Illinois Emergency Medical Services for Children is a collaborative program between the Illinois Department of Public Health and Loyola University Medical Center.
This manual was completed under the direction of the Illinois EMSC Advisory Board

Illinois Emergency Medical Services for Children
Loyola University Medical Center
2160 South First Avenue
EMS Bldg 110-Lower Level
Maywood, Illinois 60153

Phone: (708) 327-EMSC (3672)
Fax: (708) 327-2548
www.luhs.org/emsc

Illinois EMSC is funded through the Emergency Medical Services for Children grant program which is jointly administered by the Maternal and Child Health Bureau and the National Highway Traffic Safety Administration. Development of this document was supported in part by Grant H33 MC06685 from the Department of Health and Human Services, Maternal and Child Health Bureau.
# Table of Contents

<table>
<thead>
<tr>
<th>Acknowledgements</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position Statement on Pediatric Prehospital Protocols</td>
<td>2</td>
</tr>
<tr>
<td>Pediatric Initial Assessment Guideline</td>
<td>5</td>
</tr>
</tbody>
</table>

**Pediatric Prehospital Protocol Guidelines**  
(each protocol addresses: ALS, ILS, BLS and Emergency Medical Responder)

- Pediatric Initial Medical Care/Assessment .................................................. 8
- Neonatal Resuscitation ...................................................................................... 10
- Pediatric AED .................................................................................................... 13
- Pediatric Allergic Reaction/Anaphylaxis .......................................................... 14
- Pediatric Altered Level of Consciousness ....................................................... 18
- Pediatric Bradycardia ......................................................................................... 21
- Pediatric Burns .................................................................................................. 24
- Pediatric Environmental Hyperthermia ............................................................... 27
- Pediatric Hypothermia ....................................................................................... 30
- Pediatric Near Drowning ................................................................................... 33
- Pediatric Nerve Agent Antidote Guideline ....................................................... 36
- Pediatric Pulseless Arrest .................................................................................. 38
- Pediatric Respiratory Arrest ............................................................................. 41
- Pediatric Respiratory Distress .......................................................................... 44
- Pediatric Respiratory Distress with a Tracheostomy Tube ............................... 47
- Pediatric Respiratory Distress with a Ventilator ............................................... 50
- Pediatric Seizures ............................................................................................. 53
- Pediatric Shock .................................................................................................. 57
- Pediatric Tachycardia ......................................................................................... 60
- Pediatric Toxic Exposures/Ingestions ................................................................. 63
- Pediatric Trauma (with Head Trauma Addendum) .............................................. 66
- Suspected Child Abuse and Neglect ................................................................. 72

**Resources**

- Burn Resource ................................................................................................. 74
- Toxic Exposures/Ingestions Resource ............................................................... 75
- Vital Signs and Cardiopulmonary Compromise Resource ............................... 76
- Document Development Resources .................................................................. 77
Acknowledgements

This document contains protocols and related resources which were originally developed by Illinois EMSC in 1997. During 2006-2007, an extensive review and revision of this document was undertaken by the EMSC Prehospital Committee. In addition, the State EMS Protocols Committee critically reviewed the BLS Protocols and forwarded recommendations which were incorporated into the protocols.

The Illinois EMSC Advisory Board gratefully acknowledges the commitment and dedication of the EMSC Prehospital Committee in revising the guidelines and protocols that comprise this document. Their contributions of countless hours of work and collaboration have led to this valuable resource and assists Illinois EMSC in striving toward the goal of improving pediatric emergency care within our state.

EMSC Prehospital Committee

Susan Fuchs, MD, FAAP, FACEP, Chairman
Associate Director, Pediatric Emergency Medicine
Children's Memorial Hospital

Evelyn Lyons, RN, MPH
EMSC Manager
Illinois Department of Public Health

John L. Beckman, AA, BS, FF/EMT-P
Addison Fire Protection District
Fire Science Instructor
Technology Center of DuPage

Mike Hansen, EMT-P, BA
Fire Chief
Lincolnwood Fire Department

Harriet Hawkins, RN, CCRN, FAEN
Resuscitation Education Coordinator
Children's Memorial Hospital

Kathy Janies, BA
EMSC Quality Improvement Specialist
Loyola University Medical Center

Peggy Jones
Senior Director, State Health Alliances & Cultural Health Initiatives
American Heart Association

Rick Miller, MD
EMS Medical Director, Emergency Medicine
OSF Saint Francis Medical Center

Annie Moy, RN, MS
Manager, EMS & Trauma
Northwestern Memorial Hospital

Randy Price, NREMT-P, BS
Lead EMS Instructor, EMS System
Loyola University Medical Center

Gloria Trevino
Technical Curriculum Specialist
American Red Cross of Greater Chicago

Jack Whitney, MD
EMS Medical Director, Emergency Department
Highland Park Hospital

J. Thomas Willis, EMT-P
4th District Vice President
Associated Fire Fighters of Illinois

Ginger Worlds, NREMT-P, CCEMT-P
EMS Instructor, EMS System
Loyola University Medical Center

Special thanks to Ramona Rendon, EMSC Administrative Secretary, for her dedicated administrative and editorial assistance in the production of this manual.
ILLINOIS EMERGENCY MEDICAL SERVICES FOR CHILDREN
POSITION STATEMENT
PEDIATRIC PREHOSPITAL PROTOCOLS

Several key prehospital elements in local Emergency Medical Services systems facilitate the delivery of quality field care to children:

- Appropriate education of prehospital providers in the assessment and treatment of acute pediatric illness and injury.
- Standardized and appropriate equipment and medications for the delivery of care to the pediatric population.
- Uniform pediatric-specific treatment protocols.

Prehospital treatment protocols for adult patients are frequently used in EMS systems. Within the State of Illinois there exists considerable variation in treatment protocols based upon local EMT scope of practice, availability of regional resources and differences in medical opinion regarding the delivery of Emergency Medical Responder (EMR), BLS, ILS and ALS care in the prehospital environment. In 1997, the Emergency Medical Services and Trauma Center Code, adopted by the Illinois Department of Public Health, was revised to mandate pediatric specific treatment protocols.

Illinois EMSC strongly endorses the concept of standardized prehospital patient care for the pediatric population at the Emergency Medical Responder (EMR), BLS, ILS, and ALS levels. While most BLS and Emergency Medical Responder field interventions are considered relatively uncomplicated and straightforward, guidelines improve the continuity, quality and consistency of patient care.

Treatment Protocol Guidelines:

1. Within the context of all federally funded EMSC projects, the pediatric population is defined as inclusive of all patients up to the age of 21 years. In this document, pediatric patients are defined as age 15 years and younger, consistent with the Emergency Medical Services and Trauma Center Code adopted by the Illinois Department of Public Health. Other terms commonly applied to the pediatric population include: "newly born" (under 24 hours), "neonates" (1-28 days) and "infant" (1-12 months).

2. Emergency Medical Responder, BLS, ILS, and ALS interventions should be clearly identified within each protocol.

3. Special considerations for pediatric care should be identified within each protocol where appropriate.

4. Drug dosages should be weight-based and given per kilogram. Inconsistencies exist within the prehospital environment secondary to the relatively low volume and exposure to pediatric patients resulting in inaccuracies and possible under- or over-treatment. Therefore, a validated "length-based" or color coded resuscitation tool is highly recommended. Have available precalculated drug dosing forms based on drug concentrations carried within the EMS system. In addition, standardized weight charts should be readily available to the prehospital provider identifying age adjusted vital sign parameters and appropriate sizing of endotracheal tubes.

5. Intravenous fluids administered in the prehospital environment should be a balanced crystalloid solution.

6. A triage mechanism for the rapid and appropriate treatment and transport of "critical patients" (i.e., multiple trauma) to the "most" appropriate facility must be identified.
7. The Pediatric Glasgow Coma Scale should be utilized by ALS, ILS, and BLS personnel.

Protocol Recommendations:

Protocols for the treatment and transport of the critically ill and/or injured child should exist in a "freestanding" format isolated from adult protocols or clearly identified in a general protocol, i.e., using the EMSC teddy bear logo to highlight pediatric considerations.

The following areas have been identified as requiring specific treatment protocols:

1. **PEDIATRIC INITIAL ASSESSMENT** - A foundation for all pediatric patient interactions, this protocol should reinforce the need for consistent, methodical patient assessment. The protocol should reinforce the following:
   - Importance of rapid BLS interventions (i.e., CPR) specifically airway support.
   - Age appropriate signs and symptoms of pediatric respiratory distress.
   - Age appropriate airway interventions including the use of "blow-by" oxygen administration.
   - Indicators of adequate ventilation and perfusion.
   - Age appropriate immobilization of the pediatric trauma patient.
   - Recognition of and monitoring for imminent life-threats.
   - Unique assessment considerations and emergent care requirements of children with special health care needs (CSHCN), including those who are technologically dependent. Emphasize the appropriate inclusion of parents/primary caregivers.

2. **INITIAL MEDICAL CARE/ASSESSMENT** – Address the initial assessment and medical care provided to the pediatric patient, including an assessment of scene safety and ensuring body substance isolation. Commonly referred to as "routine medical care" in adult protocols.

3. **NEONATAL RESUSCITATION** - Must incorporate the specific heart rate parameters and requisite interventions according to the American Heart Association recommendations.

4. **PEDIATRIC AED** – Treatment must be in accordance with the Department approved Pediatric AED protocol and in accordance with American Heart Association guidelines. AED’s can be used in children age 1-8 years. Use of pediatric pads and cables are preferable; however adult pads can be used in an anterior/posterior application.

5. **PEDIATRIC ALLERGIC REACTION/ANAPHYLAXIS** – Pay special attention to the differentiation between local reaction (hives), respiratory distress and cardio-respiratory compromise.

6. **PEDIATRIC ALTERED LEVEL OF CONSCIOUSNESS** - Emphasize the importance of recognizing etiology, aggressive airway maintenance, glucose monitoring and naloxone administration.

7. **PEDIATRIC BRADYCARDIA** - Treatment in accordance with the current American Heart Association recommendations.

8. **PEDIATRIC BURNS** - Special emphasis on the pediatric "rule of nines" for burn size estimation, aggressive airway management and triage to the appropriate facility. Differentiation should be made between thermal, chemical and electrical injuries.

10. **PEDIATRIC HYPOTHERMIA** - Emphasize the pediatric population at high risk for hypothermia: neonates and infants. Address aggressive airway management, warming techniques and recognition of frostbite injury. Interventions for arrhythmias in accordance with the American Heart Association recommendations.


12. **PEDIATRIC NERVE AGENT ANTIDOTE GUIDELINE** – Define specific antidote dosing based on mild, moderate or severe exposure and patient age/weight.

13. **PEDIATRIC PULSELESS ARREST** – Treatment modalities/algorithms should be consistent with the current guidelines set forth by the current American Heart Association “Pediatric Advanced Life Support” algorithms. The use of intraosseous access should be taught to all ALS providers.

14. **PEDIATRIC RESPIRATORY ARREST** - Treatment must be in accordance with the current American Heart Association "Pediatric Advanced Life Support" guidelines.

15. **PEDIATRIC RESPIRATORY DISTRESS** - Differentiation should be made between "upper airway obstruction" (i.e., croup, epiglottitis and foreign body) and lower airway disease (i.e., asthma, bronchiolitis, pneumonia). The potential for invasive airway interventions must also be identified.

16. **PEDIATRIC RESPIRATORY DISTRESS WITH A TRACHEOSTOMY TUBE** – Differentiate between an obstructed and patent tracheostomy tube. Identify appropriate assessment and management of the child presenting with respiratory distress with a tracheostomy tube.

17. **PEDIATRIC RESPIRATORY DISTRESS WITH A VENTILATOR** – Address steps in managing a pediatric patient that requires ventilator support. Emphasize to utilize the parents, caregivers and home health nurses as medical resources, and arrange to bring the ventilator to the hospital.

18. **PEDIATRIC SEIZURES** - Must include the identification of rapid blood glucose monitoring in the field, considerations for febrile seizures and administration of rectal benzodiazepines.

19. **PEDIATRIC SHOCK** - Differentiation should be made between "hypovolemic" (dehydration, hemorrhagic), cardiogenic and "distributive" (sepsis).

20. **PEDIATRIC TACHYCARDIA** - Interventions for both wide and narrow complex tachycardias must be in accordance with the American Heart Association recommendations.

21. **PEDIATRIC TOXIC EXPOSURES/INGESTIONS** - Incorporate accidental /environmental toxic exposure or ingestion events commonly encountered in the pediatric population.

22. **PEDIATRIC TRAUMA** - Emphasis should be made on mechanism of injury, limited on-scene time, aggressive airway maintenance, field triage to the appropriate facility and addressing the unique needs of the head-injured child. Additional information or an addendum specific to initial assessment and management of head trauma should also be included.

23. **SUSPECTED CHILD ABUSE AND NEGLECT** - Special emphasis should be made on careful documentation of physical findings, discrepancy between history of injury and physical findings, interaction between child and parent/caregiver, and characteristics of the environment. Discuss the prehospital provider's responsibility as a mandated reporter, and to report suspicions to the emergency room staff. Include directions for responding to parent/caregiver refusal to allow transport.
I. Scene size up
- Identify possible hazards.
- Assure safety for patient and responder.
- Observe for mechanism of injury/nature of illness.
- Note anything suspicious at the scene, i.e., medications, household chemicals, other ill family members.
- Assess any discrepancies between the history and the patient presentation, i.e., infant fell on hardwood floor; however floor is carpeted.
- Initiate appropriate body substance isolation (BSI) precautions.
- Determine the number of patients.

II. General Approach to the Stable/Conscious Pediatric Patient
A. Assessments and interventions must be tailored to each child in terms of age, size and development.
   - Smile if appropriate to the situation.
   - Keep voice at even quiet tone, don't yell.
   - Speak slowly; use simple, age appropriate terms.
   - Use toys or penlight as distractors; make a game of assessment.
   - Keep small children with their caregiver(s); encourage assessment while caregiver is holding child.
   - Kneel down to the level of the child if possible.
   - Be cautious in use of touch. In the stable child, make as many observations as possible before touching (and potentially upsetting) the child.
   - Adolescents may need to be interviewed without their caregivers present if accurate information is to be obtained regarding drug use, alcohol use, LMP, sexual activity, child abuse.

B. While walking up to the patient, observe/inspect the following:
   - General appearance, age appropriate behavior. Does child have a malnourished appearance? Is child looking around, responding with curiosity or fear, playing, sucking on a pacifier or bottle, quiet, eyes open but not moving much or uninterested in environment?
   - Obvious respiratory distress/increased work of breathing: retractions, nasal flaring, accessory muscle use, head bobbing, grunting.
   - Color: pink, pale, flushed, cyanotic, mottled.
   - Position of the child. Are the head, neck or arms being held in a position suggestive of spinal injury? Is the patient sitting up or tripoding?
   - Level of consciousness, i.e., awake vs asleep or unresponsive.
   - Muscle tone: good vs limp.
   - Movement: spontaneous, purposeful, symmetrical.
   - Obvious injuries, bleeding, bruising, impaled objects or gross deformities.
   - Assess for pain.
   - Determine weight - ask child or caretakers or use length/weight tape.

III. Initial Assessment
A. Airway Access/Maintainence with Cervical Spine Control
   - Maintainable with assistance: positioning.
   - Maintainable with adjuncts: oral airway, nasal airway.
   - Maintainable with endotracheal tube.
   - Listen for any audible airway noises, i.e., stridor, snoring, gurgling, wheezing.
   - Patency: suction secretions as necessary.

B. Breathing
   - Rate and rhythm of respirations. Compare to normal rate for age and situation.
   - Chest expansion: symmetrical.
Breath sounds: compare both sides and listen for sounds (present, absent, normal, abnormal).
Positioning: sniffing position, tripod position.
Work of breathing: retractions, nasal flaring, accessory muscle use, head bobbing, grunting.

C. Circulation
- Heart rate: compare to normal rate for age and situation.
- Central/truncal pulses (brachial, femoral, carotid): strong, weak or absent.
- Distal/peripheral pulses: present/absent, thready, weak, strong.
- Color: pink, pale, flushed, cyanotic, mottled.
- Skin temperature: hot, warm, cool.
- Blood pressure: compare to normal for age of child. Must use appropriately sized cuff.
- Hydration status: anterior fontanel in infants, mucus membranes, skin turgor, crying tears, urine output history.

D. Disability - Brief Neuro Examination
- Assess Responsiveness
  - A Alert
  - V Responds to verbal stimuli
  - P Responds to painful stimuli
  - U Unresponsive
- Assess pupils.
- Assess for transient numbness/tingling.

E. Expose and Examine
- Expose the patient as appropriate based on age and severity of illness.
- Initiate measures to prevent heat loss and keep the child from becoming hypothermic.

IV. Focused History/Physical Assessment
Tailor assessment to the needs of the patient. Rapidly examine areas specific to the chief complaint.

A. Patient History - Acquire during/incorporate into physical exam.
- S Signs & Symptoms as they relate to the chief complaint.
- A Allergies to medications, foods, environment
- M Medications: prescribed, over-the-counter, compliance with prescribed dosing regimen, time, date and amount of last dose
- P Past Pertinent Medical History
  - Pertinent medical or surgical problems
  - Preexisting diseases/chronic illness
  - Previous hospitalizations
  - Currently under medical care
  - For infants, obtain a neonatal history (gestation, prematurity, congenital anomalies, was infant discharged home at the same time as the mother)
- L Last oral intake of liquid/food ingested.
- E Events surrounding current problem
  - Onset, duration and precipitating factors
  - Associated factors such as toxic inhalants, drugs, alcohol
  - Injury scenario and mechanism of injury
  - Treatment given by caregiver

B. Responsive Medical Patients
- Perform rapid assessment based on chief complaint. A full review of systems may not be necessary. If chief complaint is vague, examine all systems.

C. Unresponsive Medical Patients
- Perform rapid assessment: ABC's, quick head-to-toe exam.
- Emergency care is based on signs and symptoms, initial impressions and standard operating procedures.
D. Trauma patient with NO significant mechanism of injury.
   ▪ Focused assessment is based on specific injury site.

E. Trauma patient WITH significant mechanism of injury
   ▪ Perform rapid assessment of all body systems.

V. Detailed Assessment

A. Performed to detect non-life threatening conditions and to provide care for those conditions/injuries. Usually performed enroute. May be performed on scene if transport is delayed.
   ▪ Inspect and palpate each of the major body systems for the following:
     ▪ Deformities
     ▪ Contusions
     ▪ Abrasions
     ▪ Penetrations/punctures
     ▪ Burns
     ▪ Lacerations
     ▪ Swelling/edema
     ▪ Tenderness
     ▪ Instability
     ▪ Crepitus
   ▪ Auscultation of breath and heart sounds as well as blood pressure readings may be required in the field.

VI. Ongoing Assessment

To effectively maintain awareness of changes in the patient's condition, repeated assessments are essential and should be performed at least every 5 minutes on the unstable patient, and at least every 15 minutes on the stable patient.

VII. Considerations for Children with Special HealthCare Needs (CSHCN)

   ▪ Track CSHCN in your service community and become familiar with both the child as well as their anticipated emergency care needs.
   ▪ Refer to child's emergency care plan formulated by their medical providers, if available. Understanding the child's baseline will assist in determining the significance of altered physical findings. Parents/caregivers are the best source of information on: medications, baseline vitals, functional level/normal mentation, likely medical complications, equipment operation and troubleshooting, emergency procedures.
   ▪ Regardless of underlying condition, assess in a systematic and thorough manner.
   ▪ Use parents/caregivers/home health nurses as medical resources at home and enroute.
   ▪ Be prepared for differences in airway anatomy, physical development, cognitive development and possibly existing surgical alterations or mechanical adjuncts. Common home therapies include: respiratory support (oxygen, apnea monitors, pulse oximeters, tracheostomies, mechanical ventilators), nutrition therapy (nasogastric or gastrostomy feeding tubes), intravenous therapy (central venous catheters), urinary catheterization or dialysis (continuous ambulatory peritoneal dialysis), ostomy care, orthotic devices, communication or mobility devices, or hospice care.
   ▪ Communicate with the child in an age appropriate manner. Maintain communication with and remain sensitive to the parents/caregivers and the child.
   ▪ The most common emergency encountered with these patients is respiratory related and so familiarity with respiratory emergency interventions/adjuncts/treatment is appropriate.
Assess scene safety
Ensure Body Substance Isolation (BSI)
Assess Airway Breathing and Circulation (ABC’s)
Assess level of consciousness
Administer O₂ per appropriate method
Support with bag mask ventilation as indicated
Test blood glucose
Apply Cardiac monitor
Apply Pulse oximetry
Assess scene safety
Ensure Body Substance Isolation (BSI)
Assess and support Airway, Breathing, Circulation (ABC’s)
Assess level of consciousness
Administer O₂ per appropriate method
Support with bag mask ventilation as indicated
Test blood glucose if available
Apply Pulse oximetry if available

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
IL·INOIS EMSC
NEONATAL RESUSCITATION
BLS CARE GUIDELINE

Initial Medical Care/Assessment
- Deliver head and body
- Clamp/cut cord

Assess Risk
- Term gestation?
- Clear amniotic fluid?
- Breathing or crying?
- Good muscle tone?

YES (TO ALL)
- Provide warmth
- Clear airway as necessary
- Dry
- Assess color

NO (TO ONE OR MORE)
- Provide warmth
- Position; clear airway as necessary (bulb syringe or large bore catheter)
- Dry, stimulate, reposition

CHECK RESPIRATIONS, HEART RATE AND COLOR
Apneic, Heart Rate <100
- Meconium Present?
  - NO
    - Clear airway
    - Suction
  - YES
    - Positive pressure ventilation
    - Check Heart Rate
    - Heart Rate <60
      - Positive pressure ventilation with supplemental O₂
        - Administer chest compressions for 30 seconds, ratio of 3:1 compressions to ventilations
      - Heart Rate 60-100
        - Continue ventilations
      - Heart Rate >100 and pink
        - Continue ventilations
    - Heart Rate 60-100
      - Continue ventilations
  - Cyanotic
    - Supplemental O₂

Cyanotic and Breathing
- Pink
  - Heart Rate >60
    - Continue ventilations

Breathing, Heart Rate >100 and pink
- Continue ventilations

Special Considerations:
- Focus should be on neonate appearance, not the presence of meconium.
- Consider APGAR at 1 min, repeat every 5 mins. Do not interrupt resuscitation efforts to obtain APGAR.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**Illinois EMSC**  
**Neonatal Resuscitation**  
**Emergency Medical Responder Care Guideline**

**Initial Medical Care/Assessment**
- Deliver head and body
- Clamp/cut cord

**Assess Risk**
- Term gestation?
- Clear amniotic fluid?
- Breathing or crying?
- Good muscle tone?

**YES (TO ALL)**
- Provide warmth
- Clear airway as necessary
- Dry
- Assess color

**NO (TO ONE OR MORE)**
- Provide warmth
- Position: clear airway as necessary (bulb syringe or large bore catheter)
- Dry, stimulate, reposition

**Check Respirations, Heart Rate and Color**
- Breathing, Heart Rate >100 and pink

**Apneic, Heart Rate <100**
- Meconium Present?
  - NO
  - Supplemental O₂
  - Pink
  - Cyanotic
  - Heart Rate >60
    - Continue ventilations
  - Heart Rate <60
    - Heart Rate 60-100
      - Continue ventilations

**Cyanotic and Breathing**
- Pink
- Cyanotic
- Heart Rate >60
  - Continue ventilations

**Special Consideration:**
- Focus should be on neonate appearance, not the presence of meconium.
- Consider APGAR at 1 min, repeat every 5 mins. Do not interrupt resuscitation efforts to obtain APGAR.

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Establish unresponsiveness. Get the AED.

Open the airway (head tilt-chin lift or jaw thrust if c-spine injury suspected) and check breathing (look, listen and feel).

If breathing is absent or inadequate, give 2 breaths (over 1 second) that cause the chest to rise (if chest does not rise, reposition, reattempt). Allow for adequate exhalation time.

Check carotid pulse and other signs of circulation. If no signs of circulation, start chest compressions (ratio of about 100 compressions per minute). Continue CPR for 2 minutes.

Place the AED next to the patient. Turn AED ON.

Attach pads to bare dry skin in proper position. (NOTE: It is always desirable to utilize an AED with pediatric capabilities and pads. If unavailable, use of any AED is appropriate)

For children 1-8 yrs:
- If PEDS pads available – apply as pictured on each of the AED electrodes with proper contact and no overlap of pads. If overlap of pads, use anterior (front) and posterior (back) placement with cervical spine precautions if neck/back injury suspected.
- If ADULT pads only – apply anterior (front) and posterior (back) with cervical spine precautions if neck/back injury suspected.

Analyze Rhythm Step.
Press ANALYZE button (if present), and stand clear of patient.

- Check airway, breathing and other signs of circulation and continue CPR if needed.
  (Pulse, breathing, coughing, movement present.)
- Contact Medical Control (consider ALS backup if not on scene)
- Support ABC’s
- Keep Warm
- Transport

Special Considerations:
- If injury or neck/back trauma suspected, maintain c-spine immobilization.
- Remove patient from hazardous environment or standing water prior to use of AED.

The Illinois EMS Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**Epinephrine** SQ/IM 0.01 ml/kg (0.01mg/kg) 1:1000 as indicated. Maximum 0.3 ml per single dose. May be repeated every 15 mins.**

Nebulized Beta-agonist

Reassess

Establish vascular access IV/IO **

Epinephrine IV/IO 1:10,000 0.1 ml/kg (0.01 mg/kg). Repeat every 5 minutes as indicated.

Administer fluid bolus 20 ml/kg. Repeat as indicated to a maximum of 60 ml/kg.

Reassess

Administer continuous nebulized Beta-agonist for severe wheezing.

Contact Medical Control

Support ABCs

Observe

Keep warm

Transport

Special Considerations:

- **Epi-Pen** – use a 0.3mg auto-injector for children over 30kg and Epi-Pen Jr 0.15mg auto-injector for children less than 30kg.

- **Beta-agonist** MDI inhalers include, among others, **Albuterol (Proventil, Ventolin)** and **Levalbuterol (Xopenex)**. An inhaler should be administered through a holding chamber or spacer device if available.

- Combination Beta-agonist/corticosteroid inhaler can be used per medical direction.

- If prolonged transport, per Medical Control consider IV Diphenhydramine 1mg/kg slow IVP over 2-3 minutes. (Max dose 50 mg)

- Consider IV steroids via intravenous route as per Medical Control.

*Simple hives without airway complaints may not require any additional field treatment.

**Avoid IV initiation or medication administration into same extremity as bite or allergen site.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**Establish vascular access IV/IO**<sup>**</sup>
- Per medical protocol, Epinephrine SQ/IM 0.01 ml/kg (0.01mg/kg) 1:1000 as indicated. Maximum 0.3 ml per single dose. May be repeated every 15 mins.<sup>**</sup>
- Nebulized Beta-agonist
- Reassess

**Per Medical Control, Epinephrine SQ/IM 0.01 ml/kg (0.01mg/kg) 1:1000 as indicated. Maximum 0.3 ml per single dose. May be repeated every 15 mins.**
- Nebulized Beta-agonist
- Reassess

**Apply ice/cold pack to site.**

**Nebulized Beta-agonist**
- Reassess

**Special Considerations:**
- Epi-Pen – use a 0.3mg auto-injector for children over 30kg and Epi-Pen Jr 0.15mg auto-injector for children less than 30kg.
- Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex). An inhaler should be administered through a holding chamber or spacer device if available.
- Combination Beta-agonist/corticosteroid inhaler can be used per medical direction.

*Simple hives without airway complaints may not require any additional field treatment.

**Avoid IV initiation or medication administration into same extremity as bite or allergen site.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**Initial Medical Care/Assessment**

- Apply ice/cold pack to site.*
- Contact Medical Control (and consider ALS backup if available)
- Support ABCs
- Observe
- Keep warm
- Transport

**Respiratory Distress/Cardiopulmonary Compromise**

- Per Medical Control, as indicated:
  - Assist with prescribed Epi-Pen/Epi-Pen Jr if available**
  - Assist with prescribed Beta-agonist inhaler if available.
- Reassess

**Local Reaction**

- Apply ice/cold pack to site.*

**Special Considerations:**
- **Epi-Pen** – use a 0.3mg auto-injector for children over 30kg and Epi-Pen Jr 0.15mg auto-injector for children less than 30kg.
- **Beta-agonist MDI** inhalers include, among others, **Albuterol (Proventil, Ventolin)** and **Levalbuterol (Xopenex)**. An inhaler should be administered through a holding chamber or spacer device if available.
- Combination Beta-agonist/corticosteroid inhaler can be used per medical direction.

*Simple hives without airway complaints may not require any additional field treatment.
**Avoid medication administration into same extremity as bite or allergen site.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Initial Medical Care/Assessment

Respiratory Distress/Cardiopulmonary Compromise
- Contact dispatch and request appropriate level of care
- Support ABCs
- Observe
- Keep warm
- Continue support until transport arrives

Local Reaction
- Apply ice/cold pack to site.*

Special Considerations:
- Advise patient to administer Epi-Pen/Epi-Pen Jr or Beta-agonist MDI inhaler. Avoid medication administration into same extremity as bite or allergen site.
- Epi-Pen – use a 0.3mg auto-injector for children over 30kg and Epi-Pen Jr 0.15mg auto-injector for children less than 30kg.
- Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex). An inhaler should be administered through a holding chamber or spacer device if available.

*Simple hives without airway complaints may not require any additional field treatment.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
ILLINOIS EMSC
PEDIATRIC ALTERED LEVEL OF CONSCIOUSNESS
ALS/ILS CARE GUIDELINE

Initial Medical Care/Assessment

- Immobilize spine as indicated
- Consider other causes of altered level of consciousness and refer to appropriate protocol(s).

Glucose < 60

- Establish vascular access IV/IO NS/LR @ TKO
- Administer:
  - Dextrose (0.5-1.0 g/kg):
    - > 8 yrs. D50% 1-2ml/kg IV/IO
    - 1-8 yrs. D25% 2-4 ml/kg IV/IO
    - <1 yr. D12.5%* 4ml/kg IV/IO for infants
  - OR
- Glucagon:
  - ≤ 8 y/o 0.5mg IM
  - > 8 y/o 1mg IM
  - OR
  - Consider Glucose Paste to gums if venous access unavailable and gag reflex intact**

Glucose > 60

- Reassess respiratory effort

No improvement

- Improved level of consciousness

- Contact Medical Control
- Support ABCs
- Observe
- Keep warm
- Transport

Adequate respiratory effort

- Secure airway as appropriate
- Naloxone (maximum dose 2 mg.)
  - ≤ 20 kg 0.1 mg/kg IV/IO/SQ/IM or 0.2mg/kg ET
  - >20 kg 2 mg/dose
- Reassess patient
- If evidence of SHOCK, administer fluid bolus 20 ml/kg.
  Repeat as indicated to a maximum of 60 ml/kg.

Inadequate respiratory effort

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

* To make D12.5% dilute D25% 1:1 with sterile water.
**Examples of treatment for hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child's clinical presentation, and on authorized policies and protocols.
ILLINOIS EMSC
PEDIATRIC ALTERED LEVEL OF CONSCIOUSNESS
BLS CARE GUIDELINE

Initial Medical Care/Assessment

- Immobilize spine as indicated
- Consider other causes of altered level of consciousness and refer to indicated protocol(s)
- Consider Hypoglycemia (or Glucose ≤ 60) and if gag reflex intact, treat as available*

Reassess respiratory effort

Inadequate respiratory effort

- Initiate bag mask ventilation

Adequate respiratory effort

- Contact Medical Control (and consider ALS backup if available)
- Support ABCs
- Observe
- Keep warm
- Transport

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

*Examples of treatment for hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child's clinical presentation, and on authorized policies and protocols.
### Initial Medical Care/Assessment

- Immobilize spine as indicated
- Consider other causes of altered level of consciousness and refer to indicated protocol(s)
- Consider Hypoglycemia (or Glucose $\leq 60$) and if gag reflex intact, treat as available*

---

### 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

*Examples of treatment for hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing.

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Perform chest compressions if despite oxygen and ventilation, heart rate <60/min. with poor perfusion. Continue compressions as indicated.

Establish vascular access IV/IO NS/LR @ TKO

Epinephrine
- IV/IO 0.1 ml/kg (0.01mg/kg) 1:10,000
- ET 0.1 ml/kg (0.1mg/kg) 1:1000
- Repeat every 3-5 min. if no response

If increased vagal tone or primary AV block:
Atropine 0.02 mg/kg
- Minimum dose: 0.1mg
- Maximum single dose: 0.5 mg for child; 1 mg for adolescent
- May be repeated once

Continued Cardiopulmonary Compromise

YES
- Per medical orders, consider external pacing * if available
- Refer to Pulseless Arrest Protocol as indicated

NO
- Contact Medical Control
- Support ABCs
- Observe
- Keep warm
- Transport

Reminders
Search for and treat possible contributing factors in the prehospital setting:
- Hypovolemia
- Hypoxia or ventilation problems
- Hypoglycemia
- Hypothermia
- Toxins
- Tamponade, cardiac
- Tension pneumothorax
- Trauma (hypovolemia, increased ICP)

Special Considerations:
- Special conditions may apply in the presence of severe hypothermia. Refer to Hypothermia Protocol as indicated.
- Limited pediatric data on efficacy of external pacing.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
ILLINOIS EMSC
BRADYCARDIA PROTOCOL
BLS CARE GUIDELINE

Initial Medical Care/Assessment

Complete initial assessment. Assess for:
- Weak, thready, or absent peripheral pulses
- Decreasing consciousness
- Tachypnea/respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)

Cardiopulmonary Compromise Present

Support with bag mask ventilation

■ Perform chest compressions if despite oxygen and ventilation heart rate <60/min. in infant or child with hypoperfusion. Continue compressions as indicated.
■ Refer to Pediatric AED or Pulseless Arrest Protocol as indicated

NO

Contact Medical Control (and consider ALS backup if available)
■ Support ABCs
■ Observe
■ Keep warm
■ Transport

Special Considerations:
■ Hypoglycemia has been known to cause bradycardia in infants and children.
■ Special conditions may apply in the presence of severe hypothermia. Refer to Hypothermia Protocol as indicated.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Perform chest compressions if despite oxygen and ventilation heart rate <60/min. in infant or child with hypoperfusion. Continue compressions as indicated.

Refer to Pediatric AED or Pulseless Arrest Protocol as indicated.

Support with bag mask ventilation

- Contact dispatch and request appropriate level of care
- Support ABCs
- Observe
- Keep warm
- Continue support until transport arrives

Special Considerations:
- Hypoglycemia has been known to cause bradycardia in infants and children.
- Special conditions may apply in the presence of severe hypothermia. Refer to Hypothermia Protocol as indicated.
ILLINOIS EMSC
PEDIATRIC BURNS (THERMAL, ELECTRICAL, CHEMICAL)
ALS/ILS CARE GUIDELINE

Assess scene safety. As indicated:
- Remove patient to safety
- Appropriate body substance isolation

Initial Medical Care/Assessment

- Complete initial assessment. Assess for:
  - stridor
  - wheezing
  - grunting
  - decreased respirations or apnea
  - retractions
  - tachypnea
  - decreasing consciousness
- Refer to Pediatric Initial Trauma Care Protocol as indicated
- Assess percentage/depth of burn * (see back)
- Remove constricting jewelry and clothes.

Respiratory Compromise

- Secure airway as appropriate
- Refer to Respiratory Distress Protocol

No Respiratory Compromise

Follow correct burn type path

THERMAL BURNS
Superficial (1st degree)
- Cool burned area with water or saline
- If <20% body surface involved, apply sterile saline soaked dressings.
  DO NOT OVER COOL major burns or apply ice directly to burned areas.

Partial or Full thickness (2nd or 3rd degree)
- Wear sterile gloves/mask while burn areas exposed
- Cover burn wound with DRY sterile dressings
- Place patient on clean sheet on stretcher and cover patient with dry clean sheets and blanket to maintain body temperature.
- Refer to Shock Protocol as indicated.

ELECTRICAL BURNS
- Immobilize as indicated
- Assess cardiac monitor for dysrhythmia and treat according to appropriate protocol
- Identify and document any entrance and exit wounds
- Assess neurovascular status of affected part
- Cover wounds with dry sterile dressings
- Establish vascular access IV/IO NS/LR @ TKO as indicated. Avoid involved area/extremity.
- Contact Medical Control
- Support ABCs
- Observe
- Keep warm
- Transport

CHEMICAL BURNS
- Refer to EMS System Haz/Mat Protocol
- If powdered chemical, brush away excess
- Remove clothing if possible
- Flush burn area with copious amounts of sterile water or saline ASAP and during transport

IF EYE INVOLVEMENT
- Rapid visual acuity
- Remove contact lens and irrigate with saline or sterile water continuously.
  DO NOT CONTAMINATE THE UNINJURED EYE WITH EYE IRRIGATION

SPECIAL CONSIDERATIONS:
- Assess for potential child abuse and follow appropriate reporting mechanism
- Keep the child warm and protect from hypothermia. Be cautious with cool dressings.
- Consider Morphine IV (0.05mg/kg - 0.1mg/kg) per Medical Control.
- Consider transport to a Burn Center* (see back)

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Any patient with a life threatening condition should be treated until stable at the nearest appropriate facility before being transferred to a burn center. Listed below is the American Burn Association criteria for pediatric patients to be transported to a burn center.

1. Partial thickness burns of greater than 10% total body surface area (TBSA)
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints
3. Third-degree burns in any age group
4. Electrical burns (including lightning injury)
5. Chemical burns
6. Inhalation injury
7. Burn injury in patient with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality
8. Any patients with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be initially stabilized in a trauma center before being transferred to a burn unit. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols
9. Burned children in hospitals without qualified personnel or equipment for the care of children
10. Burn injury in patients who will require special social, emotional, or long-term rehabilitative intervention
Assess scene safety. As indicated:
- Remove patient to safety
- Appropriate body substance isolation

Complete initial assessment. Assess for:
- Stridor
- Wheezing
- Grunting
- Decreased respirations or apnea
- Retractions
- Tachypnea
- Decreasing consciousness

Refer to Pediatric Initial Trauma Care Protocol as indicated
- Assess percentage and depth of burn *(see back)
- Remove constricting jewelry and clothes.

Respiratory Compromise

No Respiratory Compromise

Refer to Respiratory Distress Protocol

Follow correct burn type path

THERMAL BURNS
Superficial (1st degree)
- Cool burned area with water or saline
- If <20% body surface involved, apply sterile saline soaked dressings. DO NOT OVER COOL major burns or apply ice directly to burned areas.

Partial or Full thickness
(2nd or 3rd degree)
- Wear sterile gloves/mask while burn areas exposed
- Cover burn wound with DRY sterile dressings
- Place patient on clean sheet on stretcher and cover patient with dry clean sheets and blanket to maintain body temperature.
- Refer to Shock Protocol as indicated.

ELECTRICAL BURNS
- Immobilize as indicated
- Identify and document any entrance and exit wounds
- Assess neurovascular status of affected part
- Cover wounds with dry sterile dressings

CHEMICAL BURNS
- Refer to EMS System Haz/Mat protocol
- If powdered chemical, brush away excess
- Remove clothing if possible
- Flush burn area with copious amounts of sterile water or saline ASAP and during transport

IF EYE INVOLVEMENT
- Rapid visual acuity
- Remove contact lens and irrigate with saline or sterile water continuously.
- DO NOT CONTAMINATE THE UNINJURED EYE WITH EYE IRRIGATION

Contact Medical Control (and consider ALS backup if available)
- Support ABCs
- Observe
- Keep warm
- Transport

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Any patient with a life-threatening condition should be treated until stable at the nearest appropriate facility before being transferred to a burn center. Listed below is the American Burn Association criteria for pediatric patients to be transported to a burn center.

1. Partial thickness burns of greater than 10% total body surface area (TBSA)
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints
3. Third-degree burns in any age group
4. Electrical burns (including lightning injury)
5. Chemical burns
6. Inhalation injury
7. Burn injury in patient with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality
8. Any patients with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be initially stabilized in a trauma center before being transferred to a burn unit. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols
9. Burned children in hospitals without qualified personnel or equipment for the care of children
10. Burn injury in patients who will require special social, emotional, or long-term rehabilitative intervention
ILLINOIS EMSC

PEDIATRIC BURNS (THERMAL, ELECTRICAL, CHEMICAL)  
EMERGENCY MEDICAL RESPONDER CARE GUIDELINE

Assess scene safety. As indicated:
- Remove patient to safety
- Appropriate body substance isolation

Initial Medical Care/Assessment

- Complete initial assessment. Assess for:
  - Stridor
  - Wheezing
  - Grunting
  - Decreased respirations or apnea
  - Retractions
  - Tachypnea
  - Decreasing consciousness
- Refer to Pediatric Initial Trauma Care Protocol as indicated
- Assess percentage and depth of burn * (see back)
- Remove constricting jewelry and clothes.

Respiratory Compromise

No Respiratory Compromise

Refer to Respiratory Distress Protocol

Follow correct burn type path

THERMAL BURNS

- Superficial (1st degree)
  - Cool burned area with water or saline
  - If <20% body surface involved, apply sterile saline soaked dressings. DO NOT OVER COOL major burns or apply ice directly to burned areas.

Partial or Full Thickness (2nd or 3rd degree)
  - Wear sterile gloves/mask while burn areas exposed
  - Cover burn wound with DRY sterile dressings
  - Place patient on clean sheet on stretcher and cover patient with dry clean sheets and blanket to maintain body temperature.
  - Refer to Shock Protocol as indicated.

ELECTRICAL BURNS

- Immobilize as indicated
- Identify and document any entrance and exit wounds
- Assess neurovascular status of affected part
- Cover wounds with dry sterile dressings

Contact dispatch and request appropriate level of care
- Support ABCs
- Observe
- Keep warm
- Continue support until transport arrives

CHEMICAL BURNS

- Refer to EMS System Haz/Mat Protocol
- If powdered chemical, brush away excess
- Remove clothing if possible
- Flush burn area with copious amounts of sterile water or saline ASAP and during transport

IF EYE INVOLVEMENT

- Rapid visual acuity
- Remove contact lens and irrigate with saline or sterile water continuously. DO NOT CONTAMINATE THE UNINJURED EYE WITH EYE IRRIGATION

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Any patient with a life threatening condition should be treated until stable at the nearest appropriate facility before being transferred to a burn center. Listed below is the American Burn Association criteria for pediatric patients to be transported to a burn center.

1. Partial thickness burns of greater than 10% total body surface area (TBSA)
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints
3. Third-degree burns in any age group
4. Electrical burns (including lightning injury)
5. Chemical burns
6. Inhalation injury
7. Burn injury in patient with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality
8. Any patients with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be initially stabilized in a trauma center before being transferred to a burn unit. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols
9. Burned children in hospitals without qualified personnel or equipment for the care of children
10. Burn injury in patients who will require special social, emotional, or long-term rehabilitative intervention
PEDIATRIC ENVIRONMENTAL HYPERThERMIA
ALS/ILS CARE GUIDELINE

Initial Medical Care/Assessment

- Complete initial assessment. Assess for:
  - Hot, dry, flushed or ashen skin
  - Tachycardia
  - Tachypnea
  - Diaphoresis
  - Decreasing consciousness
- Assess scene for environmental risks

Place in cool environment. Remove clothing as appropriate.

Decreased Consciousness
(If glucose < 60, refer to altered level of consciousness protocol for glucose dose)

- Inadequate Respiratory Effort
  - Secure airway as appropriate
  - Support with bag mask ventilation

- Adequate Respiratory Effort
  - Establish vascular access IV/IO NS/LR
  - Fluid bolus with 20ml/kg
  - Repeat if no improvement to maximum of 60 ml/kg
  - Initiate cooling
    - Apply cool pack to head, neck, armpits, groin, behind knees and to lateral chest.
    - Tepid water per sponge/spray
    - Manually fan body to evaporate and cool
  - Stop cooling if shivering occurs
    - For shivering, per Medical Control consider Diazepam 0.1-0.3mg/kg IV over 2-3 minutes every 15 mins.
      - < 5 yrs. maximum total dose 5mg
      - > 5yrs. maximum total dose 10mg
    - Refer to Seizure Protocol as indicated.

Normal Level of Consciousness

- Nausea/Vomiting Present
- No Nausea/Vomiting
  - Give cool liquids PO

Contact Medical Control
- Support ABCs
- Observe
- Transport

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Complete initial assessment. Assess for:
- Hot, dry, flushed or ashen skin
- Tachycardia
- Tachypnea
- Diaphoresis
- Decreasing consciousness
- Weak, thready or absent peripheral pulse
- Hypotension
- Profound weakness/fatigue
- Vomiting
- Muscle cramps
- Headache

Assess scene for environmental risks

Place in cool environment. Remove clothing as appropriate.

Decreased Consciousness
Treat hypoglycemia or glucose ≤ 60 as available if gag reflex intact

Initiate cooling
- Apply cool pack to head, neck, armpits, groin, behind knees and to lateral chest.
- Tepid water per sponge/spray
- Manually fan body to evaporate and cool.
- Stop cooling if shivering occurs.
- Refer to Seizure Protocol as indicated.

Normal Level of Consciousness

Contact Medical Control (and consider ALS backup if available)
- Support ABCs
- Give cool liquids if no nausea/vomiting
- Observe
- Transport

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
ILLINOIS EMSC
PEDiatric ENVIRONMENTAL HYPERTHERMIA
EMERGENCY MEDICAL RESPONDER CARE GUIDELINE

Initial Medical Care/Assessment

- Complete initial assessment. Assess for:
  - Hot, dry, flushed or ashen skin
  - Tachycardia
  - Tachypnea
  - Diaphoresis
  - Decreasing consciousness
  - Weak, thready or absent peripheral pulse
  - Hypotension
  - Profound weakness/fatigue
  - Vomiting
  - Muscle cramps
  - Headache

- Assess scene for environmental risks

Place in cool environment. Remove clothing as appropriate.

Decreased Consciousness
Treat hypoglycemia or glucose ≤ 60 as available if gag reflex intact

- Initiate cooling
  - Apply cool pack to head, neck, armpits, groin, behind knees and to lateral chest.
  - Tepid water per sponge/spray
  - Manually fan body to evaporate and cool.
- Stop cooling if shivering occurs.
- Refer to Seizure Protocol as indicated.

Normal Level of Consciousness

- Contact dispatch and request appropriate level of care
- Support ABCs
- Give cool liquids if no nausea/vomiting
- Observe
- Continue support until transport arrives

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child's clinical presentation, and on authorized policies and protocols.
Complete initial assessment. Assess for:

**Hypothermia Signs & Symptoms**
- Complains of cold
- Shivering (+/-)
- Decreased respiratory rate
- Dysrhythmias
- Dilated, sluggish pupils
- Decreased reflexes
- May mimic death

**Signs of Cardiopulmonary Compromise**
- Weak, thready, absent peripheral pulses
- Decreasing consciousness
- Tachypnea/respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)

Place in warm environment. Remove wet clothing. Prevent further heat loss.

**Cardiopulmonary Compromise**
- Secure airway as appropriate
- Avoid unnecessary manipulation and rough handling
- Perform chest compressions for no pulse
  - For VF or pulseless VT consider defibrillation 2 J/kg
    - Give one shock only, then resume CPR
- Refer to appropriate protocol as indicated
- Establish vascular access IV/IO NS/LR @ TKO
- Warm trunk. Place heat packs to axilla and groin, taking care to avoid direct skin contact.

**No Cardiopulmonary Compromise**
- Warm trunk
- Place heat packs to axilla and groin, taking care to avoid direct skin contact.

Contact Medical Control
- Support ABCs
- Observe
- Keep warm
- Transport

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Complete initial assessment. Assess for:

**Hypothermia Signs & Symptoms**
- Complains of cold
- Shivering (+/-)
- Decreased respiratory rate
- Dysrhythmias
- Dilated, sluggish pupils
- Decreased reflexes
- May mimic death

**Signs of Cardiopulmonary Compromise**
- Weak, thready, absent peripheral pulses
- Decreasing consciousness
- Tachypnea/respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)

Place in warm environment. Remove wet clothing. Prevent further heat loss.

**Cardiopulmonary Compromise**
- Support with bag mask ventilation as indicated
- Avoid unnecessary manipulation and rough handling
- **Perform chest compressions for no pulse**
  - Consider AED if available
    - Give one shock only if advised
    - Do not repeat, resume CPR
  - Refer to appropriate protocol as indicated
- Warm trunk. Place heat packs to axilla and groin, taking care to avoid direct skin contact.

**No Cardiopulmonary Compromise**
- Warm trunk
- Place heat packs to axilla and groin, taking care to avoid direct skin contact.
- Contact Medical Control (and consider ALS backup if available)
- Support ABCs
- Observe
- Keep warm
- Transport

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Inadequate Ventilation and Respiratory Effort

- Perform airway maneuver, maintaining in-line C-spine stabilization:
  - Jaw thrust
  - Suction
- Relieve upper airway obstruction as indicated

Reassess Airway Patency

Obstructed
- Refer to Respiratory or Pulseless Arrest protocols as indicated.

Patent

Adequate Ventilation and Respiratory Effort

- Complete initial assessment
- Remove wet clothing
- Prevent further heat loss
- Warm trunk as indicated. Place heat packs to axilla and groin, taking care to avoid direct skin contact.

- Establish vascular access IV/IO NS/LR @ TKO as indicated
- Refer to Hypothermia, Dysrhythmia, or Seizure protocols as indicated.

- Contact Medical Control
- Support ABC’s
- Observe
- Transport

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Inadequate Ventilation and Respiratory Effort

- Perform airway maneuver, maintaining in-line C-spine stabilization:
  - Jaw thrust
  - Suction
- Relieve upper airway obstruction as indicated

Reassess Airway Patency

Obstructed

- Refer to Respiratory or Pulseless Arrest protocols as indicated.

Patent

Adequate Ventilation and Respiratory Effort

- Complete initial assessment
- Remove wet clothing
- Prevent further heat loss
- Warm trunk as indicated. Place heat packs to axilla and groin, taking care to avoid direct skin contact.

Refer to Hypothermia or Seizure protocols as indicated.

- Contact dispatch and request appropriate level of care
- Support ABC’s
- Observe
- Continue support until transport arrives

Initial Medical Care/Assessment

Immobilize spine as indicated

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**ILLINOIS EMSC**  
**PEDIATRIC NERVE AGENT**  
**ANTIDOTE GUIDELINE**

<table>
<thead>
<tr>
<th>PATIENT AGE</th>
<th>ANTIDOTES (IV/IM)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MILD/MODERATE</td>
<td>SEVERE</td>
<td></td>
</tr>
<tr>
<td>INFANT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-6 months</td>
<td>0.25mg Atropine</td>
<td>0.5mg Atropine*</td>
<td></td>
</tr>
<tr>
<td>(&lt; 7 kg)</td>
<td>2 PAM† 15 mg/kg</td>
<td>2 PAM† 25 mg/kg</td>
<td></td>
</tr>
<tr>
<td>INFANT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 months-2 years</td>
<td>0.5mg Atropine*</td>
<td>1mg Atropine*</td>
<td></td>
</tr>
<tr>
<td>(7-13 kg)</td>
<td>2 PAM† 15 mg/kg</td>
<td>300 mg 2 PAM†</td>
<td></td>
</tr>
<tr>
<td>CHILD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-7 yrs</td>
<td>1mg Atropine*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(14-25 kg)</td>
<td>300mg 2 PAM†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHILD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-14 yrs</td>
<td>2mg Atropine</td>
<td>4mg Atropine</td>
<td></td>
</tr>
<tr>
<td>(26-50 kg)</td>
<td>600 mg 2 PAM†</td>
<td>1200 mg 2 PAM†</td>
<td></td>
</tr>
<tr>
<td>ADOLESCENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 14 yrs</td>
<td>2mg Atropine</td>
<td>4mg Atropine</td>
<td></td>
</tr>
<tr>
<td>(&gt; 51 kg)</td>
<td>600 mg 2 PAM†</td>
<td>1200 mg 2 PAM†</td>
<td></td>
</tr>
</tbody>
</table>

* Appropriate dose Atropen auto injector can be used if available  
† 2 PAM=Práloidoxime

**NOTES:**

For nerve agents the doses are:
- Atropine dose 0.05 mg/kg
- 2 PAM† dose 25 mg/kg

For children > 3 yrs with severe symptoms:
- 1 Mark I Kit will give 0.08 — 0.13 mg/kg Atropine
- 24-46 mg/kg 2 PAM†

2 PAM† solution can be prepared from the vial containing 1 gram of dessicated 2 PAM†. Inject 3 ml of NS or sterile water into the vial and shake well. This results in 3.3ml of 300 mg/ml.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**ILLINOIS EMSC PEDIATRIC NERVE AGENT TREATMENT GUIDELINE**

**WARM ZONE**
Mild to Severe Exposures
- Reassess Patient & Triage
- Support with bag mask ventilation as indicated
- Decontaminate Patient
- Contact Medical Control When Appropriate
- Initiate IV NS
- Repeat Atropine If Conditions Warrants

**HOT ZONE**
Severe Exposures Only
- Assess Patient
- Inject one MARK I Kit
- Label or Tag Patient to Identify Dosage
- Remove Patient to Warm Zone

**MILD EXPOSURE**
SOB, Wheezing, Runny Nose

**MODERATE EXPOSURE**
Vomiting, Drooling, Pinpoint Pupils

**SEVERE EXPOSURE**
Unconscious, cyanosis, seizures

**Infant 0-6 mths (<7kg)**
- Atropine: 0.25mg IM/IV
- 2 PAM 15 mg/kg IM/IV

**Infant 7 mths-2 yrs (7-13kg)**
- Atropine: 0.5mg IM/IV
- 2 PAM: 15 mg/kg IM/IV

**Child 3 yrs-7 yrs (14-25 kg)**
- Atropine: 1 mg IM/IV
- 2 PAM: 300 mg

**Child 8 yrs-14 yrs (26-50 kg)**
- Atropine: 2 mg IM/IV
- 2 PAM: 600 mg

**Infant 0-6 mths (<7 kg)**
- Atropine: 0.5mg IM/IV
- 2 PAM 25 mg/kg IM/IV

**Infant 7 mths-2 yrs (7-13 kg)**
- Atropine: 1mg IM/IV
- 2 PAM 300 mg/kg IM/IV

**Child 3 yrs-7 yrs (14-25 kg)**
- Atropine: 2 mg IM/IV
- 2 PAM: 600 mg

**Child 8 yrs-14 yrs (26-50 kg)**
- Atropine: 4 mg IM/IV
- 2 PAM: 1200 mg

**Adult/Adolescent**
- Inject One MARK I Kit (Second Dose)
- Atropine: 2mg IM/IV
- 2 PAM: 600 mg IM (1 Gram IV)
- Atropine: 2mg IM/IV
- 2 PAM: 600 mg IM (1 Gram IV)

**Adult/Adolescent**
- Inject One MARK I Kit (Third Dose)
- Atropine: 2mg IM/IV
- 2 PAM: 600 mg IM (1 Gram IV)
- Atropine: 2mg IM/IV
- 2 PAM: 600 mg IM (1 Gram IV)

**Children Under 14 yrs (< 50 kg)**
- Remove Patient to Warm Zone

If patient exposed:
- Protect Emergency Responders
- Utilize Incident Command System
- Activate Regional EMS Disaster Plan
- Determine Decontamination Needs

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**ILLINOIS EMSC PULSELESS ARREST ALS/ILS CARE GUIDELINE**

**PHASE I**

1. **Check Rhythm**
   - **Shockable Rhythm?**
     - **YES**
       - Go to VF/VT Pathway
     - **NO**
       - **Check Pulse**
         - **PULSE PRESENT**
           - **YES**
             - Contact Medical Control
             - Support ABCs
             - Keep warm
             - Transport
           - **NO PULSE**
             - Continue CPR while defibrillator is charging
             - Give 1 shock of 4 J/kg or utilize AED in children > 1 yr
             - Resume CPR immediately for 2 minutes
             - Establish vascular access IV/IO
             - Give epinephrine while continuing CPR
               - IV/IO: 0.1 ml/kg (0.01 mg/kg) 1:10,000
               - ET: 0.1 ml/kg (0.1 mg/kg) 1:1000
               - Repeat every 3 to 5 minutes
         - **NO PULSE**
           - Continue CPR while defibrillator is charging
           - Give 1 shock of 2 J/kg or utilize AED in children > 1 yr
           - Resume CPR immediately for 2 minutes
           - Establish vascular access IV/IO
           - Give epinephrine while continuing CPR
             - IV/IO: 0.1 ml/kg (0.01 mg/kg) 1:10,000
             - ET: 0.1 ml/kg (0.1 mg/kg) 1:1000
             - Repeat every 3 to 5 minutes

**REMINDERS**

Search for and treat possible contributing factors in the prehospital setting:
- Hypovolemia
- Hypoxia or ventilation problems
- Hypoglycemia
- Hypothermia
- Toxins
- Tamponade, cardiac
- Tension pneumothorax
- Trauma (hypovolemia, increased ICP)

**Special Consideration:**
*If advanced airway is placed, give continuous chest compressions without pauses for breaths per current AHA/ARC guidelines. Check rhythm every 2 minutes.*

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Initial Medical Care/Assessment

Initiate CPR

Apply AED (in children > 1 yr)

NOT SHOCKABLE

S H O C K A B L E

Continue CPR

RATIO
15:2  2 rescuers
30:2  1 rescuer

Go to AED Protocol

- Contact dispatch and request appropriate level of care
- Support ABC's
- Keep warm
- Continue support until transport arrives

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child's clinical presentation, and on authorized policies and protocols.
Special Considerations:
- Respiratory arrest may be a presenting sign of a toxic ingestion, metabolic disorder or anaphylaxis.
- Consider naloxone, flumazenil or glucose per Medical Control.
*Refer to Vital Signs and Cardiopulmonary Compromise Resource for signs and symptoms of decreased perfusion in children.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Not Breathing

- Administer 100% O₂
- Support ventilation with bag mask at age appropriate rate
- Secure airway as appropriate

Breathing resumed
- Assess lung sounds

Perform airway maneuver, maintaining in-line C-spine stabilization.
- jaw thrust or chin lift/head tilt
- suction
- oropharyngeal airway
- C-spine immobilization as indicated
- If foreign body suspected, open mouth and remove foreign body if visible

Chest Rise Inadequate
- Reposition airway
- Begin CPR

Chest Rise Adequate
- Administer 100% O₂
- Support ventilation with bag mask as indicated
- Secure airway as appropriate

Cardiopulmonary Compromise*

- Contact Medical Control (and consider ALS backup if available)
- Support ABCs
- Complete initial assessment
- Observe
- Keep warm
- Transport

- Refer to Shock, AED or Pulseless Arrest protocols as appropriate
- If HR < 60 go to Bradycardia Protocol as appropriate

Special Considerations:
- Respiratory arrest may be a presenting sign of a toxic ingestion, metabolic disorder or anaphylaxis.
- Refer to Respiratory Distress Protocol as appropriate.

*Refer to Vital Signs and Cardiopulmonary Compromise Resource for signs and symptoms of decreased perfusion in children.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Complete initial assessment. Assess for:
- suspected foreign body
- obstruction or epiglottitis
- anaphylaxis

Refer to Respiratory Distress with a Tracheostomy Protocol as indicated.

---

**Partial Airway Obstruction**
- suspected foreign body
- obstruction or epiglottitis
- anaphylaxis
- stridor
- history of choking episode
- drooling
- hoarseness
- retractions
- tripod position

Reactove Airway Disease
- wheezing
- grunting
- retractions
- tachypnea
- diminished respirations
- decreased breath sounds
- tachycardia/bradycardia
- decreasing consciousness

---

**Complete Airway Obstruction**
- If foreign body suspected, open mouth and remove foreign body if visible
- Reposition airway
- Consider back slaps, chest/abdominal thrusts (age dependent)
- Direct laryngoscopy, foreign body removal with Magill forceps if indicated
- Secure airway as appropriate
- Consider needle cricothyrotomy

**Partial (Upper) Airway Obstruction**
- Avoid any agitation
- Position of comfort
- Consider alternate O₂ methods, i.e. blow by O₂
- Per Medical Control, consider nebulized Racemic Epinephrine or short-acting Beta-agonist (nebulized or MDI)*
- DO NOT attempt intubation, invasive glottic visualization, nor IV access

If condition worsens see Respiratory Arrest Protocol as indicated

---

**Special Considerations:**
*Severe upper airway obstruction secondary to croup may be relieved with nebulized Racemic Epinephrine or short acting/nebulized Beta-agonist per Medical Control.

**Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex).**
**An inhaler should be administered through a holding chamber or spacer device, if available.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
ILLINOIS EMSC

PEDIATRIC RESPIRATORY DISTRESS
BLS CARE GUIDELINE

Initial Medical Care/Assessment

- Complete initial assessment. Assess for:
  **Complete Airway Obstruction**
  - suspected foreign body
  - obstruction or epiglottitis
  - anaphylaxis

- **Partial Airway Obstruction**
  - suspected foreign body
  - obstruction or epiglottitis
  - anaphylaxis
  - stridor
  - history of choking episode
  - drooling
  - hoarseness
  - retractions
  - tripod position

- **Reactive Airway Disease**
  - wheezing
  - grunting
  - retractions
  - tachypnea
  - diminished respirations
  - decreased breath sounds
  - tachycardia/bradycardia
  - decreasing consciousness

- Refer to Respiratory Distress with a Tracheostomy Protocol as indicated.

**Complete Airway Obstruction**
- If foreign body suspected, open mouth and remove foreign body if visible
- Reposition airway
- Consider back slaps, chest/abdominal thrusts (age dependent)

**Partial (Upper) Airway Obstruction**
- Avoid any agitation
- Position of comfort
- Consider alternate $O_2$ methods, i.e. blow by $O_2$
- Per Medical Control, consider assist of patient with prescribed Beta-agonist MDI* if available
- DO NOT attempt invasive airway maneuvers

**Reactive (Lower) Airway Disease**
- Position of comfort
- Per Medical Control, assist with prescribed Beta-agonist MDI inhaler* if available
- Reassess. If still in distress repeat Beta-agonist.

If condition worsens see Respiratory Arrest Protocol as indicated

**Special Considerations:**
*Per Medical Control, severe upper airway obstruction secondary to croup may be relieved with Beta-agonists.
*Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex).
*An inhaler should be administered through a holding chamber or spacer device, if available.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**ILINOIS EMSC**
**PEDIATRIC RESPIRATORY DISTRESS**
**EMERGENCY MEDICAL RESPONDER CARE GUIDELINE**

---

**Initial Medical Care/Assessment**

- Complete initial assessment. Assess for:
  - **Complete Airway Obstruction**
    - suspected foreign body
    - obstruction or epiglottis
    - anaphylaxis
  - **Partial Airway Obstruction**
    - suspected foreign body
    - obstruction or epiglottis
    - anaphylaxis
    - stridor
    - history of choking episode
    - drooling
    - hoarseness
    - retractions
    - tripod position
  - **Reactive Airway Disease**
    - wheezing
    - grunting
    - retractions
    - tachypnea
    - diminished respirations
    - decreased breath sounds
    - tachycardia/bradycardia
    - decreasing consciousness

- Refer to **Respiratory Distress with a Tracheostomy Protocol** as indicated.

---

**Complete Airway Obstruction**

- If foreign body suspected, open mouth and remove foreign body if visible
- Reposition airway
- Consider back slaps, chest/abdominal thrusts (age dependent)

---

**Partial (Upper) Airway Obstruction**

- Avoid any agitation
- Position of comfort
- Consider alternate O₂ methods, i.e. blow by O₂
- Per Medical Control, consider assist of patient with prescribed **Beta-agonist MDI** if available
- DO NOT attempt invasive airway maneuvers

---

**Reactive (Lower) Airway Disease**

- Position of comfort
- Per Medical Control, assist with prescribed **Beta-agonist MDI** inhaler* if available
- Reassess. If still in distress repeat **Beta-agonist.**

---

**If condition worsens see Respiratory Arrest Protocol as indicated**

---

**Special Considerations:**

*Per Medical Control, severe upper airway obstruction secondary to croup may be relieved with **Beta-agonists.**

*Beta-agonist MDI inhalers include, among others, **Albuterol (Proventil, Ventolin),** and **Levalbuterol (Xopenex).**

*An inhaler should be administered through a holding chamber or spacer device, if available.

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child's clinical presentation, and on authorized policies and protocols.
ILLINOIS EMSC
PEDIATRIC RESPIRATORY DISTRESS WITH A TRACHEOSTOMY TUBE
ALS/ILS CARE GUIDELINE

Initial Medical Care/Assessment

- Administer 100% O2 per tracheostomy collar
- Suction
- Reassess airway patency*

Obstructed

- Repeat suction, after removing inner cannula if present
- Have caregiver change trach tube, or EMS insert appropriately sized ET tube into stoma.
- Reassess patency

Patent

- Do not change trach tube
- Complete initial assessment
- Perform frequent reassessments

Are any of the following present?
- Retractions
- Grunting/wheezing/stridor
- Tachypnea
- Decreasing consciousness
- Apnea
- Cyanosis

YES

- Ventilate with 100% O2 using bag mask to trach tube.
- If trach tube not patent even after changing, ventilate with bag mask to mouth (cover stoma). If no chest rise, ventilate with infant mask to stoma.
- Must have rise and fall of chest with each ventilation
- Consider nebulized Beta-agonist**
- Refer to Respiratory Arrest or Pulseless Arrest protocols as indicated

NO

- Contact Medical Control
- Support ABCs
- Observe
- Keep warm
- Transport in position of comfort

Continued Obstruction

Patent

Special Considerations:
*If chest rise inadequate:
- Reposition the airway.
- If using mask to stoma, consider inadequate volume delivered. Compress bag further and/or depress pop-off valve.

**Only bronchodilator (Beta-agonist MDI) inhalers should be administered.
- Beta-agonist MDI inhalers include, among others, Albuterol (Proventil, Ventolin) and Levalbuterol (Xopenex).
- An inhaler should be administered through a holding chamber or spacer device, if available.

Consider allowing caregiver to remain with child regardless of child’s level of responsiveness.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Initial Medical Care/Assessment

- Administer 100% O₂ per tracheostomy collar
- Suction
- Reassess airway patency

Obstructed

- Repeat suction, after removing inner cannula if present
- Have caregiver change trach tube
- Reassess patency

Patent

- Do not change trach tube
- Complete initial assessment
- Perform frequent reassessments

Are any of the following present?
- Retractions
- Grunting/wheezing/stridor
- Tachypnea
- Decreasing consciousness
- Apnea
- Cyanosis

Continued Obstruction

YES

- Ventilate with 100% O₂ bag mask to trach tube.
- If trach tube not patent even after changing, ventilate with bag mask to mouth (cover stoma). If no chest rise, ventilate with infant mask to stoma.
- Must have rise and fall of chest with each ventilation
- Refer to Respiratory Arrest or Pulseless Arrest protocols as indicated

NO

- Contact Medical Control (and consider ALS backup if available)
- Support ABCs
- Observe
- Keep warm
- Transport in position of comfort

Special Considerations:
*If chest rise inadequate:
- Reposition the airway.
- If using mask to stoma, consider inadequate volume delivered. Compress bag further and/or depress pop-off valve.
Consider allowing caregiver to remain with child regardless of child’s level of responsiveness.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
PEDIATRIC RESPIRATORY DISTRESS WITH A TRACHEOSTOMY TUBE

EMERGENCY MEDICAL RESPONDER CARE GUIDELINE

Initial Medical Care/Assessment

- Administer 100% O₂ per tracheostomy collar
- Suction
- Reassess airway patency*  

Obstructed

- Repeat suction, after removing inner cannula if present
- Have caregiver change trach tube
- Reassess patency

Patent

- Do not change trach tube
- Complete initial assessment
- Perform frequent reassessments

Are any of the following present?

- Retractions
- Grunting/wheezing/stridor
- Tachypnea
- Decreasing consciousness
- Apnea
- Cyanosis

Continued Obstruction

Patent

- Ventilate with 100% O₂ using bag mask to trach tube.
- If trach tube not patent even after changing, ventilate with bag mask to mouth (cover stoma). If no chest rise, ventilate with infant mask to stoma.
- Must have rise and fall of chest with each ventilation
- Refer to Respiratory Arrest or Pulseless Arrest protocols as indicated

YES

- Contact dispatch and request appropriate level of care
- Support ABCs
- Observe
- Keep warm
- Continue support until transport arrives

NO

Special Considerations:

*If chest rise inadequate:
- Reposition the airway.
- If using mask to stoma, consider inadequate volume delivered. Compress bag further and/or depress pop-off valve.

Consider allowing caregiver to remain with child regardless of child’s level of responsiveness.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
I LLINOIS EMSC
PEDIATRIC RESPIRATORY DISTRESS WITH A VENTILATOR
ALS/ILS CARE GUIDELINE

Initial Medical Care/Assessment

- Open airway
- Remove patient from ventilator and support with bag mask ventilation as indicated via tracheostomy tube

UNABLE TO VENTILATE

Suction tracheostomy tube

ABLE TO VENTILATE

- Contact Medical Control
- Support ABCs
- Observe
- Keep warm
- Transport

UNABLE TO VENTILATE

Go to Pediatric Respiratory Distress with a Tracheostomy Tube Protocol for obstructed airway guidelines

Special Considerations:
- Consider using parents/caregivers/home health nurses as medical resources at home and enroute.
- Consider alerting Medical Control of parent/caregiver participation in care.
- Consider allowing caregiver to remain with child regardless of child’s level of responsiveness.
- Bring ventilator to the hospital or have parents/caregivers bring the ventilator to the hospital.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Initial Medical Care/Assessment

- Open airway
- Remove patient from ventilator and support with bag mask ventilation as indicated via tracheostomy tube

UNABLE TO VENTILATE

- Suction tracheostomy tube

ABLE TO VENTILATE

- Contact Medical Control (and consider ALS backup if available)
- Support ABCs
- Observe
- Keep warm
- Transport

UNABLE TO VENTILATE

Go to Pediatric Respiratory Distress with a Tracheostomy Tube Protocol for obstructed airway guidelines

Special Considerations:
- Consider using parents/caregivers/home health nurses as medical resources at home and enroute.
- Consider alerting Medical Control of parent/caregiver participation in care.
- Consider allowing caregiver to remain with child regardless of child’s level of responsiveness.
- Bring ventilator to the hospital or have parents/caregivers bring the ventilator to the hospital.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Initial Medical Care/Assessment

- Protect from injury
- Vomiting and aspiration precautions

Consider drug administration by alternate routes prior to establishing vascular access

**Diazepam** 0.1-0.3mg/kg IV/IO over 2-3 mins., every 15 mins.
- <5 yrs. maximum total dose 5mg
- ≥5 yrs. maximum total dose 10mg

**Diazepam** 0.5 mg/kg PR. Max dose 20mg. If parents have gel formulation use per medical direction.

**Midazolam** 0.05-0.15mg/kg IV/IO/IM (Max dose 5.0mg)

**Glucose < 60**

- Establish vascular access IV/IO NS/LR @ TKO
- Administer:
  - **Dextrose (0.5-1.0 g/kg):**
    - > 8 yrs. D50% 1-2ml/kg IV/IO
    - 1-8 yrs. D25% 2-4 ml/kg IV/IO
    - <1 yr. D12.5% 4ml/kg IV/IO for infants*
  - **Glucagon:**
    - ≤ 8 y/o 0.5mg IM
    - > 8 y/o 1mg IM
  - Consider **Glucose Paste** to gums if venous access unavailable and gag reflex intact**

**Glucose > 60**

- Contact Medical Control
- Support ABCs
- Observe
- Keep warm
- Transport

**Special Considerations:**
- Anticipate respiratory depression if **Diazepam** or **Midazolam** are administered
- Refer to **Respiratory Arrest Protocol** as indicated
- Parents may have given medication prior to EMS arrival, so watch for respiratory depression.

*To make D12.5%, dilute D25% 1:1 with sterile water.
**Examples of treatment for Hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
ILLINOIS EMSC
PEDIATRIC SEIZURES
ILS CARE GUIDELINE

Initial Medical Care/Assessment

- Protect from injury
- Vomiting and aspiration precautions

Per Medical Control:
Consider drug administration by alternate routes prior to establishing vascular access
**Diazepam 0.1-0.3mg/kg IV/IO over 2-3 mins., every 15 mins.**
  - <5 yrs. maximum total dose 5mg
  - ≥5 yrs. maximum total dose 10mg
**Diazepam 0.5 mg/kg PR. Max dose 20mg. If parents have gel formulation use per medical direction.**
**Midazolam 0.05-0.15mg/kg IV/IO/IM (Max dose 5.0mg)**

Glucose < 60

Per Medical Control
- Establish vascular access IV/IO NS/LR @ TKO
- Administer:
  **Dextrose (0.5-1.0 g/kg):**
  - > 8 yrs. D50% 1-2ml/kg IV/IO
  - 1-8 yrs. D25% 2-4 ml/kg IV/IO
  - <1 yr. D12.5% 4ml/kg IV/IO for infants*
    - OR
  **Glucagon:**
  - ≤ 8 y/o 0.5mg IM
  - > 8 y/o 1mg IM
    - OR
  - Consider **Glucose Paste** to gums if venous access unavailable and gag reflex intact**

Glucose > 60

- Contact Medical Control
- Support ABCs
- Observe
- Keep warm
- Transport

Special Considerations:
- Anticipate respiratory depression if **Diazepam** or **Midazolam** are administered
- Refer to **Respiratory Arrest Protocol** as indicated
- Parents may have given medication prior to EMS arrival, so watch for respiratory depression.

*To make D12.5%, dilute D25% 1:1 with sterile water.
**Examples of treatment for Hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**Initial Medical Care/Assessment**

- Protect from injury
- Vomiting and aspiration precautions
- Consider hypoglycemia (or glucose < 60) and treat as available if gag reflex intact*

- Contact dispatch and request appropriate level of care
- Support ABCs
- Observe
- Continue support until transport arrives

---

**Special Considerations:**

*Examples of treatment for hypoglycemia if gag reflex intact: glucose paste, sugar, cake icing.*

- Refer to *Respiratory Arrest Protocol* as indicated.
- Parents may have given medication prior to EMS arrival, so watch for respiratory depression.
- Document medications administered prior to transport.

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**ILLINOIS EMSC**
**PEDIATRIC SHOCK**
**ALS/ILS CARE GUIDELINE**

- **Initial Medical Care/Assessment**
  - Secure airway as appropriate
  - Supine or shock position

- **DETERMINE ETIOLOGY OF SHOCK**

**OBSTRUCTIVE SHOCK**
(Tension Pneumothorax)
- Needle thoracostomy (per system protocol)

**DISTRIBUTIVE SHOCK**
(Suspected sepsis/anaphylaxis)
- Establish vascular access IV/IO NS/LR
- Administer fluid bolus 20 ml/kg
- If suspected allergic reaction, refer to Allergic Reaction/Anaphylaxis Protocol
- If no response to initial fluid bolus and history of fever/infection, repeat fluid boluses of 20 ml/kg as indicated to a maximum of 60 ml/kg.

**CARDIOGENIC SHOCK**
(History congenital heart disease/cardiac surgery/rhythm disturbance/post-cardiac arrest)
- Establish vascular access IV/IO NS/LR @ TKO
- Identify any cardiac rhythm disturbance and refer to appropriate Cardiac/Dysrhythmia Protocol
- Per Medical Control, consider fluid bolus and/or Dopamine 5-20 mcg/kg/min*

**HYPOVOLEMIC SHOCK**
(Suspected dehydration/volume loss/hemorrhagic shock)
- Establish vascular access IV/IO NS/LR
- Administer fluid bolus 20 ml/kg
- If no response to initial fluid bolus, repeat at 20 ml/kg as indicated to a maximum of 60 ml/kg.
- Control bleeding as appropriate

- **Contact Medical Control**
- Support ABC's
- Observe
- Keep warm
- Transport

**Special Considerations:**
Caution - fluids may need to be restricted in Cardiogenic shock.
*Dopamine must be administered per system protocol.*

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Initial Medical Care/Assessment

- Supine or shock position
- Control bleeding as appropriate

- Contact Medical Control
  (and consider ALS backup if available)
- Support ABC's
- Observe
- Keep warm
- Transport

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child's clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
ILLINOIS EMSC
TACHYCARDIA PROTOCOL
ALS/ILS CARE GUIDELINE

Initial Medical Care/Assessment

Complete initial assessment. Assess for Cardiopulmonary Compromise:
- Weak, thready, or absent peripheral pulses
- Decreasing consciousness
- Tachypnea/Respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)
- Bradycardia and/or no palpable BP (ominous sign)

Possible Ventricular Tachycardia

WIDE QRS
(>0.08 sec)

Evaluate QRS duration

NARROW QRS
(<0.08 sec)

Probable Supraventricular Tachycardia
- Compatible history (vague, nonspecific)
- P waves absent/abnormal
- HR not variable
- History of abrupt rate changes
- Infants: rate usually >220 bpm
- Children: rate usually >180 bpm

Probable Sinus Tachycardia
- Compatible history consistent with known cause
- P waves present/normal
- Variable R-R; constant P-R
- Infants: rate usually <220 bpm
- Children: rate usually <180 bpm

Contact Medical Control
- Establish vascular access IV/IO
- Amiodarone 5 mg/kg IV/IO over 20 to 60 minutes
  or
- Procainamide 15 mg/kg IV/IO over 30 to 60 minutes
  or
- Lidocaine 1 mg/kg IV/IO

Do not routinely administer amiodarone and procainamide together

Consider Reminders below and treat according to appropriate protocol.

REMINDERS
Search for and treat possible contributing factors in the prehospital setting:
- Hypovolemia
- Hypoxia or ventilation problems
- Hypoglycemia
- Hypothermia
- Toxins
- Tamponade, cardiac
- Tension pneumothorax
- Trauma (hypovolemia, increased ICP)

Special Considerations:
Attempt vagal stimulation first unless patient is very unstable and it does not delay chemical or electrical cardioversion. In infants and young children, apply ice to the face without occluding the airway. In older children, valsalva maneuvers are acceptable.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
Assess scene safety as indicated:
- Appropriate body substance isolation
- Refer to System/Department Haz/Mat Protocol
- Stop exposure

Contact Medical Control
- Initial interventions per Medical Control as indicated for identified exposure*
- For altered level of consciousness or seizures, refer to appropriate protocol**
- Support ABCs
- Keep warm
- Observe
- Bring container(s) of drug or substance to the ED
- Transport

Establish vascular access IV/IO NS/LR @ TKO

Special Considerations:
- Intubate for GCS <8
- Do not induce vomiting, especially in cases where caustic substance ingestion is suspected.
- Consider DCFS methamphetamine protocol.
- Poison Center phone # 1-800-222-1222

*REFER TO BACK OF PAGE FOR LIST OF POTENTIAL ANTIDOTES, INGESTIONS AND EXPOSURES.
** Anticipate vomiting, respiratory arrest, seizure, dysrhythmias and refer to indicated protocols.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
EXPOSURE TO OR INGESTION OF NARCOTICS OR UNKNOWN SUBSTANCES FOR ALS/ILS

POTENTIAL TREATMENT

- For altered level of consciousness:
  - Weight ≤ 20 kg, administer Naloxone 0.1 mg/kg, IV/IO/SQ/IM, or 0.2 mg/kg ET
  - Weight > 20kg, administer Naloxone 2.0mg/dose
- **DO NOT INDUCE VOMITING, ESPECIALLY IN CASES WHERE CAUSTIC SUBSTANCE INGESTION IS SUSPECTED.**
- Contact direct medical oversight for specific information about individual toxic exposures and treatments.
- Treatment for toxic exposures may be instituted as permitted by medical direction, including the following:
  - High-dose atropine for organophosphates
  - Sodium bicarbonate for tricyclic antidepressants
  - Glucagon for calcium channel blockers or beta-blockers
  - Diphenhydramine for dystonic reactions
  - Dextrose for insulin overdose

POTENTIAL EXPOSURES

- Burning overstuffed furniture = Cyanide
- Old burning buildings = Lead fumes and Carbon monoxide
- Pepto-Bismol™ like products = Aspirin
- Pesticides = Organophosphates & Carbamates
- Common Plants = Treat symptoms and bring plant/flower to ED

SMELLS

- Almond = Cyanide
- Fruit = Alcohol
- Garlic = Arsenic, parathion, DMSO
- Mothballs = Camphor
- Natural gas = Carbon monoxide
- Rotten eggs = Hydrogen sulfide
- Silver polish = Cyanide
- Stove gas = Think CO (CO and methane are odorless)
- Wintergreen = Methyl salicylate
Assess scene safety as indicated:
- Appropriate body substance isolation
- Refer to System/Department Haz/Mat Protocol
- Stop exposure

Initial Medical Care/Assessment

- Contact Medical Control (and consider ALS backup if available)
- Initial interventions per Medical Control as indicated for identified exposure*
- For altered level of consciousness or seizures, refer to appropriate protocol**
- Support ABCs
- Keep warm
- Observe
- Bring container(s) or drug or substance to the ED
- Transport

Special Considerations:
- Do not induce vomiting, especially in cases where caustic substance ingestion is suspected.
- Consider DCFS methamphetamine protocol.
- Poison Center phone # 1-800-222-1222

*Refer to back of page for list of potential ingestions and exposures.
** Anticipate vomiting, respiratory arrest, seizure, dysrhythmias and refer to indicated protocols.
EXPOSURE TO OR INGESTION OF NARCOTICS OR UNKNOWN SUBSTANCES FOR BLS

POTENTIAL TREATMENT

- DO NOT INDUCE VOMITING, ESPECIALLY IN CASES WHERE CAUSTIC SUBSTANCE INGESTION IS SUSPECTED.
- Contact direct medical oversight for specific information about individual toxic exposures and treatments.

POTENTIAL EXPOSURES

- Burning overstuffed furniture = Cyanide
- Old burning buildings = Lead fumes and Carbon monoxide
- Pepto-Bismol™ like products = Aspirin
- Pesticides = Organophosphates & Carbamates
- Common Plants = Treat symptoms and bring plant/flower to ED

SMELLS

- Almond = Cyanide
- Fruit = Alcohol
- Garlic = Arsenic, parathion, DMSO
- Mothballs = Camphor
- Natural gas = Carbon monoxide
- Rotten eggs = Hydrogen sulfide
- Silver polish = Cyanide
- Stove gas = Think CO (CO and methane are odorless)
- Wintergreen = Methyl salicylate
Assess scene safety as indicated:
- Appropriate body substance isolation
- Refer to System/Department Haz/Mat Protocol
- Stop exposure

Initial Medical Care/Assessment

- Contact dispatch and request appropriate level of care
- Initial interventions per Medical Control as indicated for identified exposure*
- For altered level of consciousness or seizures, refer to appropriate protocol**
- Support ABCs
- Keep warm
- Observe
- Bring container(s) or drug or substance to the ED
- Continue support until transport arrives

Special Considerations:
- Do not induce vomiting, especially in cases where caustic substance ingestion is suspected.
- Consider DCFS methamphetamine protocol.
- Poison Center phone # 1-800-222-1222

*Refer to back of page for list of potential ingestions and exposures.
** Anticipate vomiting, respiratory arrest, seizure, dysrhythmias and refer to indicated protocols.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
POTENTIAL TREATMENT

- DO NOT INDUCE VOMITING, ESPECIALLY IN CASES WHERE CAUSTIC SUBSTANCE INGESTION IS SUSPECTED.
- Contact direct medical oversight for specific information about individual toxic exposures and treatments.

POTENTIAL EXPOSURES

- Burning overstuffed furniture = Cyanide
- Old burning buildings = Lead fumes and Carbon monoxide
- Pepto-Bismol™ like products = Aspirin
- Pesticides = Organophosphates & Carbamates
- Common Plants = Treat symptoms and bring plant/flower to ED

SMELLS

- Almond = Cyanide
- Fruit = Alcohol
- Garlic = Arsenic, parathion, DMSO
- Mothballs = Camphor
- Natural gas = Carbon monoxide
- Rotten eggs = Hydrogen sulfide
- Silver polish = Cyanide
- Stove gas = Think CO (CO and methane are odorless)
- Wintergreen = Methyl salicylate
**Assess for signs of Cardiopulmonary Compromise:**
- Tachycardia
- Weak, thready, or absent peripheral pulses
- Decreasing consciousness
- Tachypnea/Respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)
- Bradycardia and/or no palpable BP (ominous sign)

**Cardiopulmonary Compromise**

**YES**
- Refer to Shock or Pulseless Arrest protocols

**NO**
- Splint/immobilize fracture(s) as indicated

- Contact Medical Control
- Support ABCs
- Keep warm
- Observe
- Transport

*Refer to back of protocol for Pediatric Trauma Score and Pediatric Glasgow Coma Scale.

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
# PEDIATRIC GLASGOW COMA SCALE (PGCS)

<table>
<thead>
<tr>
<th>( &gt; 1 \text{ Year} )</th>
<th>(&lt; 1 \text{ Year} )</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>EYE OPENING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spontaneously</td>
<td>Spontaneously</td>
<td>4</td>
</tr>
<tr>
<td>To verbal command</td>
<td>To shout</td>
<td>3</td>
</tr>
<tr>
<td>To pain</td>
<td>To pain</td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
<td>1</td>
</tr>
<tr>
<td>MOTOR RESPONSE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obeys</td>
<td>Spontaneous</td>
<td>6</td>
</tr>
<tr>
<td>Localizes pain</td>
<td>Localizes pain</td>
<td>5</td>
</tr>
<tr>
<td>Flexion-withdrawal</td>
<td>Flexion-withdrawal</td>
<td>4</td>
</tr>
<tr>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td>3</td>
</tr>
<tr>
<td>Extension (decerbrate rigidity)</td>
<td>Extension (decerbrate rigidity)</td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
<td>1</td>
</tr>
<tr>
<td>VERBAL RESPONSE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oriented</td>
<td>Appropriate words/phrases</td>
<td>Smiles/coos appropriately</td>
</tr>
<tr>
<td>Disoriented/confused</td>
<td>Inappropriate words</td>
<td>Cries and is consolable</td>
</tr>
<tr>
<td>Inappropriate words</td>
<td>Persistent cries and screams</td>
<td>Persistent inappropriate crying and/or screaming</td>
</tr>
<tr>
<td>Incomprehensible sounds</td>
<td>Grunts</td>
<td>Grunts, agitated, and restless</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
<td>No response</td>
</tr>
</tbody>
</table>

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

---

# PEDIATRIC TRAUMA SCORE (PTS)

<table>
<thead>
<tr>
<th>Component</th>
<th>+ 2</th>
<th>+ 1</th>
<th>- 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Child/adolescent &gt; 20 kg</td>
<td>Toddler 11 – 20 kg</td>
<td>Infant ≤ 10 kg</td>
</tr>
<tr>
<td>Airway</td>
<td>Normal</td>
<td>Maintained</td>
<td>Unmaintained or Intubated</td>
</tr>
<tr>
<td>Systolic BP</td>
<td>&gt; 90 mmHg</td>
<td>50 – 90 mmHg</td>
<td>&lt; 50 mmHg</td>
</tr>
<tr>
<td>CNS</td>
<td>Awake</td>
<td>Obtunded/Lost consciousness</td>
<td>Coma/Unresponsive</td>
</tr>
<tr>
<td>Skeletal Injury</td>
<td>None</td>
<td>Closed Fracture</td>
<td>Open/Multiple Fractures</td>
</tr>
<tr>
<td>Open Wounds</td>
<td>None</td>
<td>Minor</td>
<td>Major/Penetrating</td>
</tr>
</tbody>
</table>

If a proper sized blood pressure cuff is not available, blood pressure can be rated as:

- +2 = palpable at wrist, +1 = palpable at groin, -1 = no pulse palpable

A PTS of < 8 indicates the need for evaluation at a Trauma Center.
Score range is from –6 to +12.
Inadequate ventilation, respiratory effort

- Jaw thrust
- Relieve upper airway obstruction as indicated
- Support ventilation with bag mask as indicated

Adequate ventilation, respiratory effort

- Control hemorrhage
- Reassess perfusion

**CARDIOPULMONARY COMPROMISE**

**YES**
- Refer to Shock or Pulseless Arrest protocols

**NO**
- Splint/immobilize fracture(s) as indicated
  - Contact Medical Control (and consider ALS backup if available)
  - Support ABCs
  - Keep warm
  - Observe
  - Transport

**Assess for signs of Cardiopulmonary Compromise:**
- Tachycardia
- Weak, thready, or absent peripheral pulses
- Decreasing consciousness
- Tachypnea/Respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)
- Bradycardia and/or no palpable BP (ominous sign)

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.

*Refer to back of protocol for Pediatric Trauma Score and Pediatric Glasgow Coma Scale.*
ILLINOIS EMSC  
PEDIATRIC TRAUMA  
BLS CARE GUIDELINE

### PEDIATRIC GLASGOW COMA SCALE (PGCS)

<table>
<thead>
<tr>
<th>EYE OPENING</th>
<th>&gt; 1 Year</th>
<th>&lt; 1 Year</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneously</td>
<td>Spontaneously</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>To verbal command</td>
<td>To shout</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>To pain</td>
<td>To pain</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MOTOR RESPONSE</th>
<th>&gt; 5 Years</th>
<th>2-5 Years</th>
<th>0-23 months</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obeys</td>
<td>Spontaneous</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Localizes pain</td>
<td>Localizes pain</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Flexion-withdrawal</td>
<td>Flexion-withdrawal</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Extension (decerebrate rigidity)</td>
<td>Extension (decerebrate rigidity)</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

### PEDIATRIC TRAUMA SCORE (PTS)

<table>
<thead>
<tr>
<th>Component</th>
<th>+ 2</th>
<th>+ 1</th>
<th>- 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Child/adolescent &gt; 20 kg</td>
<td>Toddler 11 – 20 kg</td>
<td>Infant ≤ 10 kg</td>
</tr>
<tr>
<td>Airway</td>
<td>Normal</td>
<td>Maintainable</td>
<td>Unmaintained or Intubated</td>
</tr>
<tr>
<td>Systolic BP</td>
<td>&gt; 90 mmHg</td>
<td>50 – 90 mmHg</td>
<td>&lt; 50 mmHg</td>
</tr>
<tr>
<td>CNS</td>
<td>Awake</td>
<td>Obtunded/Lost consciousness</td>
<td>Coma/Unresponsive</td>
</tr>
<tr>
<td>Skeletal Injury</td>
<td>None</td>
<td>Closed Fracture</td>
<td>Open/Multiple Fractures</td>
</tr>
<tr>
<td>Open Wounds</td>
<td>None</td>
<td>Minor</td>
<td>Major/Penetrating</td>
</tr>
</tbody>
</table>

If a proper sized blood pressure cuff is not available, blood pressure can be rated as:

+ 2 = palpable at wrist, + 1 = palpable at groin, - 1 = no pulse palpable

A PTS of < 8 indicates the need for evaluation at a Trauma Center.

Score range is from – 6 to + 12.
Initial Medical Care/Assessment

- Immobilize spine as indicated
- Complete initial assessment

Refer to Head Trauma Addendum as indicated

Inadequate ventilation, respiratory effort

- Jaw thrust
- Relieve upper airway obstruction as indicated
- Support ventilation with bag mask as indicated

Adequate ventilation, respiratory effort

- Control hemorrhage
- Reassess perfusion

CARDIOPULMONARY COMPROMISE*

YES

- Refer to Shock or Pulseless Arrest protocols

NO

- Splint/immobilize fracture(s) as indicated

- Contact dispatch and request appropriate level of care
- Support ABCs
- Keep warm
- Observe
- Continue support until transport arrives

*Assess for signs of Cardiopulmonary Compromise:
- Tachycardia
- Weak, thready, or absent peripheral pulses
- Decreasing consciousness
- Tachypnea/Respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)
- Bradycardia and/or no palpable BP (ominous sign)

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
**Initial Medical Care/Assessment**

- Maintain supine position
- Immobilize spine as indicated
- Assess Pediatric Glasgow Coma Scale (PGCS)
- Contact Medical Control

**Pediatric Glasgow Coma Scale (PGCS)**

<table>
<thead>
<tr>
<th>EYE OPENING</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 1 Year</td>
<td>&lt; 1 Year</td>
</tr>
<tr>
<td>Spontaneously</td>
<td>Spontaneously</td>
</tr>
<tr>
<td>To verbal command</td>
<td>To shout</td>
</tr>
<tr>
<td>To pain</td>
<td>To pain</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MOTOR RESPONSE</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obeys</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>Localizes pain</td>
<td>Localizes pain</td>
</tr>
<tr>
<td>Flexion-withdrawal</td>
<td>Flexion-withdrawal</td>
</tr>
<tr>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td>Flexion-abnormal (decorticate rigidity)</td>
</tr>
<tr>
<td>Extension (decerebrate rigidity)</td>
<td>Extension (decerebrate rigidity)</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERBAL RESPONSE</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 5 Years</td>
<td>2-5 Years</td>
</tr>
<tr>
<td>Oriented</td>
<td>Appropriate words/phrases</td>
</tr>
<tr>
<td>Disoriented/confused</td>
<td>Inappropriate words</td>
</tr>
<tr>
<td>Inappropriate words</td>
<td>Persistent cries and screams</td>
</tr>
<tr>
<td>Incomprehensible sounds</td>
<td>Grunts</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
</tr>
</tbody>
</table>

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

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child's clinical presentation, and on authorized policies and protocols.
Maintain supine position

Immobilize spine as indicated

Assess Pediatric Glasgow Coma Scale (PGCS)

Contact Medical Control (consider ALS backup if not on scene)

PGCS < 8 (Severe)

- Contact Medical Control (and consider ALS backup if available)
- Administer 100% O₂
- Support ventilation with bag mask*
- Control hemorrhage
- Reassess PGCS
- Observe
- Refer to Seizure Protocol as indicated
- Transport

PGCS 9-12 (Moderate)

- Contact Medical Control (and consider ALS backup if available)
- Administer 100% O₂
- Support ventilation with bag mask as indicated*
- Control hemorrhage
- Reassess PGCS
- Observe
- Transport

PGCS 13-15 (Mild)

- Contact Medical Control (and consider ALS backup if available)
- Administer 100% O₂
- Control hemorrhage
- Reassess PGCS
- Observe
- Transport

Special Consideration:
*Mild hyperventilation is 4 ventilations above the normal rate. Consider performing mild hyperventilation ONLY IF suspected impending herniation (non-reactive/unequal pupils or posturing).

PEDIATRIC GLASGOW COMA SCALE (PGCS)

<table>
<thead>
<tr>
<th>EYE OPENING</th>
<th>&lt; 1 Year</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneously</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>To verbal command</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>To pain</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MOTOR RESPONSE</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Obeys</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Localizes pain</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Flexion-withdrawal</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Flexion-abnormal</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Extension</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERBAL RESPONSE</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oriented</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Disoriented/confused</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Inappropriate words</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Incomprehensible</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL PEDIATRIC GLASGOW COMA SCORE: (3-15)

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.

ILLINOIS EMSC
HEAD TRAUMA ADDENDUM
PEDIATRIC EMERGENCY MEDICAL RESPONDER

Initial Medical Care/Assessment
- Maintain supine position
- Immobilize spine as indicated
- Assess Pediatric Glasgow Coma Scale (PGCS)

PGCS ≤ 8 (Severe)
- Contact dispatch and request appropriate level of care
- Administer 100% O₂
- Support ventilation with bag mask*
- Control hemorrhage
- Reassess PGCS
- Observe
- Refer to Seizure Protocol as indicated
- Continue support until transport arrives

PGCS 9-12 (Moderate)
- Contact dispatch and request appropriate level of care
- Administer 100% O₂
- Support ventilation with bag mask as indicated
- Control hemorrhage
- Reassess PGCS
- Observe
- Continue support until transport arrives

PGCS 13-15 (Mild)
- Contact dispatch and request appropriate level of care
- Administer 100% O₂
- Control hemorrhage
- Reassess PGCS
- Observe
- Continue support until transport arrives

Special Consideration:
*Mild hyperventilation is 4 ventilations above the normal rate. Consider performing mild hyperventilation ONLY IF suspected impending herniation (non-reactive/unequal pupils or posturing).

### PEDIATRIC GLASGOW COMA SCALE (PGCS)

<table>
<thead>
<tr>
<th>EYE OPENING</th>
<th>&gt; 1 Year</th>
<th>&lt; 1 Year</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneously</td>
<td>To verbal command</td>
<td>Spontaneously</td>
<td>To shout</td>
</tr>
<tr>
<td>To pain</td>
<td>No response</td>
<td>To pain</td>
<td>No response</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MOTOR RESPONSE</th>
<th>&gt; 5 Years</th>
<th>2-5 Years</th>
<th>0-23 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obeys</td>
<td>Localizes pain</td>
<td>Localizes pain</td>
<td>5</td>
</tr>
<tr>
<td>Flexion-withdrawal</td>
<td>Flexion-withdrawal</td>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td>4</td>
</tr>
<tr>
<td>Flexion-abnormal (decorticate rigidity)</td>
<td>Extension (decerebrate rigidity)</td>
<td>Extension (decerebrate rigidity)</td>
<td>3</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
<td>No response</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERBAL RESPONSE</th>
<th>&gt; 5 Years</th>
<th>2-5 Years</th>
<th>0-23 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oriented</td>
<td>Appropriate words/phrases</td>
<td>Smiles/coos appropriately</td>
<td>5</td>
</tr>
<tr>
<td>Disoriented/confused</td>
<td>Inappropriate words</td>
<td>Cries and is consolable</td>
<td>4</td>
</tr>
<tr>
<td>Inappropriate words</td>
<td>Persistent cries and screams</td>
<td>Persistent inappropriate crying and/or screaming</td>
<td>3</td>
</tr>
<tr>
<td>Incomprehensible sounds</td>
<td>Grunts</td>
<td>Grunts, agitated, and restless</td>
<td>2</td>
</tr>
<tr>
<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)
**Initial Medical Care/Assessment**

- Treat obvious injuries
- Refer to appropriate protocol

**Note:**
- Environmental surroundings
- Child’s interaction with parents/caregivers
- Physical assessment findings
- Discrepancies in child and parent history and injuries

**Transport, regardless of extent of injuries.**

**Transport Refused By Parent/Caregiver**

- Assess scene safety
- If possible, remain at site
- Call dispatch for police response
- Call Medical Control
- Do not confront caregivers

**Transport Agreed Upon By Parent/Caregiver**

- Contact Medical Control/dispatch and request appropriate level of care
- Support ABC’s
- Observe
- Transport
- Document all findings*

---

**REPORT SUSPICIONS TO ED PHYSICIAN, ED CHARGE NURSE AND DCFS (1-800-25-ABUSE). WHEN CONTACTING DCFS, IDENTIFY SELF AS A STATE MANDATED REPORTER TO EXPEDITE PROCESS.**

*Refer to back of page for special considerations.*

---

The Illinois EMSC Prehospital Committee has exercised extreme caution that all information and drug dosages presented are accurate and in accordance with professional standards in effect at the time of publication. This prehospital care guideline may be modified at the discretion of the EMS Medical Director. It is recommended that care must be based on the child’s clinical presentation, and on authorized policies and protocols.
SPECIAL CONSIDERATIONS:

1. You are required by law to report your suspicions.

2. Document findings objectively:
   - Body location of the injury
   - Severity of the injury
   - Patterns of similar injury over time
   - Include verbatim statements offered by the child
   - Note verbatim statements from the parent/caregiver

3. Suspect battered or abused child if any of the following is found:
   - A discrepancy exists between history of injury and physical exam.
   - Caregiver provides a changing or inconsistent history.
   - There is a prolonged interval between injury and the seeking of medical help.
   - Child has a history of repeated trauma.
   - Caregiver responds inappropriately or does not comply with medical advice.
   - Suspicious injuries are present, such as:
     - Injuries of soft tissue areas, including the face, neck and abdomen,
     - Injuries of body areas that are normally shielded, including the back and chest,
     - Fractures of long bones in children under 3 years of age,
     - Old scars, or injuries in different stages of healing,
     - Bizarre injuries, such as bites, cigarette burns, rope marks, imprint of belt or other object,
     - Trauma of genital or perianal areas,
     - Sharply demarcated burns in unusual areas,
     - Scalds that suggest child was dipped into hot water.

4. The following are some common forms of neglect:
   - Environment is dangerous to the child (e.g., weapons within reach, playing near open windows without screen/guards, perilously unsanitary conditions, etc.).
   - Caretaker has not provided, or refuses to permit medical treatment of child’s acute or chronic life-threatening illness, or of chronic illness, or fails to seek necessary and timely medical care for child.
   - Child under the age of 10 has been left unattended or unsupervised. (Although in some situations children under 10 years of age may be left alone without endangerment, EMS personnel cannot make such determinations.) All instances should be reported for DCFS investigation.
   - Abandonment
   - Caretaker appears to be incapacitated (e.g., extreme drug/alcohol intoxication, disabling psychiatric symptoms, severe illness) and cannot meet child’s care requirements.
   - Child appears inadequately fed (e.g., seriously underweight, emaciated, or dehydrated) inadequately clothed, or inadequately sheltered.
   - Child is found to be intoxicated or under the influence of an illicit substance(s).
Resources
Any patient with a life threatening condition should be treated until stable at the nearest appropriate facility before being transferred to a burn center. Listed below is the American Burn Association criteria for pediatric patients to be transported to a burn center.

1. Partial thickness burns of greater than 10% total body surface area (TBSA)
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints
3. Third-degree burns in any age group
4. Electrical burns (including lightning injury)
5. Chemical burns
6. Inhalation injury
7. Burn injury in patient with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality
8. Any patients with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be initially stabilized in a trauma center before being transferred to a burn unit. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols
9. Burned children in hospitals without qualified personnel or equipment for the care of children
10. Burn injury in patients who will require special social, emotional, or long-term rehabilitative intervention
EXPOSURE TO OR INGESTION OF NARCOTICS OR UNKNOWN SUBSTANCES

POTENTIAL TREATMENT

- For altered level of consciousness:
  - Weight < 20 kg, administer Naloxone 0.1 mg/kg, IV/IO/SQ/IM, or 0.2 mg/kg ET
  - Weight > 20 kg, administer Naloxone 2.0 mg/dose
- DO NOT INDUCE VOMITING, ESPECIALLY IN CASES WHERE CAUSTIC SUBSTANCE INGESTION IS SUSPECTED.
- Contact direct medical oversight for specific information about individual toxic exposures and treatments.
- Treatment for toxic exposures may be instituted as permitted by medical direction, including the following:
  - High-dose atropine for organophosphates
  - Sodium bicarbonate for tricyclic antidepressants
  - Glucagon for calcium channel blockers or beta-blockers
  - Diphenhydramine for dystonic reactions
  - Dextrose for insulin overdose

POTENTIAL EXPOSURES

- Burning overstuffed furniture = Cyanide
- Old burning buildings = Lead fumes and Carbon monoxide
- Pepto-Bismol™ like products = Aspirin
- Pesticides = Organophosphates & Carbamates
- Common Plants = Treat symptoms and bring plant/flower to ED

SMELLS

- Almond = Cyanide
- Fruit = Alcohol
- Garlic = Arsenic, parathion, DMSO
- Mothballs = Camphor
- Natural gas = Carbon monoxide
- Rotten eggs = Hydrogen sulfide
- Silver polish = Cyanide
- Stove gas = Think CO (CO and methane are odorless)
- Wintergreen = Methyl salicylate
VITAL SIGNS AND CARDIOPULMONARY COMPROMISE RESOURCE

Vital Sign/Age Parameters

<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>50 - 90</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Infant (31 days – &lt; 1yr)</td>
<td>100 - 160</td>
<td>60 - 100</td>
<td>24 - 50</td>
</tr>
<tr>
<td>Toddler (1 yr - &lt; 3 yrs)</td>
<td>90 - 150</td>
<td>80 - 105</td>
<td>24 - 40</td>
</tr>
<tr>
<td>Pre-School (3yrs – &lt; 5 yrs)</td>
<td>80 - 140</td>
<td>95 - 105</td>
<td>20 - 30</td>
</tr>
<tr>
<td>School Age (5 yrs – 12 yrs)</td>
<td>65 - 120</td>
<td>95 - 120</td>
<td>18 - 30</td>
</tr>
<tr>
<td>Adolescent (&gt; 12 yrs)</td>
<td>60 - 100</td>
<td>100 - 128</td>
<td>12 - 20</td>
</tr>
</tbody>
</table>

Adapted from the following references:
- Hazinski MF editor, Nursing Care of the Critically Ill Child, 1999.

Indicators of Cardiopulmonary Compromise in Children

- Tachycardia
- Weak, thready, or absent peripheral pulses
- Decreasing consciousness
- Tachypnea/Respiratory difficulty
- Central cyanosis and coolness
- Hypotension (late sign)
- Bradycardia and/or no palpable BP (ominous sign)
RESOURCES


