EMS REGION 11 CHICAGO

BLS/EMT-B

STANDING MEDICAL ORDERS
These Standing Medical Orders (SMOs) have been developed and approved through a collaborative process involving the four EMS Systems of EMS/Trauma Region 11.

The following SMOs are to be utilized as the pre-hospital medical treatment guidelines by the system’s EMT-B. It is understood that deviations from the SMOs may be necessary in the interest of assuring that a patient is transported to an appropriate medical facility rather than receive no care at all.

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# BLS STANDING MEDICAL ORDERS

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**GENERAL**

Adult Initial Assessment  A-1.1 to A-1.4
Routine Medical Care (RMC)  A-2
ADULT INITIAL ASSESSMENT – BLS

I. SCENE SIZE-UP

A. Wear appropriate personal protective equipment (PPE)

B. Assess the scene safety
   1. Evaluate hazards to EMS personnel, patients and bystanders
   2. Determine number of patients
   3. Determine the mechanism of injury/nature of illness
   4. Request additional resources as needed, and weigh the benefits of waiting for additional resources against rapid transport to definitive care
   5. Consider declaration of mass casualty incident if needed

II. INITIAL ASSESSMENT OF ADULT PATIENT

A. Assess General Impression of the patient
   1. Evaluate patient responsiveness using the AVPU scale

B. Primary Survey - Should be Airway-Breathing-Circulation (A-B-C), unless specific circumstances such as cardiac arrest or major hemorrhage where Circulation-Airway-Breathing (C-A-B) is indicated
   1. Airway - Assess for patency
      a. Open the airway as needed using either head-tilt, chin-lift or jaw thrust while maintaining c-spine stabilization as appropriate
      b. Suction airway as needed
      c. Consider use of appropriate airway adjuncts including: oral airway (OPA), nasal airway (NPA), or supraglottic airway device (SGA), as per Advanced Airway Management I-4
      d. For Respiratory Obstruction, see Respiratory Obstruction C-2
   2. Breathing
      a. Evaluate for rate, breath sounds, accessory muscle use, retractions, and patient positioning
b. Administer oxygen as needed to maintain an oxygen saturation of >94% or at 15L by most appropriate method for any critically ill patient (respiratory distress, shock, smoke inhalation, carbon monoxide poisoning, or cardiac arrest)

c. If apneic, see Advanced Airway Management I-4

3. **Circulation**
   
a. Control any major external hemorrhage
      
i. Apply direct pressure to wound
      
   ii. For life-threatening bleeding that cannot be controlled by other means, proceed to Tourniquet Application I-9 and/or apply hemostatic agent

   b. Assess pulse
      
i. Assess rate and quality of carotid and radial pulses
      
   ii. If none, see Cardiac Arrest Management: Incident Command for Cardiac Arrest (ICCA) I-5

   c. Assess perfusion status via skin color, temperature and capillary refill

4. **Disability**
   
a. Calculate GCS as indicated
   
b. Evaluate gross motor and sensory exam in all extremities
   
c. Check blood glucose in any patient with altered mental status
   
d. If acute stroke suspected, perform Cincinnati Stroke Scale I-3 and see Suspected Acute Stroke D-3

5. **Expose** patient as appropriate to complaint or mechanism
   
a. Be considerate of patient modesty and environmental conditions
   
b. Apply appropriate intervention to maintain normal body temperature

C. **Secondary Survey** - A full secondary assessment should be completed and documented on every patient unless a critical airway, breathing or circulation problem requires stabilization. It should not delay transport in critical patients. A secondary survey should include the following components:

1. **Head**
   
a. Pupils
   
b. Naso-oropharynx
   
c. Skull and scalp
2. Neck
   a. Jugular venous distention
   b. Tracheal position
   c. Spinal tenderness

3. Chest
   a. Chest wall bruising or deformities
   b. Retractions
   c. Breath Sounds

4. Abdomen/Flank/Back/Pelvis
   a. Bruising
   b. Distention
   c. Tenderness

5. Extremities
   a. Bruising or deformities
   b. Pulse
   c. Edema

6. Neurologic
   a. Mental Status/Orientation
   b. Motor and sensory exam

D. Obtain Baseline Vital Signs

1. An initial full set of vital signs is required on every patient including: pulse, blood pressure, respiratory rate, pulse oximetry and neurologic status assessment

2. A repeat set of vital signs is required at least every 15 minutes on stable patients and at least every 5 minutes on unstable patients

3. For patients with a cardiac or respiratory complaint or in those where acute coronary syndrome is suspected, request ALS assistance

4. Blood sugar should be checked on any patients with altered mental status or with known or suspected diabetes

5. Continuous waveform capnography must be monitored on any patient with advanced airway management

6. Pain scale should be documented on any patient with a pain complaint
E. Obtain OPQRST History:
   1. Onset of Symptoms
   2. Provocation-location, any factors that worsen or relieve symptoms
   3. Quality of symptoms or pain
   4. Radiation of pain
   5. Severity of symptoms-pain scale
   6. Time of onset and circumstances surrounding onset

F. Obtain SAMPLE History:
   1. Symptoms
   2. Allergies
   3. Medications
   4. Past Medical/Surgical History
   5. Last oral intake
   6. Events leading up to emergency call

G. Reassessment
   1. At least every 15 minutes in a stable patient
   2. At least every 5 minutes in an unstable patient or more often if clinically appropriate
Scene Size-Up

Initial assessment of adult patient as per protocol A-1

Patient care per appropriate protocol and policy

Determination of BLS vs. ALS care per Policy B.3

Contact Online Medical Control per Policy A.1

Transport patient (or appropriate disposition) as per Policy B.1
CARDIAC

Suspected Acute Coronary Syndrome / Cardiac Chest Pain  B-1
Cardiac Arrest  B-2
SUSPECTED ACUTE CORONARY SYNDROME / CARDIAC CHEST PAIN - BLS

RMC

Request ALS assistance

4 chewable (81 mg non-enteric coated) aspirin po

SBP ≥ 100?

NO, < 100

YES, ≥ 100

Assist patient with prescribed 0.4 mg NTG tab or spray

Repeat VS SBP ≥ 100?

NO, < 100

YES, ≥ 100

Repeat NTG q 5 min for continued CP if SBP remains ≥ 100 Total 3 doses

Trendelenburg if tolerated

Contact Medical Control as appropriate and prepare for transport

1 – Contact Medical Control before administration of nitroglycerin in patients with recent use of erectile dysfunction medications such as sildenafil (Viagra), tadalafil (Cialis), or vardenafil (Levitra)
**CARDIAC ARREST - BLS**

Confirm unresponsiveness and check CABs. **Attach AED, AND request ALS assistance.**

Initiate CPR and ICCA.

- Machine advises shock? 
  - YES: Deliver shock. 
  - NO: Reanalyze rhythm.

- Machine advises shock? 
  - YES: Deliver shock. 
  - NO: CPR for 2 minutes.

- CPR for 2 minutes.
  - Pulse present? 
    - NO: Establish Supraglottic Airway. 
    - YES: Reanalyze rhythm. 

- Reanalyze rhythm.

- Machine advises shock? 
  - YES: Deliver shock. 
  - NO: CPR for 2 minutes.

- CPR for 2 minutes.
  - Breathing normally? 
    - NO: Continue CPR. 
    - YES: Assist ventilation via BVM. Consider Supraglottic Airway.

- Continue CPR.

Contact Medical Control from scene.

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BLS B-2
RESPIRATORY

Respiratory Distress  C-1
Respiratory Obstruction  C-2
Allergic Reaction and/or Anaphylaxis  C-3
Suspected Carbon Monoxide Poisoning  C-4
RESPIRATORY DISTRESS - BLS

RMC

Secure and maintain airway

Request ALS assistance

Adequate airway/respiratory effort?

NO, RR < 10 and/or decreased LOC

Assist airway with ventilation via BVM

Suction

YES, RR ≥ 10

Assess lung sounds. Wheezing?

YES

Albuterol 2.5 mg mixed with Atrovent 0.5 mg via nebulizer 1
Repeat Albuterol as needed

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate

NO

Continue RMC

See appropriate SMO

BLS C-1

1 – If available

NOTE: Complete lack of breath sounds may indicate severe bronchoconstriction
RESPIRATORY OBSTRUCTION - BLS

RMC

Request ALS assistance

Conscious?

NO

BEGIN CPR

Before ventilation, look in airway
If a foreign body is seen, remove
(Do not do a blind finger sweep)

Continue CPR until the obstruction
is relieved or the patient regains
consciousness

YES

Able to speak?

NO

Abdominal thrusts or chest
thrusts if not effective or if
victim is pregnant or obese

Continue until relieved

YES

Allow to cough

Conscious?

BLS Non-Transport

Prepare for transport and contact
Medical Control as appropriate

BLS Ambulance

Transport and contact Medical
Control as appropriate

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ALLERGIC REACTION and/or ANAPHYLAXIS - BLS

RMC

Secure and maintain airway

Request ALS assistance

Severity of reaction?

SEVERE SYMPTOMS OR > 1 MILD SYMPTOM*

Administer Epinephrine 0.3 mg IM OR Assist patient with prescribed EpiPen

Contact Medical Control

If wheezing, Albuterol 2.5 mg Repeat Albuterol as needed

Closely monitor, if no improvement administer a second dose of Epinephrine after consultation with Medical Control

BLS Non-Transport BLS Ambulance

Prepare for transport and continue to monitor for any worsening of condition

Discuss disposition with Medical Control

SINGLE MILD SYMPTOM**

Closely monitor for any worsening of condition

Has condition worsened?

YES

NO

BLS Non-Transport BLS Ambulance

Prepare for transport and contact Medical Control as appropriate

Transport and contact Medical Control as appropriate

*Severe symptoms of an allergic reaction may include any combination of the following:

RESPIRATORY – Shortness of breath, wheezing, repetitive coughing
CARDIOVASCULAR – Pale, cyanotic, low blood pressure, dizzy
THROAT – Tightness, hoarse, trouble breathing/swallowing
MOUTH – Swelling of the tongue and/or lips
SKIN - Diffuse hives or redness
GI – Repetitive vomiting, severe diarrhea
NEURO – Anxiety, confusion, sense of doom

**Mild symptoms of an allergic reaction may include any combination of the following:

NOSE – Itchy/runny nose, sneezing
MOUTH – Itching
SKIN- Few hives, mild itching
GI – Mild nausea/discomfort
SUSPECTED CARBON MONOXIDE POISONING - BLS

RMC

Request ALS assistance

Obtain CO reading, if available

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate

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BLS C-4
MEDICAL

Altered Mental Status  D-1
Seizures  D-2
Suspected Acute Stroke  D-3
Behavioral Emergency  D-4
Taser/Electrical Weapon Device Exposure  D-5
Non-Cardiogenic/Non-Traumatic Shock  D-6
Pain Management  D-7
Suspected COVID-19 Protocol (ALS/BLS)  D-8.1 to D-8.5
ALTERED MENTAL STATUS - BLS

1. Assess level of consciousness (GCS) and determine time of onset of altered mental status

2. Request ALS assistance

3. Spinal Immobilization as indicated (See Appendix)

4. Check Blood Sugar

   - BS ≤ 60 mg/dl
     - Glucopaste 1 tube PO if intact gag reflex
   - BS > 60 mg/dl

5. If stroke suspected, see stroke SMO

6. If signs of opioid intoxication with respiratory depression administer Naloxone 2 mg IN

7. Blood Pressure?

   - < 100
     - Trendelenburg if tolerated
   - ≥ 100
     - Continue RMC

8. BLS Non-Transport

   - Prepare for transport and contact Medical Control as appropriate

9. BLS Ambulance

   - Transport and contact Medical Control as appropriate
SEIZURES - BLS

Assess level of consciousness (GCS) during post-ictal period

Spinal Immobilization as indicated (See Appendix)

Check Blood Sugar

BS ≤ 60

Glucopaste
1 tube PO if intact gag reflex

BS > 60

Assess level of consciousness (GCS) during post-ictal period

Spinal Immobilization as indicated (See Appendix)

RMC

Request ALS assistance

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SUSPECTED ACUTE STROKE - BLS

RMC

Request ALS assistance

Determine time of onset of stroke symptoms
Estimate time when patient was last seen as normal

Assess for physical signs of stroke
Perform Cincinnati Stroke Scale

Check Blood Sugar

BS ≤ 60

Glucopaste
1 tube PO if intact gag reflex

BS > 60

Document time of onset and signs of stroke,
include in radio report

Patients with stroke symptoms ≤ 24 hours in
duration or unknown time of last known normal and
an abnormality in one or more items of the Cincinnati
Stroke Scale (CSS) should be transported to the
closest stroke center

Patients may also be transported to the closest
stroke center if directed by the Base Station

See “Transport of Patients with Suspected Acute
Stroke” Policy

BLS Non-Transport  BLS Ambulance

Prepare for transport and contact
Medical Control as appropriate

Transport and contact Medical
Control as appropriate

Cincinnati Stroke Scale (CSS) (for responsive patient):

1. Facial droop – have patient show teeth or smile
   Abnormal = one side does not move as the other

2. Arm Drift – have patient close eyes and hold arms out for 10 seconds with
   palms up
   Abnormal = one arm does not move or drifts down

3. Abnormal speech – have patient say, “You can’t teach an old dog new tricks”
   Abnormal = patient slurs words, uses wrong words or is unable to speak

Positive CSS = One or more of the above items are abnormal
BEHAVIORAL EMERGENCY - BLS

RMC

Consider safety and request assistance as needed

Use verbal techniques to diffuse patient behavior

Assure sufficient resources to contain and restrain patient in supine position

Continue to monitor airway

Assess for medical emergency and/or trauma if possible
See appropriate SMO

Check Blood Sugar if possible and treat as appropriate

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate
Note: This protocol is to be used for patients who have been subdued by the use of any conductive electrical weapon device (e.g. TASER)

1 – Patient will be transported to the closest comprehensive Emergency Department.
2 – Patients who are in police custody must be accompanied to the hospital by appropriate law enforcement personnel.

RMC

Request ALS assistance

Secure and maintain airway

If the patient fell, assess for head/neck/spinal injury
Spinal Immobilization as indicated
(See Appendix)

Monitor patient for:
Seizure Activity
Chest Pain
Altered LOC

Secure Taser Barb
DO NOT REMOVE BARB
Stabilize with gauze/tape
Identify location of probes on the patient’s body

BLS Non-Transport
BLS Ambulance

Prepare for transport and contact
Medical Control as appropriate

Transport\textsuperscript{1,2} and contact
Medical Control as appropriate

1 – Patient will be transported to the closest comprehensive Emergency Department.
2 – Patients who are in police custody must be accompanied to the hospital by appropriate law enforcement personnel.
NON-CARDIOGENIC / NON-TRAUMATIC SHOCK - BLS

RMC

Request ALS assistance

Place in Trendelenburg

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate
Determine cause of patient’s pain and refer to appropriate protocol

Determine Patient’s Pain Score using either the Verbal Descriptor Scale or Wong-Baker FACES® Scale

Consider use of non-pharmacologic pain management techniques
   Attempt to place patient in a position of comfort
   Consider application of ice packs or splints as appropriate

Complete vital signs and pain scale should be assessed and documented before and after every intervention

Transport and contact Medical Control as appropriate

Universal Pain Assessment Tool

Verbal Descriptor Scale
- No Pain
- Mild Pain
- Moderate Pain
- Severe Pain
- Very Severe Pain
- Excruciating Pain

Wong-Baker FACES®
REGION 11 CHICAGO EMS SYSTEM
Suspected COVID-19 Protocol (ALS/BLS)

I. PATIENT CARE GOALS

A. To identify the proper EMS assessment, treatment, and transport for patients at risk for COVID-19 infection within the Region 11 EMS System.

B. To follow current CDC, IDPH, and CDPH guidelines.

C. To minimize any possible exposure of COVID-19 to EMS providers, Emergency Department staff, or any other patients or family in the healthcare setting.

II. PATIENT MANAGEMENT

A. CASE IDENTIFICATION

1. COVID-19 identification is primarily based on fever and/or symptoms of acute respiratory illness (e.g. cough and difficulty breathing), but patients may also have other viral syndrome symptoms such as chills, myalgias (muscle aches), rhinorrhea (runny nose), sore throat, nausea, vomiting, headache, abdominal pain, and diarrhea. Atypical presentations with any of the above symptoms should be considered.

2. Higher risk patients for COVID-19 includes those with close contact with a COVID-19 positive patient, recent travel to areas with widespread COVID-19, living in close quarters, healthcare workers, chronic medical conditions or immunocompromised state.

3. Emergency Medical Dispatchers (OEMC) should screen calls for suspected COVID-19 and communicate to EMS prior to their arrival on scene to allow for use of proper PPE.

B. PPE GUIDELINES

1. EMS providers should apply proper PPE per CDC guidelines.

   a. Surgical facemasks are an acceptable alternative if N-95 or higher level respirators are in short supply.

   b. Respirators/N-95s should be prioritized for procedures that are likely to generate respiratory aerosols, which would pose the highest exposure risk to the healthcare provider.

   c. Eye protection. (i.e. goggles or disposable face shields that fully covers the front and side of face. Personal eyeglasses are not considered adequate eye protection).
d. **Gloves.** A single pair of disposable patient examination gloves that should be changed if torn or heavily contaminated.

e. **Isolation gown.** If there is a shortage of gowns it should be prioritized for aerosol generating procedures, care activities where splashes and sprays are anticipated and high contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothes of EMS providers (e.g. moving patient onto stretcher).

2. After patient handoff at the hospital, EMS providers should safely remove PPE to prevent contamination. Discard PPE in accordance with routine procedures and perform good hand hygiene.

## C. SUSPECTED COVID-19 PATIENT ASSESSMENT

1. Initial Assessment

   a. EMS providers should exercise appropriate precautions when responding to a call with signs or symptoms of a respiratory infection and apply proper PPE before entering the scene.

   b. For patients with suspected COVID-19, EMS providers should avoid exposure of multiple personnel if possible.

   c. Initial assessment should begin at a distance of at least 6 feet from the patient and a facemask should be placed on the patient for source control.

   d. Patient contact should be minimized to the extent possible until a facemask is on the patient.

2. Patient Assessment

   a. Perform Adult or Pediatric Assessment
   
   b. Travel history
   
   c. COVID-19 exposure history
   
   d. Past medical history
   
   e. Vital signs
   
   f. Physical examination

3. Procedures

   a. **Aerosol-Generating Procedures should be to minimized to reduce virus transmission unless exhibiting signs of severe respiratory illness.**

   b. EMS providers should exercise caution when an aerosol-generating procedure is necessary, an N-95 or higher level respirator should be used by EMS providers performing aerosol-generating procedures including bag valve mask (BVM) ventilation, oropharyngeal suctioning, nebulizer treatment, continuous positive airway pressure (CPAP) or resuscitation involving CPR.
c. If possible, Aerosol Generating Procedures should be done with the rear doors of the ambulance open and the HVAC system active or in a negative pressure room away from patient care areas.

d. At the hospital, nebulizers and CPAP should be temporarily discontinued between the ambulance and the patient room to minimize disease transmission.

e. BVMs and other ventilator equipment should be equipped with HEPA or other viral filter to filter expired air if available.

4. Treatment
   a. **Oxygenation**
      i. Maintain SpO2 > 90%.
      ii. Nasal cannula with surgical mask over the cannula is the preferred method of oxygenation. May use higher than normal flow rates (up to 7 liters per minute) if needed to maintain desired oxygen saturation.
      iii. If persistently hypoxic despite nasal cannula apply non-rebreather.

   b. **Nebulization Therapy**
      i. Restrict nebulizer treatments to patients who are exhibiting signs of severe respiratory distress.
      ii. Metered dose inhaler (MDI) with a spacer, if available, is the preferred route for medication administration
         1. Consider 4-6 puffs per dose of MDI with spacer, if available, may repeat every 5 minutes as needed.
         2. Use of patient’s MDI with spacer if available is preferred.

   c. **Continuous Positive Airway Pressure (CPAP)** should be used with caution in suspected COVID-19 patients due to increased transmission risk.

   d. **Endotracheal intubation** should be avoided in suspected COVID-19 patients due to increased transmission risk. Supraglottic airway placement should be performed for advanced airway management during resuscitation.

   e. **Epinephrine**: For patients with severe respiratory distress and wheezing, epinephrine IM can be used for rescue therapy.

5. Transportation of Suspected COVID-19 Patients
   a. Transport to the closest appropriate Emergency Department.
b. Close door/window between driver and patient compartment.

c. During transport, vehicle ventilation in both compartments should be on non-circulated mode and rear exhaust fan on.

d. If a vehicle without an isolated patient compartment and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to create a negative patient gradient in the patient area.

e. Online Medical Control should be consulted for any questions regarding patient care and all refusals of transport.

f. Pre-notification to the receiving hospital is mandatory to allow for room and equipment preparation.

g. EMS must coordinate with receiving hospital staff prior to entering the hospital to minimize exposure.

h. Family members and contacts should not ride in the ambulance if possible, but should wear a mask if their presence is critical for patient care.

III. DOCUMENTATION


   1. For CFD select “Suspected Case of Corona/COVID-19” on the Special Event/Situation tag under Incident.

B. Document all EMS and public safety providers involved in the care of a suspected COVID-19 patient, level of contact, and level of PPE worn during treatment for follow-up of testing results.

C. Positive COVID-19 tests should be reported from the hospital to local health department. The hospital should notify the EMS Agency Designated Infection Control Officer to facilitate appropriate follow-up for agency personnel.

D. EMS Agencies should develop policies for assessing exposure risk and management of EMS providers that are exposed to and that become infected with COVID-19.

III. CLEANING

A. After patient transport, leave the rear doors of the ambulance open to remove potentially infectious particles. The time to complete patient transfer, cleaning, and documentation should provide sufficient air changes.

B. Routine cleaning and disinfectant procedures are appropriate. When cleaning the vehicle, EMS providers should wear a disposable gown and gloves. A facemask and eye protection should be used if splashes or sprays during cleaning are anticipated.
C. All surfaces that may have come in contact with the patient or materials contaminated during patient care should be thoroughly cleaned and disinfected (e.g. stretcher, rails, control panels, floors, walls, work surfaces).

D. EPA registered disinfectants for emerging viral pathogens should be used.

IV. RESTOCKING

A. EMS agencies should maintain a stock of PPE for their EMS providers as the primary means of replacement.

B. Hospitals should replace individual PPE after patient transport if the same level of PPE is available.
ENVIRONMENTAL

Frostbite E-1
Hypothermia E-2
Heat Illness E-3
Burns E-4.1 to E-4.3
Haz Mat / Toxic Exposure E-5
Hazardous Events / Nuclear/Blast Injuries E-6.1
Hazardous Events / Suspected Biological E-6.2
Hazardous Events / Chemical E-6.3
FROSTBITE - BLS

RMC

- Prevent further injury/handle gently
- Move patient to warm environment
- Remove wet clothing

- Protect injured part (blisters) with light sterile dressing
  - Avoid pressure to area
  - Handle as you would a burn

- Prevent re-exposure to cold or refreezing of part

- Do not rub part
- Do not use artificial heat
- Do not use tight dressing

BLS Non-Transport
Prepare for transport and contact Medical Control as appropriate

BLS Ambulance
Transport and contact Medical Control as appropriate
1 - May present with altered sensorium or unconscious. Heart more susceptible to dysrhythmias. May have apnea, dusky or cyanotic appearance, fixed and dilated pupils; may appear without signs of life.
2 – An individual in a frozen state is not considered salvageable.
3 – The suspected hypothermic patient shall never be declared dead in the field.
HEAT ILLNESS - BLS

RMC

Place in cool environment

Mental status?

ALTERED

Request ALS assistance

If blood sugar < 60, Glucopaste 1 tube PO if intact gag reflex

NORMAL

Remove all clothing and cover with wet sheets Monitor for seizure activity

BLS Non-Transport BLS Ambulance

Prepare for transport and contact Medical Control as appropriate

Transport and contact Medical Control as appropriate
BURNS - BLS

RMC

Assess singed facial hair, hoarseness, wheezing, cough or stridor

Airway compromise?

YES

Secure airway
Consider advanced airway
Request ALS assistance

NO

Remove clothing
Clothing should be cut, not pulled off
Smoldering clothing should be extinguished with water
Remove all accessories and jewelry
Do not attempt to cool patient

Estimate BSA

Cover with dry dressings or sheet

BLS Non-Transport
BLS Ambulance

Prepare for transport and contact Medical Control as appropriate
Transport and contact Medical Control as appropriate
ELECTRICAL BURNS - BLS

Assure scene safety
Remove patient from source of electricity or have power service cut off

RMC

Request ALS assistance

Spinal Immobilization as indicated
(See Appendix)

See Burns SMO

BLS Non-Transport
Prepare for transport and contact Medical Control as appropriate

BLS Ambulance
Transport and contact Medical Control as appropriate
CHEMICAL BURNS - BLS

Assure scene safety
Remove patient from source as necessary

Notify Fire Department Haz Mat as appropriate

RMC
See Burn SMO

Burn location?

EYE
SOLID
Brush off excess chemical

SKIN
LIQUID
Remove clothing

Flush with Normal Saline/water

BLS Non-Transport

BLS Ambulance

Prepare for transport and contact Medical Control as appropriate

Transport and contact Medical Control as appropriate

Flush eyes continuously with Normal Saline throughout transport

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
HAZ MAT / TOXIC EXPOSURE - BLS

Protect yourself, maintain a safe distance upwind of site

Notify Fire Department Haz Mat Team of any potential biological, chemical or radiation exposure

Do not enter area unless declared safe by Haz Mat Team

Contact Illinois Poison Center as indicated (800)222-1222

RMC

See appropriate SMO

Bring container(s) of drug or substance to the ED (provided that it is not a Haz Mat substance)

BLS Non-Transport  BLS Ambulance

Prepare for transport and contact Medical Control as appropriate  Transport and contact Medical Control as appropriate

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
HAZARDOUS EVENTS / NUCLEAR/BLAST INJURIES - BLS

Notify Haz Mat Team
Decontamination by Haz Mat Team

RTC

Crush injury with victim still entrapped?

YES
Request ALS assistance

NO

Stabilize all life threatening injuries/bleeding
Long board with lateral head and full body immobilization per Spinal Immobilization
(See Appendix)

See Burn SMO as indicated

BLS Non-Transport BLS Ambulance

Prepare for transport and contact Medical Control as appropriate

Transport and contact Medical Control as appropriate

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
HAZARDOUS EVENTS / SUSPECTED BIOLOGICAL - BLS

RMC

Field or ED personnel: Note increase in patients with “similar type symptoms”

Don PPE and place surgical mask on patient
See ABT card

Notify Resource Hospital/Field Officer

BLS Non-Transport
Prepare for transport and contact Medical Control as appropriate

BLS Ambulance
Transport and contact Medical Control as appropriate

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
TRAUMA

Routine Trauma Care (RTC) F-1
   Head Trauma F-2
   Spinal Trauma F-3
   Trauma Airway F-4
   Chest Trauma F-5
   Extremity Trauma F-6
   Trauma in Pregnancy F-7
Traumatic Hemorrhagic Shock F-8
   Traumatic Arrest F-9
Scene Safety & Universal Precautions (BSI)

Assess level of consciousness (GCS)

Secure and maintain airway
Stabilize C-spine as appropriate
(see Spinal Immobilization in Appendix)

Administer oxygen per appropriate method
to maintain oxygen saturation ≥ 94%
For patients with respiratory distress, shock, smoke inhalation, carbon monoxide poisoning, or cardiac arrest, administer high flow oxygen 15 L by most appropriate method
(See Appendix for approved oxygen delivery methods)

Assess and control bleeding

Obtain vital signs
Assess pain using pain scale (0-10)
Obtain history
See appropriate SMO

Apply Trauma Field Triage Criteria decision scheme
to determine appropriate transport destination
(see Trauma Transport Policy)

BLS Non-Transport  BLS Ambulance
Prepare for transport and contact Medical Control as appropriate
Transport and contact Medical Control as appropriate
HEAD TRAUMA - BLS

RTC

Assess level of consciousness (GCS)

Altered level of consciousness?

YES

Request ALS assistance

Assess respiratory effort and assist ventilation as indicated
Monitor for seizure activity

Immobilization per Spinal Immobilization (See Appendix)

Check Blood Sugar

BS ≤ 60 mg/dl

Glucopaste
1 tube PO if intact gag reflex

BS > 60 mg/dl

NO

Immobilize per Spinal Immobilization (See Appendix)

BLS Non-Transport
Prepare for transport and contact Medical Control as appropriate

BLS Ambulance
Transport and contact Medical Control as appropriate
SPINAL TRAUMA - BLS

RTC

Immobilize per Spinal Immobilization
(See Appendix)

Extricate as necessary

Assess motor and sensory function

Assess circulation to extremities

BLS Non-Transport  BLS Ambulance

Prepare for transport and contact Medical Control as appropriate  Transport and contact Medical Control as appropriate
TRIUMA AIRWAY - BLS

RTC

Maintain airway with c-spine control

Adequate ventilation?

NO

Assess respiratory effort
Consider OP/NP
Consider BVM/Advanced Airway
Suction as needed

Request ALS assistance

See appropriate SMO for injury

YES

See appropriate SMO for injury

BLS Non-Transport

BLS Ambulance

Prepare for transport and contact Medical Control as appropriate

Transport and contact Medical Control as appropriate
CHEST TRAUMA - BLS

RTC

Request ALS assistance

Type of trauma?

Traumatic arrest

Sucking chest wound

Other Trauma

CPR

Occlusive dressing (tape on 3 sides)

Assess respiratory effort
Consider OP/NP/BVM/Advanced Airway

Immobilization as per Spinal Immobilization
(See Appendix)

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate
EXTREMITY TRAUMA - BLS

RTC

Assess pulse, sensation, motor function

Consider ALS assistance if BP < 90

Amputation?

YES

Consider application of a tourniquet

Complete amputation?

NO

Place severed part in saline moistened gauze in plastic bag and place on cold pack

Splint/bandage injured extremity

Avoid covering the tourniquet

NO

Assess if open wound present

Splint/bandage

Assess/document neurovascular function after splinting

If continued bleeding, consider application of a tourniquet

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate
TRAUMA IN PREGNANCY - BLS

RTC

Consider ALS assistance if abdominal pain or vaginal bleeding

Position patient on left side and/or tilt board to left

See appropriate SMO

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate

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Implementation: 1/1/11

BLS F-7
TRAUMATIC HEMORRHAGIC SHOCK - BLS

RTC

Request ALS assistance

Place in Trendelenburg

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate

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Implementation: 1/1/11; 3/1/16

BLS F-8
TRAUMATIC ARREST - BLS

RTC

Request ALS assistance

See appropriate SMO(s) for suspect injuries

BLS Non-Transport BLS Ambulance

Prepare for transport and contact Medical Control as appropriate

Transport and contact Medical Control as appropriate
OBSTETRICS

Emergency Childbirth  G-1
Postpartum Care  G-2
Obstetrical Complications  G-3.1 to G-3.5
Neonatal Resuscitation  G-4
Obtain patient history and document any of the following:
1. Rectal pressure
2. Contractions less than or equal to 2 minutes apart
3. Uncomfortable and unable to ambulate
4. Vaginal bleeding
5. Ruptured membranes
6. Uncontrollable urge to push

Any of the above present?

YES

Request ALS assistance

Check for crowning

Crowning present?

YES

Prepare for birth

Control delivery of head with palm of hand so it does not emerge too quickly

Check for cord around the neck
If present, refer to Nuchal Cord SMO (G-3.4)

Guide head and neck as upper shoulders are delivered

Support baby as body delivers

See Postpartum Care SMO

NO

NO

Monitor for above

Time contractions

Place patient on left side

Time contractions

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Contact Medical Control and transport to ED with an approved OB facility
POSTPARTUM CARE - BLS

Request ALS assistance

BABY

Note time of delivery

PRMC

Keep newborn level with mother’s vagina until cord clamped

Wipe face

Dry and wrap warmly in blanket

Clamp umbilical cord securely in two places about 6-8” from baby and cut between 2 clamps

If non-vigorous or in respiratory distress proceed to Neonatal Resuscitation SMO (G-4) Request ALS assistance

Assess APGAR score at 1 and 5 minutes after birth Request ALS assistance if APGAR ≤ 6

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Contact Medical Control and transport to ED with an approved OB facility

MOTHER

RMC

Place in Trendelenburg if BP<90 Request ALS assistance

If placenta delivers, note time of delivery Put it in a plastic bag Do not delay transport waiting for placenta Do NOT pull on cord to facilitate placenta delivery

If heavy vaginal bleeding, gently massage uterus with your hand on abdomen

If perineum is torn or bleeding, apply direct pressure with trauma dressing

APGAR SCORING

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>1 Min</th>
<th>5 Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>A=Appearance (color)</td>
<td>Blue, pale</td>
<td>Blue hands and feet</td>
<td>Entirely pink</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P=Pulse (heart rate)</td>
<td>Absent</td>
<td>&lt;100/min</td>
<td>≥100/min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G=Grimace (reflex irritability)</td>
<td>No response</td>
<td>Grimace</td>
<td>Cough or sneeze</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A=Activity (muscle tone)</td>
<td>Limp</td>
<td>Some flexion of extremities</td>
<td>Active motion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R=Respiratory effort</td>
<td>Absent</td>
<td>Weak cry, hypoventilation</td>
<td>Good, strong cry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTALS =
OBSTETRICAL COMPLICATIONS - BLS

BLEEDING IN PREGNANCY

RMC

Request ALS assistance

Place mother on left side if ≥ 20 weeks gestation

Note type and amount of external bleeding and/or discharge

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Alert Medical Control of OB complications
Transport to ED with an approved OB facility if ≥ 20 weeks gestation
OBSTETRICAL COMPLICATIONS - BLS

BREECH BIRTH

RMC

Request ALS assistance

Never attempt to pull the baby from the vagina by the legs or trunk

As soon as legs are delivered, support baby's body and wrap in towel

After shoulders are delivered, gently elevate trunk and legs to aid in delivery of head (if face down)

If head has not delivered in 30 seconds with the next contraction, continue supporting the body and reach 2 sterile gloved fingers into vagina to locate infant's mouth. Press vaginal wall away from baby's mouth to form an airway. Until head delivers, keep your hand in position

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Alert Medical Control of OB complications
Transport to ED with an approved OB facility

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BLS G-3.2
PROLAPSED CORD

RMC

Request ALS assistance

Elevate mother’s hips, knee-chest position, or left side down, Trendelenberg position.

Palpate cord for pulsations

Protect cord from being compressed by placing a sterile gloved hand in vagina and supporting the presenting part until transfer of patient care

Keep exposed cord moist and warm (may use sterile NS)

BLS Non-Transport BLS Ambulance

Prepare for transport and contact Medical Control as appropriate

Alert Medical Control of OB complications
Transport to ED with an approved OB facility
NUCHAL CORD

RMC

Request ALS assistance

Slip two fingers under the cord and lift over baby's head

Successful?

NO

Double clamp cord, cut cord between clamps to allow for release of cord from neck

YES

Follow normal delivery procedures

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Alert Medical Control of OB complications. Transport to ED with an approved OB facility

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BLS G-3.4
OBSTETRICAL COMPLICATIONS - BLS

PRE-ECLAMPSIA OR TOXEMIA (ECLAMPSIA)

RMC

Request ALS assistance

Place mother on left side

Minimal central nervous system stimulation

Seizure precautions

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Alert Medical Control of OB complications. Transport to ED with an approved OB facility

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BLS G-3.5
NEONATAL RESUSCITATION - BLS

PRMC

Request ALS assistance

Deliver head and body
Clamp/cut cord

Dry
Clear Airway
Warm
Position and stimulate

Check respirations, heart rate, and color

Apneic, HR < 100, Baby not vigorous
Cyanotic and Breathing
Pink and Breathing, HR > 100

If indicated, gently suction mouth and nose of infant with bulb syringe

Supplemental Oxygen at 5-10 L
If remaining cyanotic BVM

Check heart rate after 30 seconds of positive pressure ventilation

HP < 60

Chest compressions for 30 seconds (3:1 ratio compressions/ventilations)

HR ≥ 60

Support ABCs
Keep warm
Continue ventilation

Support ABCs
Keep warm

BLS Non-Transport
BLS Ambulance

Prepare for transport and contact Medical Control as appropriate
Contact Medical Control and transport to ED with an approved OB facility

1 – Corrective action steps to improve positive pressure ventilation:
M: Mask Adjustment
R: Reposition Airway
S: Suction Mouth & Nose
O: Open Mouth
P: Pressure Increase
A: Airway Alternative

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BLS G-4
PEDIATRICS

Pediatric Initial Assessment  H-1.1 to H-1.5
Pediatric Routine Medical Care (PRMC)  H-2
Pediatric Routine Trauma Care (PRTC)  H-3
  Cardiopulmonary Arrest  H-4
  Respiratory Distress  H-5
  Respiratory Obstruction  H-6
Allergic Reaction and/or Anaphylaxis  H-7
Tracheostomy with Respiratory Distress  H-8
  Suspected Croup or Epiglottitis  H-9
Altered Mental Status  H-10
  Seizures  H-11
Extremity Trauma  H-12
Non-Traumatic Shock  H-13
  Hypothermia  H-14
  Heat Illness  H-15
Pain Management  H-16
Burns  H-17.1 to H-17.4
Haz Mat/Toxic Exposure  H-18.1
  Hazardous Events/Nuclear-Blast Injuries  H-18.2
  Hazardous Events/Suspected Biological  H-18.3
  Hazardous Events/Chemicals and Nerve Agents  H-18.4
Near Drowning  H-19
Pediatric Drug Dosing Dose Reference Guide  H-20
I. SCENE SIZE-UP

A. Protect from body substance through isolation (glasses, gloves, gown and mask).

B. Assess the scene for safety and take appropriate steps.

C. Determine the mechanism of injury/nature of illness.
   1. Note the number of patients.
   2. Initiate Mass Casualty Plan, if necessary.
      a. Call for additional personnel and equipment.
      b. Begin triage.
   3. Assess for any indication of abuse or neglect of the patient (See policy “Reporting Abused and/or Neglected Patients”)

II. INITIAL ASSESSMENT OF PEDIATRIC PATIENT

A. Assess general impression of child and environment with initial assessment of wellness and general appearance (conduct from a distance). Complete assessment while protecting the cervical spine, if necessary.
   1. Determine nature of illness or mechanism of injury.
   3. Obtain SAMPLE history and identify any caregivers at scene.

B. Assess child's mental status.
   1. Identify yourself and your purpose using age appropriate terms.
   2. Initially approach child in non-threatening manner, on their level when appropriate. Initiate touch in a non-threatening manner, before examining child when appropriate.
   3. Evaluate child's mental status utilizing Pediatric Coma Scale.

C. Assess airway
   1. Responsive Child

BLS H-1.1
PEDIATRIC INITIAL ASSESSMENT (cont.)

a. If child is talking or crying, then assess for adequacy of breathing.
b. If child is not talking or crying, open airway using modified jaw thrust maneuver.

2. Unresponsive Child

a. Open the airway using modified jaw thrust maneuver.
b. Consider use of oral airway.

D. Assess Breathing

1. Non-breathing child

a. Maintain open airway and assist breathing utilizing ventilatory adjuncts and oxygen at the appropriate rate.
b. Suction if necessary.
c. Pulse oximeter

2. Breathing child

a. Look for rise and fall of chest and feel for rate and depth of breathing.
b. Look for use of accessory muscles, nasal flaring, grunting and retractions.
c. Determine adequacy of breathing for age (either too fast or too slow).
d. If breathing is inadequate, assist breathing utilizing ventilatory adjuncts and oxygen at the appropriate rate.
e. Suction if necessary.
f. Pulse oximeter (if indicated)

PEDIATRIC VITAL SIGNS

Weight in kg = (2 x age in years) + 10

<table>
<thead>
<tr>
<th>Age</th>
<th>Pulse</th>
<th>Systolic Blood Pressure</th>
<th>Respiratory Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonate (0-30 days)</td>
<td>100-180</td>
<td>&gt; 60</td>
<td>30-60</td>
</tr>
<tr>
<td>Infant (31 days - &lt; 1yr)</td>
<td>100-160</td>
<td>&gt; 60</td>
<td>30-60</td>
</tr>
<tr>
<td>Toddler (1 yr - &lt; 3 yrs)</td>
<td>90-150</td>
<td>&gt; 70</td>
<td>24-40</td>
</tr>
<tr>
<td>Pre-School (3 yrs - &lt; 5 yrs)</td>
<td>80-140</td>
<td>&gt; 75</td>
<td>22-34</td>
</tr>
<tr>
<td>School Age (5 yrs – 12 yrs)</td>
<td>70-120</td>
<td>&gt; 80</td>
<td>18-30</td>
</tr>
<tr>
<td>Adolescent ( &gt; 12 yrs)</td>
<td>60-100</td>
<td>&gt; 90</td>
<td>12-16</td>
</tr>
</tbody>
</table>
E. Assess Circulation

**INDICATORS OF HYPOPERFUSION IN CHILDREN**

- Cyanosis despite administration of oxygen
- Truncal pallor/cyanosis and coolness
- Hypotension (late sign)
- Bradycardia (ominous sign)
- Weak, thready, or absent peripheral pulses
- No palpable blood pressure
- Decreasing level of consciousness

1. Check brachial or femoral pulse for rate and quality.
2. If none found, check for carotid pulse. If pulseless, start CPR and see appropriate SMO.
3. Assess capillary refill.
5. Assess and control severe bleeding.

F. Identify priority pediatric patients for immediate transport and initiate interventions as per SMOs.

G. Repeat initial assessment.

1. Every 15 minutes in a stable child.
2. Every 5 minutes in an unstable child.
3. Repeat before beginning detailed physical examination.

H. Initiate measures to prevent heat loss to keep the child from becoming hypothermic.

I. For children with special healthcare needs (CSHN), refer as needed to child’s emergency care plan. Understanding the child’s baseline will assist in determining the significance of altered physical findings.
### PEDIATRIC GLASGOW COMA SCALE (PGCS)

<table>
<thead>
<tr>
<th></th>
<th>&gt; 1 Year</th>
<th>&lt; 1 Year</th>
<th>Score</th>
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<tbody>
<tr>
<td><strong>EYE OPENING</strong></td>
<td>Spontaneously</td>
<td>Spontaneously</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>To verbal command</td>
<td>To shout</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To pain</td>
<td>To pain</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>No response</td>
<td>1</td>
</tr>
<tr>
<td><strong>MOTOR RESPONSE</strong></td>
<td>Obeys</td>
<td>Spontaneous</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Localizes pain</td>
<td>Localizes pain</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Flexion-withdrawal</td>
<td>Flexion-withdrawal</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Extension (decerebrate rigidity)</td>
<td>Extension (decerebrate rigidity)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>No response</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>&gt; 5 years</th>
<th>2-5 Years</th>
<th>0-23 Months</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VERBAL RESPONSE</strong></td>
<td>Oriented</td>
<td>Appropriate words/phrases</td>
<td>Smiles/coos appropriately</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Disoriented/confused</td>
<td>Inappropriate words</td>
<td>Cries and is consolable</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Inappropriate words</td>
<td>Persistent cries and screams</td>
<td>Persistent inappropriate crying and/or screaming</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Incomprehensible sounds</td>
<td>Grunts</td>
<td>Grunts, agitated, and restless</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>No response</td>
<td>No response</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL PEDIATRIC GLASGOW COMA SCORE:** (3-15)

### PEDIATRIC PAIN SCALE

0  
No Hurt

1  
Hurts Little Bit

2  
Hurts Little More

3  
Hurts Even More

4  
Hurts Whole Lot

5  
Hurts Worst
Scene Safety & Universal Precautions (BSI)

Assess level of consciousness (PGCS)

Secure and maintain airway

Administer oxygen per appropriate method to maintain oxygen saturation ≥ 94% for patients with respiratory distress, shock, smoke inhalation, carbon monoxide delivery, or cardiac arrest, administer high flow oxygen 15 L by most appropriate method (See Appendix for approved oxygen delivery methods)

Obtain vital signs

Assess for hypoperfusion

Prevent heat loss/decreased body temperature

Assess for pain using pain scale

Obtain history

See appropriate SMO

Initiate patient care per Initiation of Patient Care policy

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate

1 – See Pediatric Initial Assessment
Scene Safety & Universal Precautions (BSI)

Assess level of consciousness (PGCS)

Secure and maintain airway
C-spine stabilization as appropriate

Administer oxygen per appropriate method
to maintain oxygen saturation ≥ 94%
For patients with respiratory distress, shock, smoke
inhalation, carbon monoxide poisoning or cardiac
arrest, administer high flow oxygen 15 L
by most appropriate method
(See Appendix for approved oxygen delivery methods)

Assess and control bleeding

Obtain vital signs

Assess for hypoperfusion

Prevent heat loss/decreased body temperature

Assess for pain using pain scale

Obtain history

See appropriate SMO

Initiate patient care per Initiation of Patient Care policy

Apply Trauma Field Triage Criteria decision scheme
to determine appropriate transport destination
(see Trauma Transport Policy)

1 – See Pediatric Initial Assessment

BLS Non-Transport
Prepare for transport and contact Medical Control as appropriate

BLS Ambulance
Transport and contact Medical Control as appropriate

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Implementation: CFD BLS 5/00; Other 8/00; 1/1/11; 3/1/16

BLS H-3
CARDIOPULMONARY ARREST - PEDIATRIC - BLS

1 – Pediatric CPR rates: 1 rescuer = 30 compressions: 2 ventilations
2 rescuers = 15 compressions: 2 ventilations
RESPIRATORY DISTRESS - PEDIATRIC - BLS

- PRMC
  - Request ALS assistance
  - Secure and maintain airway
  - Adequate airway/respiratory effort?
    - NO, and/or Decreased LOC
      - Assist airway with ventilation via BVM Suction
    - YES
      - Assess lung sounds
        - Is wheezing present?
          - YES
            - Albuterol 2.5 mg mixed with Atrovent 0.5 mg via nebulizer
            - Repeat Albuterol as needed
            - Continue PRMC
          - NO
            - Continue PRMC
            - BLS Non-Transport
              - Prepare for transport and contact Medical Control as appropriate
            - BLS Ambulance
              - Transport and contact Medical Control as appropriate

1 – If available
NOTE: If patient has an established tracheostomy, see Tracheostomy with Respiratory Distress SMO
NOTE: Complete lack of breath sounds may indicate severe bronchoconstriction
Conscious?

NO

Start CPR

Before ventilation, look in airway
If a foreign body is seen, remove
(Do not use a blind finger sweep)

Continue CPR until the
obstruction is relieved or the child
regains consciousness

YES

Able to speak or make sounds?

NO

< 1 year: 5 back slaps and 5 chest
thrusts

≥ 1 year: abdominal thrusts

Continue until relieved

YES

Allow to cough

If patient becomes unconscious
begin CPR

Start CPR

Prepare for transport and contact
Medical Control as appropriate

Transport and contact Medical
Control as appropriate

BLS Non-Transport

BLS Ambulance

1 – Pediatric CPR rates: 1 rescuer = 30 compressions: 2 ventilations
2 rescuers = 15 compressions: 2 ventilations
**ALLERGIC REACTION and/or ANAPHYLAXIS - PEDIATRIC - BLS**

- **RMC**
  - Secure and maintain airway
  - Request ALS assistance
  - Severity of reaction?
  - SEVERE SYMPTOMS OR > 1 MILD SYMPTOM*
    - **Administer Epinephrine**
      - Length < 48 inches = Epinephrine 0.15 mg IM
      - Length ≥ 48 inches = Epinephrine 0.3 mg IM
    - OR
    - Assist patient with prescribed EpiPen
  - Closely monitor for any worsening of condition
  - Has condition worsened?
    - YES
      - Closely monitor, if no improvement administer a second dose of Epinephrine after consultation with Medical Control
    - NO
      - BLS Non-Transport → BLS Ambulance
      - Prepare for transport and contact Medical Control as appropriate
      - Transport and contact Medical Control as appropriate
        - BLS Non-Transport
        - BLS Ambulance
          - Prepare for transport and continue to monitor for any worsening of condition
          - Discuss disposition with Medical Control

*Severe symptoms of an allergic reaction may include any combination of the following:

- **RESPIRATORY** – Shortness of breath, wheezing, repetitive coughing
- **CARDIOVASCULAR** – Pale, cyanotic, low blood pressure, dizzy
- **THROAT** – Tightness, hoarse, trouble breathing/swallowing
- **MOUTH** – Swelling of the tongue and/or lips
- **SKIN** – Diffuse hives or redness
- **GI** – Repetitive vomiting, severe diarrhea
- **NEURO** – Anxiety, confusion, sense of doom

**Mild symptoms of an allergic reaction may include any combination of the following:**

- **NOSE** – Itchy/runny nose, sneezing
- **MOUTH** – Itching
- **SKIN** – Few hives, mild itching
- **GI** – Mild nausea/discomfort

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TRACHEOSTOMY WITH RESPIRATORY DISTRESS - PEDIATRIC - BLS

1 – Pediatric CPR rates: 1 rescuer = 30 compressions: 2 ventilations
2 rescuers = 15 compressions: 2 ventilations

Suction as indicated

Is airway patent?

NO, Obstructed

Repeat suction after removing inner cannula if present

Have caregiver change trach tube

Is airway patent?

NO, Obstructed

Ventilate with mask to mouth
If no chest rise, ventilate with infant mask to stoma

YES, Clear

CPR if heart rate ≤ 60

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate

YES, Clear

Monitor for the following:
- Retractions
- Grunting/wheezing/stridor
- Tachypnea
- Decreasing Consciousness
- Apnea
- Cyanosis

If wheezing, Albuterol 2.5 mg via nebulizer
Repeat Albuterol as needed

BLS Non-Transport

Prepare for transport and contact Medical Control as appropriate

BLS Ambulance

Transport and contact Medical Control as appropriate

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SUSPECTED CROUP OR EPIGLOTTITIS - PEDIATRIC - BLS

- PRMC
  - Request ALS assistance
    - Do not agitate child
      - Keep patient calm and upright
    - Attempt to administer oxygen with mask held by parent or guardian 4 inches in front of child’s face only if well tolerated by child
    - See Respiratory Distress SMO

- BLS Non-Transport
  - Prepare for transport and contact Medical Control as appropriate

- BLS Ambulance
  - Transport and contact Medical Control as appropriate

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ALTERED MENTAL STATUS - PEDIATRIC - BLS

Request ALS assistance

Spinal immobilization as indicated
(See Appendix)

Check Blood Sugar

**BS ≤ 60 mg/dl**

*Oral Glucose (if gag reflex is intact):*
- 1 mo – 4 years: ¼ tube
- 4-8 years: ½ tube
- >8 years: 1 tube

**BS > 60 mg/dl**

Assess for respiratory effort

If signs of opioid intoxication with respiratory depression administer **Naloxone**
- 0 – 4 years: 1 mg/IN
- > 4 years: 2 mg/IN

Consider other causes of altered mental status

BLS Non-Transport
- Prepare for transport and contact Medical Control as appropriate

BLS Ambulance
- Transport and contact Medical Control as appropriate

---

**Special Considerations:**
Consider causes:

- A Alcohol, abuse
- E Epilepsy, electrolytes, encephalopathy
- I Insulin
- O Opiates, overdose
- U Uremia
- T Trauma, temperature
- I Infection, intussusception, inborn errors
- P Psychogenic
- P Poison
- S Shock, seizures, stroke, space-occupying lesion, subarachnoid hemorrhage, shunt
SEIZURES - PEDIATRIC - BLS

Request ALS assistance

Protect from injury
Aspiration precautions

Assess level of consciousness (PGCS) during post-ictal period

Support ABCs

Check Blood Sugar

BS ≤ 60 mg/dl

Oral Glucose (if gag reflex is intact):
1 mo – 4 years: ¼ tube
4-8 years: ½ tube
>8 years: 1 tube

BS > 60 mg/dl

BLS Non-Transport
Prepare for transport and contact Medical Control as appropriate

BLS Ambulance
Transport and contact Medical Control as appropriate
Assess pulse, sensation and motor function

Request ALS assistance if BP < 90

Amputation?

YES

Complete amputation?

NO

Assess if open wound present

Splint/bandage injured extremity

Assess/document neurovascular function after splinting

Splint/bandage injured extremity

Transport and contact Medical Control as appropriate
NON-TRAUMATIC SHOCK - PEDIATRIC - BLS

Request ALS assistance

Secure airway as appropriate
Supine or shock position

Determine etiology of shock

If suspected allergic reaction, see
Allergic Reaction and/or Anaphylaxis SMO

Support ABCs
Observe
Keep warm

BLS Non-Transport
Prepare for transport and contact Medical Control as appropriate

BLS Ambulance
Transport and contact Medical Control as appropriate

PRMC

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Implementation: 1/1/11
HYPOTHERMIA - PEDIATRIC - BLS

NOTES:
- May present with altered sensorium or as unconscious. Heart more susceptible to dysrhythmias. May have apnea, dusky or cyanotic appearance, fixed and dilated pupils; may appear without signs of life.
- An individual in a frozen state is not considered salvageable.
- The suspected hypothermic patient shall never be declared dead in the field.

1 – Pediatric CPR rates: 1 rescuer = 30 compressions: 2 ventilations
2 rescuers = 15 compressions: 2 ventilations

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BLS H-14
HEAT ILLNESS - PEDIATRIC - BLS

RPMC

Request ALS assistance

Place in cool environment
Remove clothing as appropriate

Monitor mental status
Monitor nausea/vomiting

BLS Non-Transport BLS Ambulance

Prepare for transport and contact Medical Control as appropriate
Transport and contact Medical Control as appropriate
Determine cause of patient’s pain and refer to appropriate protocol

Determine Patient’s Pain Score using either the Verbal Descriptor Scale or Wong-Baker FACES® Scale

Consider use of non-pharmacologic pain management techniques
Attempt to place patient in a position of comfort
Consider application of ice packs or splints as appropriate

Complete vital signs and pain scale should be assessed and documented before and after every intervention

Transport and contact Medical Control as appropriate
Assess singed facial hair, hoarseness, wheezing, cough or stridor

Remove clothing
Remove all accessories and jewelry
Do not attempt to cool patient

Estimate extent and depth of burn

Cover with dry dressings or sheet

Prepare for transport and contact Medical Control as appropriate
Transport and contact Medical Control as appropriate

1 – See next page for Pediatric Burns % Body Surface Area
Palm of hand (including fingers) of infant or child = 1% of the total body surface

Any patient with a life threatening condition should be treated until stable at the nearest appropriate facility before being transferred to a burn center.
Assure scene safety
Remove patient from source of electricity, or have power service cut off

PRMC

Request ALS assistance

See Spinal Immobilization SMO as indicated
(See Appendix)

BLS Non-Transport  BLS Ambulance

Prepare for transport and contact Medical Control as appropriate
Transport and contact Medical Control as appropriate
Assure scene safety  
Remove patient from source as necessary

Notify fire department Haz Mat as appropriate

PRMC

Request ALS assistance

Burn location?

EYE

SKIN

Substance form?

SOLID

Remove clothing

FLUSH with Normal Saline/water

LIQUID

Brush off excess chemical

Remove clothing

Prepare for transport and contact Medical Control as appropriate

Transport and contact Medical Control as appropriate

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
HAZ MAT / TOXIC EXPOSURE - PEDIATRIC - BLS

Protect yourself, maintain a safe distance upwind of site

Notify Fire Department Haz Mat Team of any potential biological, chemical or radiation exposure

Do not enter area unless declared safe by Haz Mat Team

Contact Illinois Poison Center as indicated (800) 222-1222

PRMC

See appropriate SMO

Request ALS assistance

Bring container(s) of drug or substance to the ED along with MSDS form if available (provided that it is not a Haz Mat substance)

BLS Non-Transport, BLS Ambulance

Prepare for transport and contact Medical Control as appropriate

Transport and contact Medical Control as appropriate

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
HAZARDOUS EVENTS / NUCLEAR/BLAST INJURIES - PEDIATRIC - BLS

1. Notify Haz Mat Team
   Decontamination by Haz Mat Team

2. PRTC

3. Request ALS assistance

4. Immobilize patient

5. BLS Non-Transport
   Prepare for transport and contact Medical Control as appropriate

6. BLS Ambulance
   Transport and contact Medical Control as appropriate

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
HAZARDOUS EVENTS / SUSPECTED BIOLOGICAL - PEDIATRIC - BLS

PRMC

Request ALS assistance

Field or ED personnel: Note increase in patients with “similar type symptoms”

Don PPE and place surgical mask on patient
See ABT card

Notify Resource Hospital/Field Officer

BLS Non-Transport
BLS Ambulance

Prepare for transport and contact Medical Control as appropriate
Transport and contact Medical Control as appropriate

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
HAZARDOUS EVENTS / CHEMICALS and NERVE AGENTS - PEDIATRIC - BLS

- Notify Haz Mat Team
- Decontamination by Haz Mat Team

PRTC

Request ALS assistance

BLS Non-Transport | BLS Ambulance

- Prepare for transport and contact Medical Control as appropriate
- Transport and contact Medical Control as appropriate

* All efforts should be made to decontaminate the patient prior to transport, as appropriate per HazMat team.
NEAR DROWNING - PEDIATRIC - BLS

1. Request ALS assistance
2. Assess ABCs
   - Start CPR if necessary
3. Spinal Immobilization as indicated
   - (See Appendix)
4. Remove wet clothing
   - Warm patient

**BLS Non-Transport**
- Prepare for transport and contact Medical Control as appropriate

**BLS Ambulance**
- Transport and contact Medical Control as appropriate

---

1 – Pediatric CPR rates:
- 1 rescuer = 30 compressions: 2 ventilations
- 2 rescuers = 15 compressions: 2 ventilations
# PEDIATRIC DRUG DOSING

**DOSE REFERENCE GUIDE - BLS**

<table>
<thead>
<tr>
<th>DRUG</th>
<th>DOSE</th>
<th>MODE</th>
<th>INTERVAL/ RATE</th>
<th>DOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALBUTEROL</td>
<td>2.5 mg</td>
<td>Nebulizer</td>
<td>X 1</td>
<td>2.5 mg/3 ml</td>
</tr>
<tr>
<td>ATROVENT</td>
<td>0.5 mg</td>
<td>Nebulizer</td>
<td>X 1</td>
<td>0.5 mg/3 ml</td>
</tr>
<tr>
<td>GLUCOSE, ORAL&lt;br&gt;(Age 1 month to 4 years)</td>
<td>¼ tube</td>
<td>PO</td>
<td>as indicated</td>
<td>25 gm/tube</td>
</tr>
<tr>
<td>GLUCOSE, ORAL&lt;br&gt;(Age 4 to 8 years)</td>
<td>½ tube</td>
<td>PO</td>
<td>as indicated</td>
<td>25 gm/tube</td>
</tr>
<tr>
<td>GLUCOSE, ORAL&lt;br&gt;(Age greater than 8 years)</td>
<td>1 tube</td>
<td>PO</td>
<td>as indicated</td>
<td>25 gm/tube</td>
</tr>
<tr>
<td>NALOXONE 1 mg: 0-4 years</td>
<td>IN</td>
<td>as indicated</td>
<td>2 mg/2 ml</td>
<td></td>
</tr>
<tr>
<td>NALOXONE 2 mg: &gt; 4 years</td>
<td>IN</td>
<td>as indicated</td>
<td>2 mg/2 ml</td>
<td></td>
</tr>
</tbody>
</table>

1 - Oral Glucose is **NOT** to be used for patients less than 1 month old.

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BLS H-20
APPENDIX

Approved Oxygen Delivery Methods  I-1
   Glasgow Coma Scale  I-2
   Cincinnati Stroke Scale  I-3
   Advanced Airway Management  I-4.1 to I-4.2
   Cardiac Arrest Management  I-5.1 to I-5.4
      Automatic External Defibrillator  I-6
      Intra-Nasal Drug Administration  I-7
   Epinephrine Auto-Injector (EpiPen)  I-8
   Tourniquet Application  I-9.1 to I-9.2
      Spinal Immobilization  I-10
   Latex Allergic Reaction  I-11
   Abbreviations/Acronyms  I-12.1 to I-12.2
## REGION XI APPROVED OXYGEN DELIVERY METHODS

<table>
<thead>
<tr>
<th>Delivery Method</th>
<th>Flow Rate</th>
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<tbody>
<tr>
<td>Nasal Cannula</td>
<td>1 – 6L / min.</td>
</tr>
<tr>
<td>Non-rebreather Mask (NRB)</td>
<td>10 -15L / min.</td>
</tr>
<tr>
<td>Bag Valve Mask (BVM)</td>
<td>15L / min.</td>
</tr>
<tr>
<td>Endotracheal Intubation</td>
<td>15L / min.</td>
</tr>
<tr>
<td>King LT Supraglottic Airway</td>
<td>15L / min.</td>
</tr>
<tr>
<td>Blow-by (for children who do not tolerate a NRB)</td>
<td>10 – 15L / min.</td>
</tr>
</tbody>
</table>
# GLASGOW COMA SCALE (GCS)

TOTAL 3 to 15

<table>
<thead>
<tr>
<th>EYES OPEN:</th>
<th>Spontaneously</th>
<th>4</th>
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<tbody>
<tr>
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<td></td>
<td>Pain</td>
<td>2</td>
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<tr>
<td></td>
<td>None</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>BEST VERBAL:</th>
<th>Oriented</th>
<th>5</th>
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<tbody>
<tr>
<td></td>
<td>Confused</td>
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<td></td>
<td>Incomprehensible</td>
<td>2</td>
</tr>
<tr>
<td></td>
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<td>1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>BEST MOTOR:</th>
<th>Obeys</th>
<th>6</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Localizes</td>
<td>5</td>
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<tr>
<td></td>
<td>Withdraws</td>
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<tr>
<td></td>
<td>Abnormal Flexion</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Abnormal Extension</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>1</td>
</tr>
</tbody>
</table>
CINCINNATI STROKE SCALE

1) **Facial droop:** Have patient show teeth or smile
   Abnormal: One side does not move as the other

2) **Arm drift:** Have patient close eyes and hold arms out for 10 seconds with palms up
   Abnormal: One arm does not move or drifts down

3) **Abnormal speech:** Have patient say “You can’t teach an old dog new tricks”
   Abnormal: Patient slurs words, uses wrong words, or is unable to speak

**Relative Criteria for Transport to a Primary Stroke Center (PSC)**

Patients with a negative or unattainable CSS may be transported to a PSC if acute stroke ≤6 hours in duration is suspected by the Base Station based on any of the following:
- Sudden and persistent alteration of consciousness
- Sudden onset severe headache (especially in association with vomiting +/- SBP >200)
- Severe and sudden loss of balance
ADVANCED AIRWAY MANAGEMENT

KING LTS-D AIRWAY (SUPRAGLOTTIC AIRWAY) INTUBATION

INDICATIONS

- Airway management in a non-breathing person without a gag reflex
- Patient is over 4 feet in height.

CONTRAINDICATIONS

- Patients under 4 feet in height.
- Intact gag reflex.
- Patients with known esophageal disease
- Patients who have ingested caustic substances

EQUIPMENT

1. King LTS-D Airway
2. 14 Fr soft suction catheter
3. Lubricant
4. 60 cc syringe

PROCEDURE

1. Pre-oxygenate the patient.

2. Choose the correct size King LTS-D airway

   - Size 3 fits 4-5 feet in height Yellow connector.
   - Size 4 fits 5-6 feet in height Red connector.
   - Size 5 fits 6+ feet in height Purple connector.

3. Inspect the King LTS-D for visible damage prior to insertion.

4. Test cuff to ensure there are no leaks.

5. Apply a water-based lubricant to the beveled distal tip and posterior aspect of the tube. Avoid getting lubricant near the ventilatory openings.

6. Position patient’s head. The ideal position for the King LTS-D insertion is “sniffing position”. The angle of the King LTS-D does not allow for insertion at a neutral angle.

7. Hold the King LTS-D at the connector with the dominant hand. With the non-dominant hand, hold the mouth open and apply chin lift, unless contraindicated by C-spine precautions or patient position. Using a lateral approach, introduce tip into corner of mouth.

8. Advance the tip behind the base of the tongue while rotating tube back to midline so that the blue orientation line faces the chin of the patient.

9. Without exerting excessive force, advance the King LTS-D until base of connector is aligned with teeth or gums.

BLS I-4.1
10. Inflate the cuffs with the minimum volume necessary to seal the airway. Inflation volumes are located the King LTS-D airway. Typical inflation volumes are as follows:

   • Size 3: 45-60 cc
   • Size 4: 60-80 cc
   • Size 5: 70-90 cc

11. Gently ventilate the patient using BVM. If initial ventilations meet resistance perform the following:

   • Slowly pull back on King LTS-D airway while gently ventilating.
   • When ventilations suddenly become easy and free flowing with corresponding chest wall rise maintain that level of insertion.

12. Confirm placement to ensure adequate ventilations by auscultation of lung sounds, observing adequate chest rise, and verification of end tidal CO2 waveform.

13. If necessary, add additional volume to cuff to maximize seal of the airway (within cuff size limits).

14. Secure King LTS-D airway to patient utilizing tape or appropriate commercial device.

15. Lubricate a 14 Fr. suction catheter prior to inserting into the King LTS-D’s gastric access lumen.

16. Document the size of King LTS-D airway used and the depth of insertion at teeth or lips.

Note: *The King LT airway does not protect the airway from aspiration like ET intubation does.*
CARDIAC ARREST MANAGEMENT
Incident Command for Cardiac Arrest (ICCA)

INDICATIONS

- Non-traumatic cardiac arrest

CODE TASKS

- Resuscitation must begin and continue where patient is encountered
- Provide high quality, uninterrupted chest compressions
- Provide early defibrillation
- Provide controlled ventilatory management during the resuscitation
- IV/IO access and ALS drug delivery
- End Tidal CO2 monitoring

EQUIPMENT

BLS:

1. Automated External Defibrillator
2. Bag Valve Mask
3. Supraglottic Airway (Combitube or King Airway)
4. Oxygen

ALS:

1. Lifepak 1000 monitor/defibrillator/pads (or private provider equivalent)
2. Lifepak 12/15 monitor/defibrillator/ETCO2/pads (or private provider equivalent)
3. Bag Valve Mask
4. Advanced airway equipment (supraglottic airway or endotracheal tube)
5. IV/IO equipment
6. ACLS drugs

PROCEDURE

1. Begin and continue resuscitation where the patient is encountered. **DO NOT MOVE THE PATIENT.** Call for an assist company (or as per private provider protocol). Patients should only be moved for scene safety concerns, not for provider convenience. Any delay in initiation of resuscitation will decrease the chance of survival.

2. Initiate high quality uninterrupted chest compressions. Harder-deeper-faster with rate 100-120 per minute. Use alternate providers to avoid fatigue. Chest compressions should only be interrupted to analyze rhythm and deliver defibrillation (< 10 seconds).

3. Attach cardiac monitor and assess rhythm. Defibrillate if ventricular fibrillation or pulseless ventricular tachycardia (or if AED advises). May initiate care with Lifepak 1000, however, upgrade to Lifepak 15 as soon as manpower allows.

4. Basic airway management with bag valve mask ventilation. Apply End Tidal CO2 to BVM. Monitor ETCO2 to assess quality of CPR. Goal ETCO2: > 10. If < 10 improve quality of chest compressions or switch compressors. Deliver 1 breath every 6 seconds (10 breathes per minute).**

BLS I-5.1
5. Continue **2 minute** cycles of CPR and defibrillation until assist company arrives. Do not attempt IV/IO access or advanced airway management until at least three providers are on scene.

6. Code commander delegates tasks when assist company arrives.

7. IV/IO access and administration of drugs as per ALS SMOs B-3 and B-4. The proximal tibia is the preferred site for IO access during cardiac arrest resuscitation.

8. Place supraglottic airway (preferred advanced airway for patients in cardiac arrest). Endotracheal intubation may be performed as backup airway if unable to ventilate/oxygenate with supraglottic airway. Do not interrupt compressions during placement of an advanced airway. Deliver 1 breath every 6 seconds (10 breathes per minute).

9. Apply End Tidal CO2. Monitor waveform and number to assess:
   a. Correct advanced airway position and ventilation
   b. Quality of CPR
   c. Return of spontaneous circulation (ROSC)

10. Contact online medical control from the scene (before moving the patient) to discuss the following options:
   a. Continue field resuscitation for a defined period/task achievement and re-contact medical control
   b. Transport patient with return of spontaneous circulation (ROSC) to closest STEMI center (see Adult Post Cardiac Arrest Care, I-6.1)
   c. Transport patient with ongoing resuscitation to closest STEMI center
   d. Terminate resuscitative efforts

   ALL PATIENTS WITH ROSC OR ONGOING RESUSCITATION MUST BE TRANSPORTED TO A STEMI CENTER.

**MANDATORY DOCUMENTATION**

1. “Cardiac Arrest” should be listed for paramedic impression for all non-traumatic cardiac arrest victims. Do not use “rule out” for any cardiac arrest impression.

2. All information from the first company on scene should be relayed to the transporting paramedics and included in both patient care records.

3. All mandatory cardiac arrest questions in the ePCR should be completed before record is closed.

4. End-Tidal CO2 number and waveform should be documented in the patient care record.

5. Lifepak 15 “Report> All” should be uploaded to CodeSTAT.
Cardiac arrest is a shared ALS and BLS response. Successful resuscitation requires a coordinated effort. Upon arrival, resuscitation roles should be clearly delegated by the highest ranking medical member on scene, so that primary code tasks are carried out quickly and efficiently.

1. **Code Commander**
   - Highest ranking medical member on scene
   - Oversees all operations
   - Responsible for timing of CPR cycles and defibrillation
   - Requests additional manpower/resources
   - Completes and/or delegates code tasks

2. **Compressor-1**
   - Performs high quality uninterrupted chest compressions
   - Assume compressor 2’s role when relieved

3. **Compressor-2**
   - Monitor’s the effectiveness of compressor 1’s compressions (monitors ETCO2 for compression quality feedback)
   - Assists with seal during bag valve mask ventilation
   - Relieves compressor 1 after 2 minutes or when compression quality decreases

4. **Procedures**
   - Apply cardiac monitor/analyze rhythm
   - Defibrillate
   - Gain IV/IO access
   - Administer medications as per ALS SMOs B-3 and B-4
   - Basic and advanced airway management
   - Apply and monitor End Tidal CO2

5. **Logistics**
   - Oversee distribution of equipment
   - Set up IV/IO equipment
   - Assemble medications/assist with drug delivery
   - Facilitates communication with online medical control
   - Prepares for transport
   - Relief for other tasks

6. **Liaison/Safety**
   - Control the scene and provide for the safety of the resuscitation team
   - Data collection/documentation: Patient demographics, medications, medical history, events
   - Communicates and assists with family/bystanders

BLS I-5.3
AUTOMATIC EXTERNAL DEFRIBILLATOR (AED)

**INDICATIONS**

- See appropriate SMO

**CONTRAINDICATIONS**

None

**EQUIPMENT**

1. Defibrillation pads
2. Monitor/defibrillator
INTRA-NASAL DRUG ADMINISTRATION
Mucosal Atomization Device (MAD)

**INDICATIONS**

- Opioid Overdose – Naloxone (Adults & Pediatrics)

**CONTRAINDICATIONS**

- Nasal trauma

**EQUIPMENT**

1. Mucosal Atomizer Device (MAD)
2. Syringe

**PROCEDURE**

1. Draw up dose of medication into syringe
2. Expel air from syringe
3. Remove needle and attach MAD to syringe
4. Insert tip of MAD into nostril.
5. Rapidly administer medication (1ml max per nostril; recommend giving ½ the volume in each nostril)

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Written: 5/16
Reviewed: 5/16
Revised:
MDC Approval: 6/7/16
IDPH Approval: 8/11/16
Implementation: 10/17/16
EPINEPHRINE AUTO-INJECTOR (EpiPen)

INDICATIONS:

- Allergic Reactions

CONTRAINDICATIONS:

- None

MEDICATION:

- EpiPen Auto-Injector - Adult dose 0.3 mg of epinephrine
- EpiPen Jr Auto-Injector - Pediatric dose 0.15 mg of epinephrine

Use an EpiPen 0.3 mg auto-injector for children over 25 kg (55 lb) and EpiPen Jr 0.15 mg auto-injector for children less than 25 kg (55 lb).

PROCEDURE

1. Obtain appropriate Epi-pen (adult dose 0.3 mg or pediatric dose 0.15 mg).

2. Make sure the medication is not discolored or expired.

3. Remove safety cap from auto-injector, if possible wipe patient’s thigh with alcohol wipe. However, do not delay administration of the drug.

4. Place the tip of the auto-injector against the lateral part of the patient’s thigh, midway between the waist and the knee.

5. Push injector firmly against the thigh until the injector activates, hold the injector in place until the medication is injected about 10 seconds.

6. Remove the injector from the patient’s thigh and dispose of it in the proper biohazard container.

7. Reassess and record patient’s vital signs after using the auto-injector.

8. Record the time and dose of injection on your patient care report.

REFERENCES:

- Illinois EMSC Pediatric Allergic Reaction/Anaphylaxis BLS Care Guidelines.
- Brady Emergency Care 12th Edition

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Written: 10/2013
Reviewed: 
Revised: 
MDC Approval: 11/5/13
IDPH Approval: 1/28/14
Implementation: 6/1/14

BLS I-8
TOURNIQUET APPLICATION

INDICATIONS

- Life threatening extremity hemorrhage that cannot be controlled by other means.

CONTRAINDICATIONS

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

EQUIPMENT

System approved tourniquet

PROCEDURE

1. Visually inspect injured extremity and avoid placement of tourniquet over joint, angulated or open fracture, stab or gunshot wound sites.

2. Apply the tourniquet directly to skin, proximal to the wound, 2-3 inches above the wound or as high as you can go above the wound.

3. Secure tourniquet:
   - Pull the free running end of the self-adhering band *tight* and securely fasten the band back on itself (if applying to an arm wound). Do not adhere the band past the windlass rod.
   - If applying to a leg wound, the self adhering band must be routed through the friction adapter buckle and fastened back on itself. This will prevent it from loosening when twisting the windlass rod.

4. Twist the windlass rod until *bright red bleeding has stopped and the distal pulse is eliminated*.

5. Place the windlass rod inside the clip locking it in place. *Check for bleeding and distal pulse.* If bleeding is not controlled consider additional tightening or applying a second tourniquet side by side to the first tourniquet and reassess.

6. Secure the rod inside the clip with the strap.

7. Record time of tourniquet application.

8. Cover wound with appropriate sterile dressing and/or bandage. *Do not cover tourniquet - the device must remain visible.*

9. Reassess and document absence of bleeding distal to tourniquet.

10. Remove any improvised tourniquets that might have been previously applied.

11. Prepare patient for transport and reassess effectiveness of the tourniquet every 10 minutes.

12. Ensure receiving hospital staff is aware of tourniquet placement and time tourniquet was applied.
MANDATORY DOCUMENTATION

- Location of injury and mechanism involved.
- Methods attempted to control bleeding and the time direct pressure was applied.
- Location of application of tourniquet
- Time of application of tourniquet
- Reassessment of tourniquet and its effectiveness
- Person at receiving hospital to whom use and location of the tourniquet is reported to
SPINAL IMMOBILIZATION

INDICATIONS

- Traumatic head/neck/back pain - blunt and penetrating
- All patients with altered levels of consciousness who sustain trauma above the clavicles
- All patients with sensory or motor deficits following blunt or penetrating neck/back injury
- Significant mechanism of injury
- Patients demonstrating sensory or motor deficits should be considered for short board/KED extrication
- Consider patient exposed to electrical source (i.e. lightening, electrocution)

CONTRAINDICATIONS

- Caution should be used with impaled objects

EQUIPMENT

1. Hard cervical collar
2. Short board/KED
3. Long board with straps
4. Padding material
5. Lateral immobilization/padding

PROCEDURE

1. Secure scene and employ universal precautions
2. Stabilize head with hands and maintain in-line position
3. Apply appropriately sized collar
4. Move patient to long board, apply firm padding as needed to maintain full neutral spinal position. Head padding should be sufficient to limit lateral cervical movement
2. Secure/tape patient's torso and extremities to board. Infants in car seats should have application of an appropriate collar and lateral immobilization positioned in the car seat
3. Secure/tape head to padding and long board across forehead and collar
LATEX ALLERGIC PATIENTS

INDICATIONS

- Patients with known sensitivity to latex
- Patients with onset of respiratory or dermatological signs and symptoms once care is initiated

CONTRAINDICATIONS

- None

EQUIPMENT

LATEX FREE products for:

1. AIRWAY:
   a. Oral/Nasal airways
   b. Suction catheters
   c. BVM/masks
   d. O₂ tubing
   e. Endotracheal tubes
   f. Stylets

2. IV:
   a. Tourniquets
   b. Gloves
   c. Tape

When utilizing other medical equipment such as stethoscopes or blood pressure cuffs, provide a barrier between the patient and the device, for example Kerlix, 4 x 4’s, cloth, etc.

PROCEDURE

1. Utilize latex free products whenever possible

2. If a patient experiences an onset of symptoms (i.e., respiratory and/or dermatological signs and symptoms) and routine, latex gloves have been utilized:
   a) **DO NOT REMOVE GLOVES.**
   b) **PLACE LATEX FREE GLOVES OVER LATEX GLOVES, AS A SECOND PAIR.**

3. MEDICATION ADMINISTRATION: Medication should not be drawn from a multi-dose vial, if possible. Medication drawn up in a syringe must be given immediately after withdrawing the medication.

4. BANDAGING: Secure bandaged sites with cloth or silk tape.

5. TREATMENT OF REACTION: See Allergic Reaction SMO for treatment of a latex reaction.

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IDPH Approval: 7/9/09
Implementation: 1/1/10

BLS I-11
# ABBREVIATIONS/ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ABCs</td>
<td>Airway, Breathing, Circulation</td>
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<tr>
<td>ABT</td>
<td>Advanced Bioterrorism Triage</td>
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<tr>
<td>ALS</td>
<td>Advanced Life Support</td>
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<tr>
<td>BLS</td>
<td>Basic Life Support</td>
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<tr>
<td>BP</td>
<td>Blood Pressure</td>
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<tr>
<td>BSA</td>
<td>Body Surface Area</td>
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<tr>
<td>BS</td>
<td>Blood Sugar</td>
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<tr>
<td>BSI</td>
<td>Body Substance Isolation</td>
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<tr>
<td>BVM</td>
<td>Bag valve Mask</td>
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<tr>
<td>CO</td>
<td>Carbon monoxide</td>
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<tr>
<td>CP</td>
<td>Chest Pain</td>
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<tr>
<td>CPAP</td>
<td>Non-Invasive Pressure Support Ventilation</td>
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<tr>
<td>CPR</td>
<td>Cardiopulmonary Resuscitation</td>
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<tr>
<td>CRIC</td>
<td>Cricothyrotomy</td>
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<tr>
<td>CSHN</td>
<td>Children with Special Healthcare Needs</td>
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<tr>
<td>ECP</td>
<td>Emergency Communications Physician</td>
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<tr>
<td>ED</td>
<td>Emergency Department</td>
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<tr>
<td>EPI</td>
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<td>ETOH</td>
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<td>Glasgow Coma Scale</td>
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<td>Intravenous Push</td>
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<td>MAD</td>
<td>Mucosal Atomizer Device</td>
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<td>Non-rebreather Mask</td>
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<td>NS</td>
<td>Normal Saline</td>
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<tr>
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<tr>
<td>PRMC</td>
<td>Pediatric Routine Medical Care</td>
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<tr>
<td>PRTC</td>
<td>Pediatric Routine Trauma Care</td>
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<td>Signs and Symptoms</td>
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<td>SBP</td>
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BLS I-12.1