suspected AND respiratory depression/failure is present, administer **NALOXONE** 2 mg IN (1/2 each nare).

NOTES:
- Common tricyclic drugs include: Amitriptyline (Elavil), Imipraminoxide (Imiprex), Lofepramine (Lomont), Nortriptyline (Pamelor).
- Poison Control: 1-800-222-1222
Medical Care

SEPSIS

Indications:
Any patient, over the age of 18, with suggestion of infection or being treated for infection (i.e. cough, shortness of breath, diarrhea, abdominal pain, central line infection, wound, cellulitis, recent procedure, immunocompromise) and at least two of the following (new to patient):

- Heart rate > 90 beats per minute
- Respiratory rate > 22 breaths per minute or \( \text{SpO}_2 < 90\% \) on room air
- Hyperthermia (>100.4\(^\circ\)F or 38\(^\circ\)C) or hypothermia (<96.8\(^\circ\)F or 36\(^\circ\)C)
- SBP ≤ 90 mmHg
- Altered mental status or decreased LOC

Contraindications:
- Any patient under the age of 18.

Protocol: BLS

1. Routine Medical Care.
2. Early notification to receiving facility of a “sepsis alert” patient.
3. Reassess patient and vital signs every 5 minutes.
4. Initiate advanced level intercept.
5. Check blood glucose level.
6. Apply, obtain, and transmit 12-lead ECG.
7. If the temperature is >104.0\(^\circ\)F, place a cold pack in each armpit as well as the posterior neck. Remove the cold packs if shivering begins.

NOTES:
- Sepsis is a life threatening condition. Providers must appreciate the critical nature of this condition.
- End tidal CO\(_2\) readings <25 mmHg are often encountered in severely septic patients, although this criteria should not be used to rule in or rule out the possibility of sepsis. Only the criteria listed in this procedure shall be used.
- Acetaminophen is contraindicated in patients with severe hepatic impairment or severe active liver disease as well as for patients with known hypersensitivity to Acetaminophen or to any of the excipients in the formulation.
- No PO medications should be administered to any patient that is at high risk of aspiration or presents with nausea/vomiting.
Medical Care

ENVIRONMENTAL – NEAR DROWNING

BLS

1. Routine Medical Care.
2. Remove wet clothing and dry patient.
Medical Care

ENVIRONMENTAL – RADIATION EXPOSURE

BLS

1. Routine Medical Care.
2. Notify receiving hospital as soon as possible. DO NOT ENTER RECEIVING FACILITY WITHOUT NOTIFYING OF SITUATION.
Medical Care

ENVIRONMENTAL – HYPOTHERMIA

BLS

1. Routine Medical Care.
2. Protect from further heat loss.
3. Handle patient very gently.
4. Remove from cold environment (remove wet clothing, cover patient’s head, cover patient with blankets).
5. Administer warm oxygen (use hot packs around oxygen tubing).
6. Place hot packs on central pulse points (axillary, femoral).
Medical Care

ENVIRONMENTAL – FROSTBITE

BLS

1. Routine Medical Care.
2. Remove clothing covering affected area. Do not forcefully remove clothing that sticks to affected area.
3. Cover affected area with dry sterile dressing and splint.
4. Protect area from re-freezing.
Medical Care

ENVIRONMENTAL – HEAT RELATED EMERGENCIES –
CRAMPS, TETANY, SYNCOPE, EXHAUSTION, HEAT STROKE

BLS

1. Routine Medical Care.
2. Move to cool environment.
3. Cool patient (place cold packs on central pulse points).
4. If patient is hypotensive, place in Trendelenberg position.
5. Do not massage cramping muscle.
6. Perform 12-lead ECG and transmit to receiving facility.
7. If heat stroke is not suspected and patient is not nauseated, give 1-2 glasses of electrolyte containing solution (i.e. Gatorade), if available.
Medical Care

ENVIRONMENTAL – BITES AND ENVENOMATIONS

BLS

1. Routine Medical Care.
2. Position patient supine.
3. Immobilize affected area/limb.
4. Monitor for allergic reaction.
5. Obtain 12-Lead ECG.

NOTES:

- Do not attempt to suction out poison from the injection site.
Trauma Care

ROUTINE TRAUMA CARE

BLS

1. Perform scene survey (assess for hazards, number of patients, mechanism of injury, special extrication needs, etc.).
2. Consider spinal precautions if mechanism warrants (refer to Spinal Immobilization Procedure).
3. Assess level of consciousness.
4. Establish/confirm airway patency.
5. Assess breathing and circulation.
6. Obtain pulse oximetry reading.
7. Administer supplemental OXYGEN per Oxygen Administration Procedure.
8. Identify and treat life threatening conditions.
10. If patient meets “load and go” criteria, transport as soon as possible (see Load and Go Protocol). Ensure advanced level intercept is activated if patient condition or mechanism warrants.
11. Manage non-life threatening injuries (if patient is unstable, do this while enroute and as time allows)
12. Take vital signs every 5 minutes (unstable) or 15 minutes (stable). Ensure a blood glucose measure is performed.
13. Perform 12-lead ECG (unstable or significant mechanism of injury).
14. Perform secondary trauma survey if time and patient condition allows.
Trauma Care

CRITICAL TRAUMA SITUATIONS – “LOAD & GO”

BLS
1. Routine Trauma Care.
2. Transport should be initiated as soon as possible.
3. DO NOT DELAY TRANSPORT WAITING FOR INTERCEPT. INTERCEPT SHOULD BE PERFORMED ENROUTE TO HOSPITAL.
4. Notify receiving facility as soon as possible.
5. The following are critical situations (not an all inclusive list) that require LOAD & GO transport:
   a. Head injury with unconsciousness, unequal pupils. Or decreasing level of consciousness (GCS≤10)
   b. Airway obstruction that cannot be quickly relieved by mechanical methods such as suction or positioning
   c. Conditions resulting in possible inadequate breathing
      i. Large open chest wound
      ii. Large flail chest
      iii. Tension pneumothorax
      iv. Major blunt chest injury
   d. Penetrating traumatic cardiopulmonary arrest
   e. Shock
   f. Signs of conditions that may rapidly lead to shock:
      i. Tender, distended abdomen
      ii. Pelvic instability
      iii. Bilateral femur fractures
Trauma Care

SMR DECISION TREE

Patients age 12-65 that experience a mechanism of injury that creates the potential for a spine injury

Field Spinal Motion Restriction Clearance Protocol

- No

Head, neck, or back pain?

- Yes

Low impact/velocity event?

- No

Complete spinal motion restriction

- Yes

Is patient:
* Free from distracting injuries
* Conscious and oriented with decisional capacity
* Without drug impairment
* Free of spinal deformities

- No

Place C-collar and transport in position of comfort on stretcher

- Yes

If field clearance is contraindicated
Trauma Care

TRAUMATIC CARDIOPULMONARY ARREST

BLS

1. Routine Trauma Care.
2. If the cause of traumatic cardiopulmonary arrest is blunt force AND AED indicates “no shock advised,” contact [MEDICAL CONTROL] for death declaration.
3. Refer to Cardiac Arrest Protocol as applicable.
Trauma Care

HEAD INJURY

BLS

1. Routine Trauma Care.
2. If signs of increased intracranial pressure, consider hyperventilating patient. See Assisted Ventilations Procedure.
Trauma Care

SPINAL INJURY

BLS

1. Routine Trauma Care.
Trauma Care

THERMAL/ELECTRICAL BURNS

BLS

1. Have patient removed from fire/remove fire from patient.
2. Routine Trauma Care.
3. Stop the burning process
   a. If burn occurred within 15 minutes, cover burns with dry, clean/sterile dressing and cool with water.
   b. If burn occurred greater than 15 minutes prior, apply dry, clean/sterile dressings.
4. Remove patient’s clothing/jewelry from affected area. If clothing sticks, do not remove.

NOTES:
- Avoid administering medications via intranasal route.
Trauma Care

CHEMICAL BURNS

BLS

1. Routine Trauma Care.
2. Note chemical agent causing burn.
3. Wearing protective equipment, remove patient’s clothing and jewelry. Contaminated clothing may cause continued exposure.
4. Irrigate or flush burn with copious amounts of water or saline, unless contraindicated.
   a. Dry powder burns should be brushed off before applying water
   b. Irrigate burns to the eye(s) for at least 15 minutes
   c. Alkaline burns should receive continuous irrigation
5. Ensure receiving hospital is notified of potential chemical exposure.

NOTES:

- If time and patient condition allows, a Materials Safety Data Sheet (MSDS), Safety Data Sheet (SDS), Product Safety Data Sheet (PSDS), or equivalent should be obtained.
- Do not transport patients prior to appropriate decontamination efforts by trained hazardous materials responders.
Trauma Care

EXTREMITY INJURIES/AMPUTATED TISSUE

BLS

1. Routine Trauma Care.
2. Extremity care:
   a. Check and record distal pulses, sensation, movement, tenderness, instability, crepitus (before and after splinting).
   b. Rest, ice, compression (elastic bandage) elevation, splint
   c. If extremity is severely angulated and pulses are absent, apply gentle traction to attempt to straighten it, then splint (if resistance is encountered, splint extremity in position found)
   d. DO NOT intentionally replace any protruding bone.
3. Amputation care:
   a. Control bleeding
   b. If tissue is partially amputated, NEVER COMPLETE THE AMPUTATION
   c. Attempt to recover the amputated part; collect all tissue, bone fragments, etc. Do not delay patient transport while attempting to recover amputated part.
   d. Apply wet sterile dressing to stump area
   e. Apply hemorrhage control agent (i.e. Quik-Clot)
   f. For uncontrolled hemorrhage of an extremity, apply EMS system approved tourniquet
4. Care of amputated part:
   a. Wrap in moist (saline) dressing. Do not immerse.
   b. Place part in waterproof bag or container and seal.
   c. Place the container in a second container filled with ice
   d. If possible, transport amputated part is transported with patient.
Trauma Care

HEMORRHAGIC SHOCK

BLS

1. Routine Trauma Care.
Trauma Care

CRUSH/SUSPENSION

BLS

1. Routine Trauma Care.
2. If an extremity is involved, place EMS system approved tourniquet on affected extremity as close to crush area as possible.

PRIOR TO RELEASE OF COMPRESSION/SUSPENSION FORCE
3. Nebulized ALBUTEROL SULFATE. Repeat once.

NOTES:

- Rescue of victims is paramount in suspension situations.
General Protocols

PAIN CONTROL

BLS

1. Routine Trauma, Medical, and/or Cardiac Care.
General Protocols

NAUSEA/VOMITING

BLS

1. Routine Trauma, Medical, and/or Trauma Care.
2. Prevent risk of aspiration by placing patient in left lateral recumbent position or slightly tilting backboard (if full SMR instituted).

NOTES:

- Keep suction ready.
General Protocols

EXCITED DELIRIUM

BLS

1. Routine Medical Care.
2. Work with law enforcement to safely restrain patient, if necessary. Refer to Patient Restraint procedure.
General Protocols

DRUG ASSISTED INTUBATION

BLS

1. N/A
General Protocols

FIELD SPINAL MOTION RESTRICTION PROTOCOL

Indications:
Any patient that experiences a mechanism of injury that creates the potential for a spine injury.

Contraindications:
Any patient less than 12 years old or any patient 65 years old or greater, patients with chronic neck or back pain, any patient exhibiting signs of shock.

Protocol:
All patients will be assessed by the following criteria. Only those patients who meet ALL requirements as NO or NORMAL may be cleared.

1. Does the patient have a GCS less than 15?
2. Does the patient complain of neck or back pain?
3. Is there tenderness, swelling or deformity noted when the complete spine is palpated?
4. Is there a distracting injury or distracting pain?
5. Are there signs/symptoms of alcohol or drug abuse present?

Spinal motion restriction (SMR) may be withheld only if the answer to all of the five preceding questions is NO. If the answer to any of the preceding questions is yes the patient should be placed in full SMR. If the patient meets the criteria to withhold SMR, EMS providers may still elect to provide SMR.

Examples of distracting injuries: long bone fractures, rib fractures, pelvic fractures, abdominal pain, large contusion, avulsion to the face or scalp, partial thickness burns greater than 10% TBSA or full thickness burns, any significantly painful injury.

Examples of signs/symptoms of alcohol or drug abuse: GCS less than 15, slurred speech, dilated pupils, flushed skin, unsteady gate, irregular behavior, presence of paraphernalia.
General Protocols

INDUCED HYPOTHERMIA

BLS

2. Insert and confirm placement of blind insertion airway device.
3. Ventilate the patient with BVM and 100% oxygen.
5. Confirm history (non-traumatic – drowning and hanging are permissible)
6. Confirm patient age is 18 years or greater.
7. Perform neurological exam.
8. Expose patient, apply ice packs around head, to the groin, and axilla areas.

NOTES:

• ROSC is defined as the return of a palpable pulse of greater than 30 seconds
• Induced hypothermia should only be initiated after ROSC has been achieved and the patient has no meaningful response to verbal commands
• Temperature after the resuscitation must be greater than 33 C rectally.
• If no blind insertion airway or intubation is in place, cooling may only be initiated by Medical Control order
• Protect the patient’s modesty; undergarments may remain in place during cooling efforts
• Do not delay transport to cool the patient
• Frequently monitor the airway and temperature status
• Patients may develop metabolic alkalosis with cooling; **DO NOT HYPERVENTILATE**
OB/GYN

PRE-ECLAMPSIA, ECLAMPSIA, TOXEMIA

BLS

1. Assure an airway and ventilate as needed.
2. Routine Medical Care.
3. Assure minimal stimulation (handle gently, do not check pupil reaction with light).
4. If patient is having seizures, follow Seizures protocol.

NOTES:
- Definition: Coma and convulsive seizures or SBP greater than 140, diastolic greater than 90, occurring between the 20th week of pregnancy and the end of the first week postpartum.
OB/GYN

IM_PENDING DELIVERY

BLS

1. Routine Medical Care.
2. Obtain a complete history
3. Position patient on left side if 2nd or 3rd trimester. Elevate feet 10-12 inches if hypotensive.

NOTES:

- History questions: length of gestation, previous pregnancies (gravida), # of children from previous pregnancies (para), due date, history of complications of pregnancy, pain level, contraction status/frequency, membrane status, anticipated multiple birth, estimate bleeding, high risk factors.
- High risk factors: lack of prenatal care, drug abuse, teenage pregnancy, history of diabetes, hypertension, cardiac diseases, previous breech or c-section deliveries, pre-eclampsia/eclampsia/toxemia
OB/GYN

CHILDBIRTH: NORMAL DELIVERY

BLS

1. If field delivery is imminent, allow delivery to progress spontaneously.
2. Support baby’s head so that it doesn’t emerge too quickly.
3. Tear amniotic membrane if it is still intact and visible outside the vagina.
4. Check for cord around neck. If cord is around neck, try to slip it over the shoulder and head. If unable to remove the cord from around neck, place umbilical clamps 2 inches apart and cut cord between clamps.
5. The baby will be wet and slippery. Carefully support head throughout delivery. Suction baby’s mouth then nose with bulb syringe as soon as head emerges.
6. Tell the mother to resume pushing. Support the head as it rotates. A slight lowering of the baby to allow delivery of the anterior (top) shoulder, and then gentle lifting to allow delivery of the posterior (bottom) shoulder may be helpful. The baby should deliver completely.

AFTER DELIVERY

7. Routine medical care.
8. Placenta should deliver within 20-30 minutes. Do not delay transport while waiting for placenta to deliver.
OB/GYN

SEVERE VAGINAL HEMORRHAGE (Postpartum or Miscarriage)

BLS

1. Assure an airway, ventilate as needed.
2. Routine Medical Care.
3. Place a sanitary napkin over the vaginal opening. Make a note for the time the napkin was placed. Remove pads as they become soaked, but save all pads to use in evaluating blood loss.
4. Save all tissue that is passed.
5. Massage fundus of uterus to keep firm and contracted.
6. If patient becomes hypotensive, position patient on left side with legs elevated.
7. Promptly transport patient.
OB/GYN

ABNORMAL DELIVERIES – PROLAPSED CORD

BLS

1. Routine Medical Care.
2. Oxygen via nasal cannula 4 liters per minute.
3. Transport immediately.
4. Place mother in knee-chest position or in a supine position with hips elevated on pillow.
5. Protect cord from being compressed by placing sterile gloved hand in vagina between pubic bone and presenting part with cord between fingers and exert counter pressure against presenting part. Keep hand in position until relieved.
6. Palpate cord for pulsations.
7. DO NOT ATTEMPT TO PUSH CORD BACK.
8. Keep exposed cord moist and warm.
OB/GYN

ABNORMAL DELIVERIES – BREECH PRESENTATION

BLS

1. Routine Medical Care.
2. Oxygen via nasal cannula 4 LPM.
3. Transport immediately.
4. Never attempt to pull the baby from the vagina by the legs or trunk.
5. As soon as legs are delivered, support baby’s body.
6. After shoulders are delivered, gently elevate trunk and legs to aid in delivery of head (if face down).
7. Head should deliver in 30 seconds. If not – reach 2 fingers into the vagina to locate the infant’s mouth. Press vaginal wall away from baby’s mouth to force an airway. Apply gentle pressure to the mother’s fundus.
OB/GYN

RAPE/SEXUAL ASSAULT

BLS

1. Ensure scene safety. Survey the scene giving special consideration to preserving any articles of evidence on or around the patient.
   a. Discourage patient from changing clothes, urinating, or washing/showering.
   b. Collaborate with police to determine what articles (e.g. clothing) will be transported with the patient.
   c. Do not physically examine genital area unless there are apparent injuries which need treatment.
   d. All linen used by the patient should be left with the patient at the Emergency Department.
2. If patient is injured: Routine trauma care. If no obvious injuries, routine medical care.
3. Notify law enforcement (if not already at scene).
4. Only ask questions pertinent to injury.
5. See Reporting of Suspected Crime policy/procedure.
ABUSE

SUSPECTED DOMESTIC ABUSE/NEGLECT

BLS

1. General approach:
   a. Consider scene safety issues. If the suspected offender is present and interferes with transportation of the patient or is influencing the patient’s acceptance of medical care, contact police and medical control and appropriate action.
   b. Routine medical/trauma care.
   c. Treat obvious injuries or illness.
   d. Survey scene for evidence of abuse neglect:
      i. Environmental
      ii. Interaction with family members
      iii. Discrepancies in history of events
      iv. Injury patterns that do not correlate with the history of patient use and mobility.
      v. Signs of intentional injury or emotional harm.

2. Transport.

3. Prehospital providers are not mandated to report suspected domestic abuse, but are required to discretely offer the victim information on where assistance may be obtained.

4. Thoroughly document the history and physical exam findings on the patient care report.

NOTES:
- As with all patients, confidentiality is of the utmost importance. No suspicion or accusations of abuse should be transmitted over the radio.
ABUSE

SUSPECTED ELDER ABUSE/NEGLECT

BLS

1. General approach:
   a. Consider scene safety issues. If the suspected offender is present and interferes with
      transportation of the patient or is influencing the patient’s acceptance of medical care, contact
      police and medical control for appropriate action.
   b. Routine medical/trauma care.
   c. Treat obvious injuries or illness.
   d. Survey scene for evidence of abuse neglect:
      i. Environmental
      ii. Interaction with family members
      iii. Discrepancies in history of events
      iv. Injury patterns that do not correlate with the history of patient use and mobility.
      v. Signs of intentional injury or emotional harm.

2. Transport.

3. Upon arrival, notify the receiving physician or nurse of the suspected abuse. Healthcare workers
   (including prehospital providers) are mandated by Illinois law to report cases of suspected abuse or
   neglect. You may contact the elderly abuse hotline 1-800-252-4343.

4. Thoroughly document the history and physical exam findings on the prehospital report.

NOTES:

- As with all patients, confidentiality is of the utmost importance. No suspicion or accusations of abuse
  should be transmitted over the radio.
Medication Index

A
ALBUTEROL SULFATE, 28, 29, 54
ASA, 5, 11

E
EPINEPHRINE, 12, 28, 29

G
GLUCAGON, 32

N
NALOXONE, 31, 36
NITROGLYCERIN, 11, 26, 27
NITROGLYCERIN PASTE, 26

O
ORAL GLUCOSE, 32

NOTE: Oxygen and normal saline have been omitted from Medication Index.
# Version History

The following is the update lineage to the EMS protocols manual. Editions prior to December 1, 2014 are NOT included in this history. Providers shall routinely check the system website (www.mcleancountyems.org) to verify this copy is the most current edition. Only the most current edition, as listed on the website, shall be used for medical guidance. Previous editions shall be considered obsolete.

<table>
<thead>
<tr>
<th>Version</th>
<th>Date of Enactment</th>
<th>List of Changes from Previous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Draft</td>
<td>N/A: Internal release only</td>
<td>N/A: not released to public</td>
</tr>
<tr>
<td>Trainer</td>
<td>N/A: Training purposes only</td>
<td>Various minor and grammatical/phrasing corrections</td>
</tr>
<tr>
<td>Preliminary</td>
<td>N/A: Training purposes only</td>
<td>Various minor and grammatical/phrasing corrections. Protocols used for initial education of system members.</td>
</tr>
<tr>
<td>1.1</td>
<td>12/1/2014</td>
<td>Various minor and grammatical/phrasing corrections.</td>
</tr>
<tr>
<td>1.2</td>
<td>03/01/2015</td>
<td>Added SEPSIS protocol under the Medical Protocols section.</td>
</tr>
</tbody>
</table>