

**New York State**  
**Department of Health**  
Bureau of Emergency Medical Services

**Statewide**  
**Basic Life Support**  
**Adult & Pediatric**  
**Treatment Protocols**  
**Certified First Responder**

**2003**





# **Preface and Acknowledgments**

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The 2003 New York State (NYS) Statewide Basic Life Support Adult & Pediatric Treatment Protocols for the Certified First Responder (CFR) includes revisions to match the current New York State CFR course curricula. These 2003 statewide protocols also include de-emphasizing the use of CUPS. CUPS is no longer required to be taught in NYS Emergency Medical Services (EMS) Courses and is not tested in Practical Skills Examinations or State Written Certification Examinations.

We would like to acknowledge the members of the New York State EMS Council's Medical Standards Committee for the time and effort given to developing this set of protocols. In addition, we would like to recognize the efforts of the Regional Emergency Medical Advisory Committees (REMACS) for their input and review.

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# Introduction

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The 2003 NYS Statewide Basic Life Support Adult and Pediatric Treatment Protocols designed by the Bureau of Emergency Medical Services of the New York State Department of Health and the New York State Emergency Medical Services Council. These protocols have been reviewed and approved by the New York State Emergency Medical Advisory Committee (SEMAC) and the New York State Emergency Medical Services Council (SEMSCO). The protocols reflect the current minimally acceptable statewide treatment standards for adult and pediatric basic life support (BLS) used by the Certified First Responder (CFR).

These protocols are not intended to be absolute and ultimate treatment doctrines, but rather standards which are flexible to accommodate the complexity of the problems in patient management presented to Certified First Responders in the field. These protocols should be considered as a model or standard by which all patients should be treated. Since patients do not always fit into a "cook book" approach, these protocols are not a substitute for GOOD CLINICAL JUDGMENT, especially when a situation occurs which does not fit these standards.

This manual includes a protocol for the general approach to the prehospital management of a patient, which is applicable to CFRs, and BLS protocols for the management of specific conditions. These protocols apply to both adults and children. In several cases, protocols designed specifically for adults or children are included. These are identified as such in their titles.

Several assumptions have been made in developing the specific protocols. First, the CFR has followed the protocol outlining the general approach to the prehospital management of the patient, that both the subjective and objective patient information has been analyzed to arrive at an appropriate treatment plan. Secondly, specific treatment protocols are referred to once the patient's problem has been identified. Obviously, significant indirect (off-line) medical control has been assumed in the development of these protocols.

Regional EMS councils, regional emergency medical advisory committees (REMACs), course sponsor agencies, regional and local medical directors and squad training officers play an important part in the implementation of these protocols.

The goal of prehospital emergency medical care is to provide DEFINITIVE CARE for the patient as rapidly and safely as the situation indicates with no deterioration of his/her condition and, when possible, in an improved condition. BLS units shall deliver their patients who will benefit from ALS care to this higher level of care as soon as possible. This may be accomplished either by intercepting with an ALS unit or by transport to an appropriate hospital, which ever can be effected more quickly.

A system of ALS intercept (when available within a given area) shall be pre-arranged. Formal written agreements for the request of ALS shall be developed in advance by those agencies not able to provide ALS. ALS requests should be initiated as soon as possible at the dispatch level whenever indicated.

A request for ALS intercept shall occur as noted in specific treatment protocols. Initiation of patient transport shall not be delayed to await the arrival of an ALS unit, unless an on-line medical control physician otherwise directs.



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# **General Approach**



# General Approach to Prehospital Patient Management

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## I. Scene Size-Up

- A. Assess the scene for safety.
- B. Use standard precautions and transmission based precautions for all patients.
- C. Note the number of patients, the mechanism(s) of injury, environmental hazards, etc.
- D. Request additional personnel (i.e. EMTs, AEMTs, police, firefighters, etc. as appropriate), ALS intercept, and/or additional equipment or resources if needed.
- E. Consider C-Spine stabilization.

**Note:**

**Check each patient for responsiveness, breathing, and pulse quickly while protecting the cervical spine.**

## II. Initial Assessment

### A. General Impression

- 1. Determine mechanism of injury, nature of illness and chief complaint.
- 2. Age and sex.
- 3. Find immediate life threatening conditions.

### B. Mental Status – What is the patient’s level of consciousness?

- 1. *Assess the patient’s level of consciousness as follows:*

**A**lert – Patient is awake and alert.

**V**erbal – Patient responds to verbal stimuli.

**P**ainful – Patient responds to pain.

**U**nresponsive – Patient does not respond to verbal or painful stimuli.

- 2. *Establish patient’s orientation*

Patient is oriented to:

- 1. his/her name,
- 2. where he/she is, and
- 3. day of the week.

### C. Airway, Breathing and Circulation

**A**irway – Identify and correct any existing or potential airway obstruction problems while protecting the cervical spine when indicated.

## General Approach, continued

**Breathing** – Assess breathing, administer oxygen if necessary and consider positive pressure ventilations.

**Circulation** – Assess circulation and control life threatening hemorrhaging.

III. **Identify Priority Patients:** Consider the following criteria for *High* priority patients

1. Poor general impression
2. Unresponsive patients
3. Responsive, not following commands
4. Difficulty breathing
5. Shock
6. Complicated childbirth
7. Chest pain
8. Uncontrolled bleeding
9. Severe pain
10. If utilizing CUPS scale – patients who are a C, U, or P

### **Immediate Transport Decision**

**If the patient's condition is high priority notify responding EMS units immediately.**

**Request for an ALS unit should be made as soon as possible. ALS requests should ideally be initiated at the dispatch level.**

IV. **Vital Signs:** Obtain and record the following on every patient initially, and repeat as often as the situation indicates.

1. **Respirations:** Rate and quality.
2. **Pulse:** Rate, quality, and regularity.
3. **Skin:** Color, temperature, moisture.

### **Note:**

**Do not delay updating the responding EMS unit of a high priority patient to obtain the above information.**

## General Approach, continued

V. **Updating Responding EMS Units:** Update responding EMS unit/Ambulance with a brief radio report. Include, at a minimum, the following:

1. Age and sex
2. Chief complaint
3. Mental status/Responsiveness (AVPU)
4. Airway and breathing status
5. Circulation status
6. Identification of priority patients
7. Determine estimated time of arrival of additional EMS resources

VI. **Physical Examination:** Perform a physical examination on the patient to gather additional information.

1. Inspect and palpate for signs of injury using the mnemonic **DOTS**:
  - a. **D**eformities
  - b. **O**pen injuries
  - c. **T**enderness
  - d. **S**welling
2. Briefly assess the following areas:
  - a. Head
  - b. Neck
  - c. Chest
  - d. Back
  - e. Abdomen
  - f. Pelvis
  - g. All four extremities

VII. **Obtain History:** Obtain the history from the patient and/or family members. The **SAMPLE** history may be completed prior to the physical exam for medical patients. Determine if the patient has a medical identification tag.

### **SAMPLE**

**S**igns and Symptoms: “Why did you call EMS today?”

1. Sign – any medical or trauma condition displayed by the patient and identifiable by the CFR.
2. Symptom – any condition described by the patient, e.g., shortness of breath.

**A**llergies: “Are you allergic to anything?”

1. Medications.
2. Food.
3. Environmental.

## General Approach, continued

**Medications:** “Do you take any prescription or non-prescription medicine?”

1. Prescription (current, recent, birth control pills, etc.).
2. Non-prescription (current, recent, herbal remedies, etc.).

**Pertinent Past History:** “Are you seeing a Doctor for anything?”

“Have you ever been in the hospital?”

1. Medical.
2. Surgical.
3. Trauma.

**Last oral intake:** “When was the last time you had anything to eat or drink?”

*Solid or Liquid*

1. Time.
2. Quantity.

**Events leading up to the injury or illness:** *Examples*

1. Chest pain on exertion. (i.e. pain while shoveling snow or walking up stairs, etc.)
2. Chest pain while at rest (i.e. pain while laying in bed or watching television, etc.)
3. “What were you doing when this happened?”
4. “Were there any other associated symptoms?”

VIII. **Field Treatment:** Administer appropriate treatment in order of priority. See specific treatment protocols.

IX. **On-Going Assessment:** Continue to assess the patient while waiting for additional EMS resources.

1. Repeat Initial Assessment every 15 minutes for a stable patient
2. Repeat Initial Assessment every 5 minutes for an unstable or high priority patient
3. Repeat Physical Examination as necessary
4. Maintain an open airway
5. Monitor breathing
6. Monitor pulse
7. Monitor skin color and temperature
8. Check effectiveness of treatments and/or interventions

X. **Hand-off Report:** Provide a Hand-off Report to the arriving EMS unit, which will take over care of your patient(s). The report must contain, at a minimum, the following information:

1. Age and sex.
2. Chief complaint
3. Mental status/Responsiveness (AVPU)
4. Airway and breathing status
5. Circulation status
6. Physical Examination findings
7. SAMPLE history
8. Interventions and/or treatment given

## General Approach, continued

### Documentation

- A. It is recommended that a written report summarizing all information listed in Section X, as a minimum data set, be given to the arriving EMS unit taking over your patient's care. However, patient care and/or transportation to a hospital **must not be delayed to complete this written report.**
- B. Complete a New York State Prehospital Care Report (PCR) or other approved equivalent documenting all information listed in Section X as a minimum data set.
- C. Submit the hospital copy of the Prehospital Care Report (PCR) to the arriving EMS unit taking over your patient's care.

## **General Approach, continued**



# **Medical Protocols**



## Altered Mental Status

(NON-TRAUMATIC AND WITHOUT RESPIRATORY OR CARDIOVASCULAR COMPLICATIONS)

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**Note:**

**Request Advanced Life Support if available.**

**Note:**

**This protocol is for patients who are not alert (A), but who are responsive to verbal stimuli (V), responding to painful stimuli (P), or unresponsive (U).**

- I. Assess the situation for potential or actual danger. If the scene/situation is not safe, retreat to a safe location, create a safe zone and obtain additional assistance from a police agency.

**Note:**

**Emotionally disturbed patients must be presumed to have an underlying medical or traumatic condition causing the altered mental status.**

**Note:**

**All suicidal or violent threats or gestures must be taken seriously. These patients should be in police custody if they pose a danger to themselves or others.  
If the patient poses a danger to themselves and/or others, summon police for assistance.**

- II. Perform initial assessment. Assure that the patient's airway is open and that breathing and circulation are adequate.
- III. Administer high concentration oxygen.
- IV. Obtain and record patient's vital signs, including determining the patient's level of consciousness.
  - A. **If the patient is unresponsive (U) or responds only to painful stimuli (P), place the patient in the recovery position, keeping the patient warm.**

## Altered Mental Status, continued

**Note:**

**Do not give anything by mouth to patients who are unconscious or to patients with head injuries.**

- V. If underlying medical or traumatic condition causing an altered mental status is not apparent; the patient is fully conscious, alert (A) and able to communicate; and an emotional disturbance is suspected, proceed to the Behavioral Emergencies protocol.
- VI. Update the responding EMS unit.
- VII. Perform a physical examination.
- VIII. Obtain history using SAMPLE.
- IX. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- X. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XI. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## Behavioral Emergencies

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- I. Determine whether the scene/situation is safe. If not, retreat to a safe location, create a safe zone, and obtain additional assistance from a police agency.

**Note:**  
**If regionally approved and available, contact a specialized mental health unit response team for assistance.**

- II. Perform initial assessment.
- III. Assure that the patient's airway is open and that breathing and circulation are adequate.
- IV. Consider other causes of abnormal behavior (lack of oxygen, shock, diabetic reactions, etc.)
- V. Place the patient in a position of comfort, if possible and no suspicion of spinal injury.
- VI. Attempt to establish a rapport with the patient and keep the patient calm.
- VII. Restrain, *only if necessary*, using soft restraints to protect the patient and others from harm. *Restraints should only be used if the patient presents a danger to themselves or others!*

**Note:**  
**Restraints must be utilized in accordance with New York State Mental Health Law. Police or Peace Officer should be present at the scene prior to the application of restraints.**

- VIII. After application of restraints, keep the patient in the most appropriate position, while assuring the restraints do not restrict the patient's breathing or circulation.
- IX. Update the responding EMS unit.
- X. Perform a Physical Examination if possible and obtain History using SAMPLE.
- XI. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- XII. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XIII. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

**Behavioral Emergencies, continued**

# Cold Emergencies

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## I. LOCAL COLD INJURY

- A. Remove the patient from the cold environment.
- B. Protect the injured areas from pressure, trauma, and friction.

**Caution:**  
**Do not rub the injured areas! Do not break blisters!**  
**Do not allow the injured areas to thaw if they may refreeze before evacuation is completed!**

- C. Perform initial assessment.
- D. Administer high concentration oxygen.
- E. Update the responding EMS unit.
- F. Perform Physical Exam.
- G. Obtain History using SAMPLE.
- H. Remove the clothing from the injured areas.
  - 1. If patient has an early *or superficial* local cold injury:
    - a. Remove jewelry.
    - b. Manually stabilize and cover the area with dry dressings.
    - c. Do not rub, massage, or expose to the cold.
  - 2. If patient has a *late or deep* local cold injury:
    - a. Remove jewelry.
    - b. Cover the exposed area with dry dressings.
    - c. Do not break blisters, rub or massage area, apply heat, rewarm, or allow the patient to walk on the affected extremity.
- I. Keep the patient warm while waiting for the responding EMS unit.

## Cold Emergencies, continued

- J. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates
- K. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- L. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## II. GENERALIZED COLD EMERGENCY:

### A. General Treatment Guidelines:

1. Handle the hypothermic patient carefully to prevent cardiac arrest from ventricular fibrillation.
2. Remove the patient from the cold environment and protect the patient from further heat loss.
3. Do not allow the patient to walk or exert themselves.
4. Perform initial assessment.
5. Assure that the patient's airway is open and that breathing and circulation are adequate.
6. Administer high concentration oxygen.
7. Update responding EMS unit.
8. Assess pulses for 30 – 45 seconds. If no pulse begin CPR and refer to appropriate Cardiac Arrest protocol.
9. **If the patient is unconscious or not responding appropriately:**
  - a. **If respirations and pulse are absent, start CPR. It is possible that the patient may still be revived.**

**Note:**

**Vital signs should be taken for a longer period of time than usual so as not to miss a very slow pulse or respiratory rate.**

- b. **If defibrillation is indicated by the AED, defibrillate a maximum of three shocks.**



## **Cold Emergencies, continued**

10. Remove any wet clothing and cover patient with a blanket.
11. Do not allow the patient to eat or drink.
12. Perform Physical Exam.
13. Obtain History using SAMPLE.
14. Place the patient in a warm, draft free environment.
15. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
16. Provide a Hand-off Report to arriving EMS unit, which will take over care of you patient.
17. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## **Cold Emergencies, continued**

## Pediatric Respiratory Distress/Failure

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**Note:**  
**Request Advanced Life Support if available.**

- I. **If the child is in respiratory distress (signs and symptoms of respiratory distress and any of the following):**
- a. Respiratory rate outside the normal range for the patient's age.  
(>60 per min. in infants, >30/40 per min. in children)
  - b. Cyanosis.
  - c. Decreased muscle tone.
  - d. Severe use of accessory muscles.
  - e. Poor peripheral perfusion and color.
  - f. Altered mental status.
  - g. Grunting.
  - h. Stridor.
  - i. Retractions.
- A. Maintain a calm approach to the child and parent. **Allow the child to assume and maintain a position of comfort or to be held by the parent, preferably in an upright position. Do not force the child to lie down!**
- B. Administer high concentration oxygen by a face mask **if tolerated without agitating the child!** Administration of oxygen may best be accomplished by allowing the parent to hold the face mask about 6 – 8 inches from the child's face.
- C. Update the responding EMS unit.
- D. Perform Physical Exam.
- E. Obtain History using SAMPLE
- F. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- G. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- H. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## Pediatric Respiratory Distress, continued

### II. If the child is in respiratory arrest/failure (signs and symptoms of respiratory distress with any of the following):

- a. Breathing at less than 10 breaths/minute in a child.
  - b. Breathing at less than 20 breaths/minute in an infant.
  - c. Retractions.
  - d. Head bobbing.
  - e. Grunting.
  - f. Severe use of accessory muscles.
  - g. Absent or shallow chest wall motion.
  - h. Limp muscle tone.
  - i. Changes in mental status.
  - j. Slow or absent heart rate.
  - k. Cyanosis with a slow heart rate.
  - l. Weak or absent distal pulses.
  - m. Unresponsive.
- A. Open the child's airway with the head-tilt/chin-lift maneuver if no trauma is suspected. Use the modified jaw thrust maneuver if head, neck, or spinal trauma is suspected.
  - B. Ventilate the child at a rate appropriate for the child's age using a pocket mask or bag-valve-mask. **Assure that the chest rises with each ventilation.**
  - C. Supplement ventilations with high concentration oxygen.

**Caution:**

**Adequate ventilation may require disabling the pop-off valve if the bag-valve-mask unit is so equipped!**

- D. Update the responding EMS unit.
- E. Perform Physical Exam.
- F. Obtain History using SAMPLE
- G. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- H. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.

## Pediatric Respiratory Distress, continued

**Caution:**

**If progressive low pulse rate and cyanosis – signs of impending cardiac arrest are present, be prepared to initiate the Non-Traumatic Cardiac Arrest Protocol.**

- I. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

**Pediatric Respiratory Distress, continued**

## Heat Emergencies

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- I. Perform initial assessment.
- II. Assure that the patient's airway is open and that breathing and circulation are adequate.
- III. Remove the patient from the heat source and place in a cool environment.
- IV. Administer high concentration oxygen.
- V. Update the responding EMS unit.
- VI. Perform Physical Exam.
- VII. Cool the patient by removing excess clothing and fanning the patient.
- VIII. Place patient in the recovery position.
- IX. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- X. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XI. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## **Heat Emergencies, continued**



## Adult Obstructed Airway

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**Note:**  
**Request Advanced Life Support if available.**

- I. **If the patient is conscious and can breathe, cough or speak, do not interfere!** Encourage the patient to cough. **If the foreign body cannot be dislodged by the patient coughing:**
  - A. Administer high concentration oxygen.
  - B. Proceed to step V.
- II. **If the patient is conscious but cannot breathe, cough or speak; or if the patient is or becomes unconscious,** perform obstructed airway maneuvers according to AHA/ARC/NSC guidelines and proceed to step V.
- III. **If the airway obstruction persists after two sequences of obstructed airway maneuvers and/or the patient becomes unconscious:**

**Caution:**  
**If obstructed airway is traumatic, manually stabilize the head and cervical spine in a neutral position while opening the patient's airway using the jaw-thrust maneuver.**  
**Continue to attempt removal of the airway obstruction while waiting for EMS unit to arrive.**

- A. Repeat the sequences of obstructed airway maneuvers while waiting for arrival of EMS unit, which will be taking care of your patient, until the foreign body is forced out.
- IV. **If the airway obstruction is cleared and the patient resumes breathing:**
  - A. Administer high concentration oxygen.
  - B. Proceed to step V.
- V. Update the responding EMS unit
- VI. Perform Physical Exam
- VII. Obtain History using SAMPLE

## **Adult Obstructed Airway, continued**

- VIII. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates
- IX. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- X. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## Pediatric Obstructed Airway

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**Note:**  
**Request Advanced Life Support if available.**

- I. **Partial Airway Obstruction – If the child is alert and can breathe, cough, cry or speak:**
  - A. **Do not interfere, and do not perform BLS airway maneuvers! Allow the child to assume and maintain a position of comfort or to be held by the parent, preferably in an upright position. Do not lay the child down.**
  - B. Administer high concentration oxygen by a face mask, **if tolerated without agitating the child!** Administration of oxygen may best be accomplished by allowing the parent to hold the face mask about 6 – 8 inches from the patient’s face.
  - C. Proceed to step IV.
- II. **If the child is conscious but cannot breath, cough, speak, or cry; *or* if the child becomes unconscious,** perform obstructed airway maneuvers according to AHA/ARC/NSC guidelines and proceed to step IV.

**Caution:**  
**Agitating a child with a partial airway obstruction could cause complete obstruction! As long as the child can breathe, cough, cry, or speak, do not upset the child with unnecessary procedures**  
  
**Use a calm, reassuring approach.**

- III. **If the child is unconscious and not breathing and if foreign body aspiration was not witnessed:**

**Note:**  
**If foreign body aspiration was witnessed, begin attempts to clear the airway obstruction.**

- A. Attempt to establish airway control using BLS techniques. Open the child’s mouth, and remove any **visible** foreign body.

## Pediatric Obstructed Airway, continued

B. Administer two breaths using a pocket mask or bag-valve-mask, observing the child for adequate chest rise.

1. **If the child's chest does not rise:**

a. Using BLS airway techniques, reopen the child's airway using the head-tilt/chin-lift or jaw-thrust maneuver. (Grasping the child's tongue during the chin-lift maneuver may improve the success of opening the airway).

b. Re-attempt ventilations using pocket mask or bag-valve-mask.

i. **If the child is younger than one year of age (infant) and the chest still does not rise:**

(a) Position the infant in a head-down position.

(b) Administer back blows and chest thrusts according to AHA/ARC/NSC guidelines.

(c) Open the infant's mouth, and remove any **visible** foreign body.

(d) Re-attempt ventilations using pocket mask or bag-valve-mask.

(e) **If the infant's chest still does not rise**, repeat the sequence of re-opening the airway, attempting ventilations, delivering back blows and chest thrusts, removing any **visible** foreign body, and re-attempting ventilations **once!**

**Caution:**

**Do not probe for suspected foreign body with blind finger sweeps. This technique could inadvertently force the foreign body (obstruction) further down the infant's airway.**

(f) Continue to repeat step (e) above while waiting for responding EMS unit, and keeping the infant warm.

ii. **If the child is one year of age or older and the chest still does not rise:**

(a) Kneel at the child's feet or straddle the larger child.

(b) Perform abdominal thrusts according to AHA/ARC/NSC guidelines.

## Pediatric Obstructed Airway, continued

- (c) Open the child's mouth, and remove any **visible** foreign body.
- (d) Re-attempt opening the airway, attempting ventilations using pocket mask or bag-valve-mask, delivering abdominal thrusts, removing any **visible** foreign body, and re-attempting ventilations **once!**

**Caution:**  
**Direct the thrusts upward along the midline!**  
**Avoid directing the thrusts to either side of midline.**

- (e) Open the child's mouth, and remove any **visible** foreign body.
- (f) Re-attempt ventilations using a pocket mask or bag-valve-mask.

**Caution:**  
**Do not probe for suspected foreign body with blind finger sweeps.**  
**This technique could inadvertently force the obstruction further down the child's airway.**

- (g) **If the child's chest still does not rise**, repeat the sequence of re-opening the airway, attempting ventilations, delivering abdominal thrusts, removing any **visible** foreign body, and re-attempting ventilation once.
- (h) Continue to repeat step (g) above throughout transport if needed, keeping the child warm.

C. **Immediately upon removal of the foreign body and/or establishment of chest rise in a child of any age (including infants), assess the child's ventilatory status!**

1. **If the ventilatory status is inadequate (the child is cyanotic or the respiratory rate is low for the child's age):**

**Caution:**  
**If signs of impending cardiac arrest are present (i.e., progressive bradycardia and cyanosis), be prepared to initiate the non-traumatic cardiac arrest protocol!**

## Pediatric Obstructed Airway, continued

**Caution:**  
**Adequate ventilation may require disabling the pop-off valve if the bag-valve-mask unit is so equipped!**

- a. Ventilate at the rate appropriate for the child's age using a pocket mask or bag-valve-mask. **Assure there is adequate chest rise with each ventilation.**
  - b. Supplemental ventilations with high concentration oxygen.
  - c. Keep the child warm while awaiting the responding EMS unit.
2. **If the ventilatory status is adequate (i.e., the child is breathing spontaneously, the respiratory rate is appropriate for the child's age and cyanosis is absent):**
- a. Administer high concentration oxygen (preferably humidified) by a face mask, **if tolerated, without agitating the child!** Administration of oxygen may best be accomplished by allowing the parent to hold the face mask about 6 – 8 inches from the patient's face.
- IV. Update the responding EMS unit.
- V. Perform Physical Exam.
- VI. Obtain History using SAMPLE.
- VII. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- VIII. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- IX. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## Adult Respiratory Arrest/Failure (Non-Traumatic)

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**Note:**

**Determine if the patient has a Do Not Resuscitate (DNR) order. Treatment must not be delayed while making this determination.**

**Note:**

**Request Advanced Life Support if available.**

- I. Perform initial assessment.
- II. **If ventilatory status is inadequate, (patient is cyanotic, visible retractions, severe use of accessory muscles, altered mental status, respiratory rate less than 10 breaths per minute, signs of poor perfusion) proceed with positive pressure ventilations as follows.**
- III. Insert an oropharyngeal airway. Provide BLS according to AHA/ARC/NSC standards. **If ventilations are unsuccessful, refer immediately to the Obstructed Airway Protocol!** If the patient is in cardiac arrest and an automated external defibrillator (AED) is available, **refer immediately to the Automated External Defibrillator (AED) Protocol!**
- IV. Ventilate with high concentration oxygen.

**Caution:**

**Adequate ventilation *may* require disabling the pop-off valve if the bag-valve-mask unit is so equipped.**

**Rates of Ventilations**

**Adults: 10 – 12 times a minute.**

**Without Supplemental Oxygen: 700 – 1000ml per ventilation over 2 seconds**

**With Supplemental Oxygen: 400 – 600ml per ventilation over 1 – 2 seconds**

- V. Update the responding EMS unit.
- VI. Perform Physical Exam.
- VII. Obtain History using SAMPLE.
- VIII. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.

## **Adult Respiratory Distress/Failure, continued**

- IX. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- X. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.



## Pediatric Respiratory Arrest/Failure (Non-Traumatic)

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**Note:**  
**Request Advanced Life Support if available.**

- I. Establish airway control and ventilations using BLS techniques according to AHA/ARC/NSC guidelines.
  - A. Open the airway using the head-tilt/chin-lift or jaw-thrust maneuver.

**Caution:**  
**If signs of impending cardiac arrest (i.e., progressive bradycardia, cyanosis and limp muscle tone), be prepared to initiate the appropriate Cardiac Arrest Protocol!**

- B. Remove any **visible** airway obstruction by hand and clear the airway of any accumulated secretions or fluids by suctioning.
- II. **Immediately** determine if the child is breathing adequately.
  - A. **If the ventilatory status is inadequate (the child is cyanotic, visible retractions, grunting, head bobbing, severe use of accessory muscles, altered mental status, the respiratory rate is low for the child's age, muscle tone is limp, a slow or fast heart rate, or other signs of inadequate perfusion):**
    1. Insert a properly sized oropharyngeal airway if the gag reflex is absent. If a gag reflex is present insert a nasopharyngeal airway.
    2. Determine if the patient needs positive pressure ventilations. If no, use supplemental oxygen and maintain airway. If yes, maintain airway, give positive pressure ventilations and supplemental oxygen.
    3. Ventilate (with high concentration oxygen) at a rate appropriate for the child's age using a pocket mask or bag-valve-mask. **Assure there is adequate chest rise with each ventilation.**

**Caution:**  
**Adequate ventilation *may* require disabling the pop-off valve if the bag-valve-mask unit is so equipped.**

**Rates of Ventilations**

**Adults: 10 – 12 times a minute.**

**Without Supplemental Oxygen: 700 – 1000ml per ventilation over 2 seconds**

**With Supplemental Oxygen: 400 – 600ml per ventilation over 1 – 2 seconds**

**Infants and children: 20 times a minute**

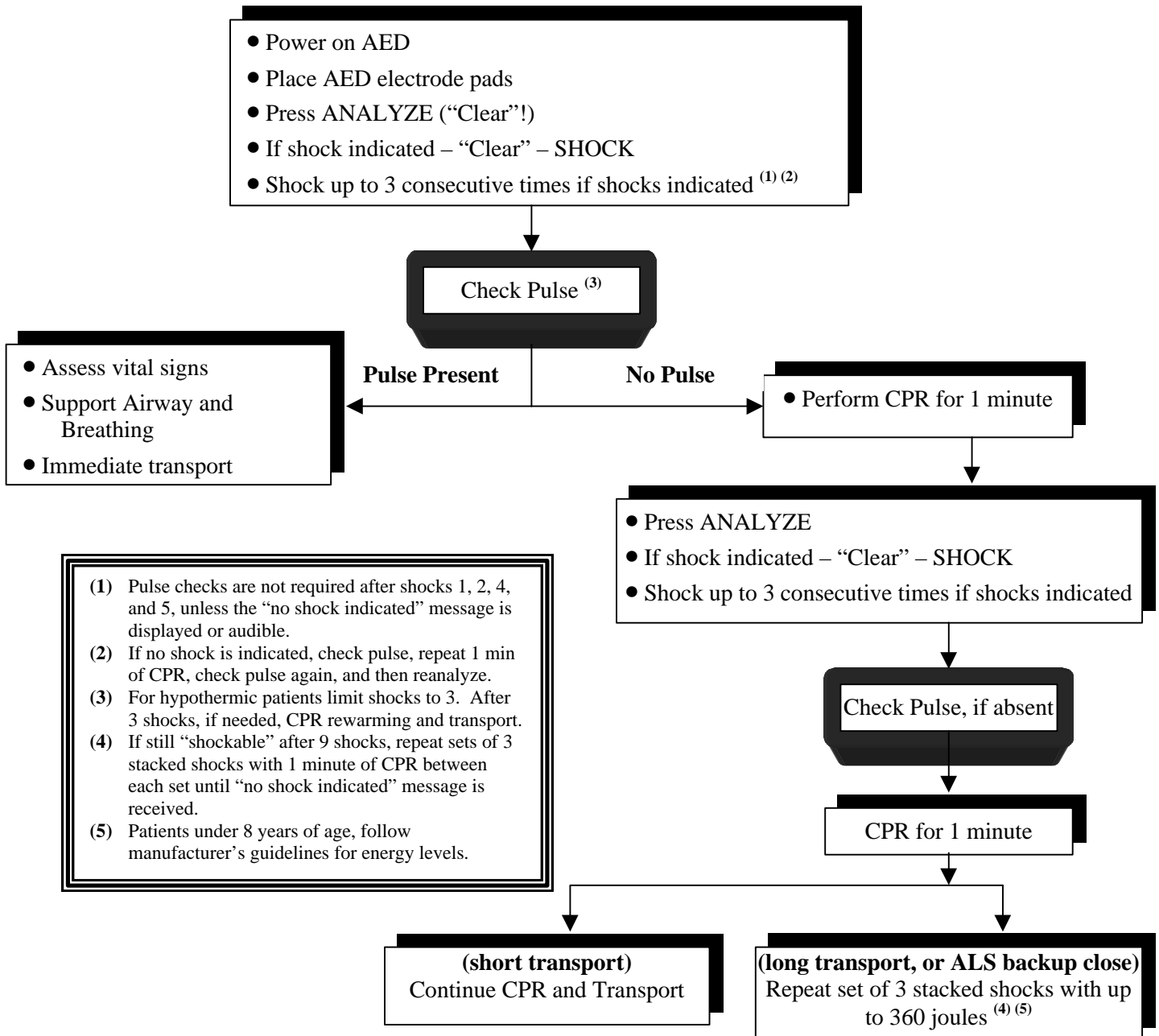
**Each ventilation should be sufficient to cause the chest to visibly rise without causing excessive gastric distention.**

- III. Identify and correct any other life-threatening conditions found during the initial assessment.
- IV. Update the responding EMS unit.
- V. Perform Physical Exam.
- VI. Obtain History using SAMPLE.
- VII. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- VIII. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- IX. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

# Adult and Pediatric Automated External Defibrillation (AED) Protocol

**Note:**  
Request Advanced Life Support if available.

**Do not use the Automated External Defibrillator (AED) in Pediatric Cardiac Arrest unless the AED is equipped for and FDA approved for use on children less than 8 years of age!**



**Adult and Pediatric AED, continued**

## **Respiratory Distress**

**(Shortness of Breath, Difficulty Breathing)**

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**Note:**  
**Request Advanced Life Support if available.**

**Caution:**  
**Be prepared to deal with respiratory and cardiac arrest!**  
**Monitor the patient's respiratory status continuously.**

- I. Perform initial assessment.
- II. Assure that the patient's airway is open. **If the airway is obstructed**, perform obstructed airway maneuvers according to AHA/ARC/NSC guidelines.
- III. Administer high concentration oxygen and assist the patient's ventilations as necessary.

**Note:**  
**Allow the patient to assume and maintain a position of comfort, or  
if a child to be held by the parent, preferably in an  
upright position**

- IV. Place the patient in position of comfort.
- V. Update the responding EMS unit.
- VI. Perform Physical Exam.
- VII. Obtain History using SAMPLE.
- VIII. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- IX. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- X. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## **Respiratory Distress, continued**

# Seizures

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**Note:**  
**Request Advanced Life Support if available.**

## I. Management of the patient who is seizing:

- A. Protect the patient from harm, **and** remove hazards from the patient's immediate area, **and** avoid unnecessary physical restraint.
- B. Perform initial assessment.
- C. Assure that the patient's airway is open, and that breathing and circulation are adequate.
- D. Suction the airway as needed. Avoid stimulation of the posterior pharynx during suctioning because this may cause vomiting.

**Caution:**  
**If the patient's ventilatory status is inadequate (cyanosis, low respiratory rate for the patient's age, decreased tidal volume, retractions, nasal flaring, agonal or irregular respirations), initiate the respiratory arrest/failure protocol.**

- E. Position the patient in the recovery if no possibility of cervical spine trauma.

**Note:**  
**Do not force the patient's mouth open or force an oral airway or any other device into the patient's mouth if it is clenched tightly during the seizure!**  
**A nasopharyngeal airway may be used.**

- F. Administer high concentration oxygen.
- G. Proceed to step III.

## II. Management of the post-seizure patient:

- A. Perform initial assessment.
- B. Assure that the patient's airway is open and that breathing and circulation are adequate.

## **Seizures, continued**

- C. Place patient in the recovery if no possibility of cervical spine trauma.
  - D. Administer high concentration oxygen.
  - E. Treat injuries sustained during the seizure.
  - F. Be prepared for additional seizures.
- III. Update the responding EMS unit.
- IV. Perform Physical Exam
- V. Obtain History using SAMPLE
- VI. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- VII. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- VIII. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.



# **Trauma Protocols**



# Amputation

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- I. Perform initial assessment.
- II. Assure that the patient's airway is open and that breathing and circulation are adequate. Apply oxygen if needed.

**Caution:**  
**Manually stabilize the head and cervical spine if trauma of the head and/or neck is suspected!**

- III. Place the patient in a position of comfort **only if doing so does not compromise stabilization of the head and cervical spine!**
- IV. Control the bleeding by applying direct pressure.
- V. Elevate the stump above the level of the patient's heart.
- VI. **If bleeding cannot be controlled**, apply pressure on the appropriate arterial pressure point.
- VII. Assess for hypoperfusion. **If hypoperfusion is present, refer immediately to the hypoperfusion protocol!**
- VIII. Wrap the stump with moist sterile dressings.
- IX. Cover the dressed stump with a dry bandage.
- X. Preserve the amputated part as follows:
  - A. Moisten an appropriately sized sterile dressing with sterile saline solution.
  - B. Wrap the severed part in the moistened sterile dressing, preserving all amputated material.
  - C. Place the severed part in a water-tight container (i.e. sealed plastic bag).
  - D. Place the container on ice or cold packs (if available). **Do not freeze or use dry ice! Do not immerse the amputated part directly in water! Do not allow the amputated part to come in direct contact with ice!**
- XI. Manually stabilize the limb to prevent further injury.
- XII. Update the responding EMS unit.

## Amputation, continued

**Note:**

**Transportation of the patient should not be delayed to search for amputated parts! Continued searching for missing amputated parts should be continued while the patient is being transported to the appropriate hospital.**

- XIII. Perform Physical Exam.
- XIV. Obtain History using SAMPLE.
- XV. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- XVI. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XVII. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## **Bleeding (External)**

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- I. Assure that the patient's airway is open and that breathing and circulation are adequate. Apply oxygen if needed.
- II. Control bleeding by:
  - A. Immediately applying pressure directly on the wound with a sterile dressing, ***and***
  - B. Elevating the injured part above the level of the patient's heart (when possible), ***and***
  - C. Applying a pressure dressing to the wound. If bleeding soaks through the dressing, apply additional dressings and ***reapply pressure***. **Do not remove dressings from the injured site!**
  - D. Cover the dressed site with a bandage.
- III. If severe bleeding persists, apply pressure on the appropriate arterial pressure points.
- IV. Assess for hypoperfusion. **If hypoperfusion is present, refer immediately to the hypoperfusion protocol!**
- V. Update the responding EMS unit.
- VI. Perform Physical Exam.
- VII. Obtain History using SAMPLE.
- VIII. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- IX. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- X. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

**Bleeding (External), continued**

## Burns (Chemical)

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- I. Assure that the scene is safe for entry. If danger of contamination is present, it may be necessary to obtain assistance from trained rescue personnel.
- II. Perform initial assessment.
- III. Assure that the patient's airway is open and that breathing and circulation are adequate. Apply oxygen if needed.
- IV. Treat according to the following:
  - A. **IF THE CHEMICAL IS A LIQUID:**

The patient you receive in your **safe zone** should already be decontaminated. Always check to assure that decontamination has been completed. There should be no contaminated clothing or jewelry on the victim. If contaminated items are present, notify the decontamination personnel. Flush the decontaminated areas with copious amounts of water at the scene and enroute to the hospital. If possible, flush site of the burn with water for a minimum of 20 minutes.
  - B. **IF THE CHEMICAL IS A DRY POWDER:**

The patient you receive in your **safe zone** should already be decontaminated. Always check to assure that decontamination has been completed. Brush any remaining chemical off of the patient. **Be careful not to spread it over unaffected areas.** There should be no contaminated clothing or jewelry on the victim. If contaminated items are present notify the decontamination personnel. Flush the decontaminated areas with copious amounts of water at the scene and enroute to the hospital. If possible, flush site of the burn with water for a minimum of 20 minutes.
  - C. **IF THE EYE(s) IS CONTAMINATED:**

The patient you receive in your **safe zone** should already be decontaminated. Always check to assure that decontamination has been completed. Irrigate the eye(s) with saline solution or water continuously for at least 20 minutes, or until arrival to the hospital, while the patient blinks frequently during irrigation. If only one eye is affected, do not contaminate the unaffected eye. After irrigation is complete, cover **both** eyes with moistened dressings or eye pads.
- V. Obtain the name of the product or substance involved and bring it and its container (if possible and without causing further contamination with the substance) with the patient to the hospital

## **Burns (Chemical), continued**

- VI. Update the responding EMS unit.
- VII. Perform Physical Exam.
- VIII. Obtain History using SAMPLE.
- IX. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- X. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient
- XI. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.



## Burns (Thermal/Electrical)

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- I. Assure that the scene is safe for entry. If danger of contamination is present, it may be necessary to obtain assistance from trained rescue and/or fire personnel.
- II. Extinguish burning clothing, and stop the burning process.
- III. Perform initial assessment.
- IV. Assure that the patient's airway is open and that breathing and circulation are adequate.
- V. Place the patient in a position of comfort **only if doing so does not compromise stabilization of the head and cervical spine!**
- VI. Administer high concentration oxygen if indicated during the initial assessment *or* if respiratory burns are suspected and in all burns involving flames, exposure to superheated gases or when patient is found in a confined area.
- VII. Remove smoldering clothing not adhering to the patient's skin. Remove rings, bracelets and all other constricting items if possible.
- VIII. Assess for hypoperfusion. **If hypoperfusion is present, refer immediately to the hypoperfusion protocol!**
- IX. **For all burns** determine the thickness and cover the burned area with a dry sterile dressing.
- X. Keep the patient warm. **This is important since these patients tend to lose heat and become hypothermic!**
- XI. Perform Physical Exam.
- XII. Obtain History using SAMPLE.
- XIII. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- XIV. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XV. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

**Burns (Thermal/Electric), continued**

# Musculoskeletal Trauma

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**Caution:**  
**Manually stabilize the head and cervical spine  
if trauma of the head and/or neck is suspected!**

- I. Perform initial assessment.
- II. Assure that the patient's airway is open and that breathing and circulation are adequate. Apply oxygen if needed.

**Note:**  
**Consider any open wound near a suspected bone injury site  
to be the result of bone protrusion.**

- III. Manually stabilize the joints above and below the suspected injury site.
- IV. Expose the injured area to locate and identify suspected musculoskeletal injuries.
- V. Cover open wounds with sterile dressings.
- VI. Do not replace any protruding bones.
- VII. Assess for hypoperfusion. **If hypoperfusion is present, refer immediately to the hypoperfusion protocol!**
- VIII. Apply a cold pack to the injured area to reduce swelling and pain.
- IX. Update the responding EMS unit.
- X. Perform Physical Exam.
- XI. Obtain History using SAMPLE.
- XII. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- XIII. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XIV. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

**Musculoskeletal Trauma, continued**

## **. Adult Major Trauma**

**(Including Traumatic Cardiac Arrest)**

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**Note:**

**Request Advanced Life Support if available.  
Consider Air Medical Transport per regional protocol.**

**Note:**

**For the purpose of this protocol, major trauma is present if the mechanism of injury or patient's physical findings meets any one of the following criteria:**

### **MECHANISM OF INJURY**

- 1. Death in the same passenger compartment.**
- 2. Fall more than 20 feet.**
- 3. Vehicle-pedestrian collision.**
- 4. Patient ejected from the vehicle.**
- 5. Vehicle collision >20 MPH resulting in 12 inches of deformity to the vehicle.**
- 6. Vehicle rollover.**
- 7. Motorcycle crash.**
- 8. Vehicle vs. bicycle collision >5 MPH.**

### **PHYSICAL FINDINGS**

- 1. Pulse less than 50/min or greater than 120/min.**
- 2. Respiratory rate less than 10/min or greater than 28/min.**
- 3. Penetrating injuries of the trunk, head, neck, chest, abdomen or groin.**
- 4. Two or more proximal long bone fractures.**
- 5. Flail chest.**
- 6. Burns involving the face and/or airway burns.**
- 7. Combined system trauma that involves two or more body systems.**
- 8. Spinal cord injury or limb paralysis.**
- 9. Amputation (except digits).**

## Adult Major Trauma, continued

**Note:**

**The following management may be instituted before or during extrication or enroute as appropriate. In no case should patient transport be delayed because of this management!**

- I. Establish and maintain airway control while manually stabilizing the cervical spine.
- II. Perform initial assessment.
- III. Assess level of consciousness.
- IV. Assess the patient's ventilatory status:
  - A. **If the ventilatory status is inadequate:**
    1. Insert an oropharyngeal airway if no gag reflex is present or a nasopharyngeal airway if a gag reflex is present.
    2. Ventilate the patient with an adjunctive device and high concentration oxygen at a rate of 12 breaths per minute. **Assure that there is sufficient chest rise with each ventilation.**
    3. **Expose the patient's chest to locate and identify injuries and open wounds.**
    4. **Seal any open chest wounds with an occlusive dressing; stabilize impaled objects in the chest.**
  - B. **If the ventilatory status is adequate,** administer high concentration oxygen as soon as possible.
- V. Assess the patient's circulatory status.
  - A. **If the pulse is absent (Traumatic Cardiac Arrest):**
    1. Update the responding EMS unit **immediately.**
    2. Perform CPR according to AHA/ARC/NSC standards and apply an AED.
    3. Take appropriate steps to control hemorrhage.

## Adult Major Trauma, continued

### B. If the pulse is present:

1. Take appropriate steps to control hemorrhage.
2. Update the responding EMS unit **immediately**.
3. Keep the patient warm while waiting for arrival of EMS unit.

### C. If life-threatening hemorrhage is present:

1. Take appropriate steps to control the hemorrhage.
2. Update the responding EMS unit **immediately**.
3. Keep the patient warm while waiting for arrival of EMS unit.
4. Assess for **hypoperfusion** enroute.

### D. If one or more signs of hypoperfusion are present, refer immediately to the Hypoperfusion Protocol!

1. Take appropriate steps to control life threatening hemorrhage.
2. Update the responding EMS unit **immediately**.
3. Keep the patient warm while waiting for arrival of EMS unit.

VI. Update responding EMS unit if not already completed above.

**Note:**  
**Consider Air Medical Transport per regional protocol.**

VII. Perform Physical Exam.

VIII. Obtain History using SAMPLE.

IX. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.

X. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.

XI. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

**Adult Major Trauma, continued**



## **Pediatric Major Trauma**

**(Including Traumatic Cardiac Arrest)**

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**Note:**

**Request Advanced Life Support if available.  
Consider Air Medical Transport per regional protocol.**

**Note:**

For the purpose of this protocol, major trauma is present if the mechanism of injury or patient's findings meets any one of the following criteria:

### **MECHANISM OF INJURY**

- 1. Death in the same passenger compartment.**
- 2. Fall more than 10 feet.**
- 3. Vehicle-pedestrian collision.**
- 4. Patient ejected from the vehicle.**
- 5. Vehicle collision >20 MPH resulting in 12 inches of deformity to the vehicle.**
- 6. Vehicle rollover.**
- 7. Motorcycle crash.**
- 8. Vehicle vs. bicycle collision >5 MPH.**

### **PHYSICAL FINDINGS**

- 1. Pulse greater than normal range for patient's age (see pediatric appendix).**
- 2. Respiratory status inadequate (central cyanosis, respiratory rate low for the child's age, capillary refill time greater than two seconds).**
- 3. Penetrating injuries of the trunk, head, neck, chest, abdomen or groin.**
- 4. Two or more proximal long bone fractures.**
- 5. Flail chest.**
- 6. Burns associated with other injuries or the child is less than five years old or facial/airway burns.**
- 7. Combined system trauma that involves two or more body systems, injuries or major blunt trauma to the chest or abdomen.**
- 8. Spinal cord injury or limb paralysis.**
- 9. Amputation (except digits).**

## **Pediatric Major Trauma, continued**

- I. Establish and maintain airway control while manually stabilizing the cervical spine.
- II. Perform initial assessment.
- III. Assess level of consciousness.
- IV. Assess the child's ventilatory status, including exposing the chest to locate and identify injuries.
  - A. **If ventilatory status is inadequate (the child is cyanotic, the respiratory rate is low for the child's age):**
    1. Ventilate the child with a pocket mask or bag-valve-mask and high concentration oxygen at a rate of up to 20 breaths per minute. **Assure that there is adequate chest rise with each ventilation.**
    2. Seal any open chest wounds with an occlusive dressing. Stabilize impaled objects in the chest.
  - B. **If ventilatory status is adequate (the child is breathing spontaneously at a respiratory rate appropriate for the child's age and cyanosis is absent),** administer high concentration oxygen (preferably humidified) by a face mask as soon as possible.

**Caution:**  
**Adequate ventilation *may* require disabling the pop-off valve if the bag-valve-mask is so equipped!**

- V. Assess the child's circulatory status by palpating the brachial pulse in infants and the carotid pulse in children older than one year of age.
  - A. **If the pulse is absent (Traumatic Cardiac Arrest):**
    1. Initiate transport **immediately** while performing CPR according to AHA/ARC/NSC guidelines.
    2. Take appropriate steps to control hemorrhage.

**Note:**  
**Do not use the Automated External Defibrillator (AED) in Pediatric Cardiac Arrest under the age of 8 unless equipped with FDA approved cable and pads for use in patients below 8 years of age.**

## **Pediatric Major Trauma, continued**

3. Elevate the patient's feet 8 – 12 inches if no trauma to the legs.
4. Keep the patient warm while waiting for arrival of EMS unit.
5. Update the responding EMS unit.

### **B. If the pulse is present:**

1. Identify any life-threatening hemorrhage, if present proceed to step "C".
2. Take appropriate steps to control hemorrhage.
3. Update the responding EMS unit.
4. Keep the child warm while waiting for arrival of EMS unit.

### **C. If life-threatening hemorrhage is present:**

1. Take appropriate steps to control the hemorrhage.
2. Update the responding EMS unit **immediately**.
3. Elevate the foot of the backboard 8 - 12 inches.
4. Keep the child warm while waiting for arrival of EMS unit.

- VI. Update responding EMS unit if not already completed above.
- VII. Perform Physical Exam
- VIII. Obtain History using SAMPLE.
- IX. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- X. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XI. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

**Pediatric Major Trauma, continued**

## Suspected Head or Spinal Injuries (Not Meeting Major Trauma Criteria)

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**Note:**

**If the patient is found in a standing position, continue your assessment and provide constant manual stabilization of the head and neck in the position found. Maintain manual stabilization of the cervical spine until the responding EMS unit takes over care.**

- I. Establish and maintain airway control while manually stabilizing the head and neck.
- II. Perform initial assessment.
- III. Assess level of consciousness.
- IV. Assess the patient's ventilatory status and assist the patient's ventilation as necessary; administer high concentration oxygen and suction as necessary.
  - A. If the ventilatory status is inadequate, ventilate the patient with an adjunctive device and high concentration oxygen at a rate of 12 breaths/minute (adult) or a rate of up to 20 breaths/minute (child). **Assure that the chest rises sufficiently with each ventilation.**
  - B. If the ventilatory status is adequate, administer high concentration oxygen as soon as possible.
- V. Assess the patient's circulatory status.
- VI. Assess pulses, motor function and sensation in all extremities.
- VII. Update the responding EMS unit.
- VIII. Perform Physical Exam.
- IX. Obtain History using SAMPLE
- X. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- XI. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XII. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## **Suspected Head or Spinal Injuries, Continued**

# **Special Considerations**





# Oxygen Administration

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## I. Perform initial assessment.

### A. If the patient requires oxygen therapy:

1. Assure that the patient's airway is open and that breathing and circulation are adequate. **If the airway is obstructed**, perform obstructed airway maneuvers according to AHA/NSC/ARC standards.

**Note:**

1. **Oxygen should never be withheld from patients requiring it, even though they may have a past medical history of chronic obstructive pulmonary disease!**
2. **When administering oxygen, monitor the patient carefully for any slowing of respirations, be prepared to ventilate the patient as necessary!**
3. **In patients who are being chronically maintained on oxygen and who have called EMS for a condition other than one requiring high concentration oxygen by these protocols, continue the administration of oxygen at the previously prescribed rate of flow.**

### 2. Administer **high-concentration oxygen**.

- a. First choice—Non-rebreather mask at 12 LPM or greater so reservoir bag does not collapse during inhalation. If reservoir bag collapses and does not refill adequately, increase to 15 LPM.
- b. Second choice—Nasal cannula at 6 LPM (used only if a mask is not tolerated).

**Note:**

**There is no contraindication to high concentration oxygen in pediatric patients in the prehospital setting. Administration of oxygen is best accomplished by allowing the parent to hold the face mask, if tolerated, 6 to 8 inches from the child's face.**

## Oxygen Administration, continued

### B. If the patient demonstrates inadequate ventilations:

1. Assist the patient's ventilations with high concentration oxygen using a positive pressure adjunctive device.
  - a. First choice—Bag-valve-mask (BVM) with reservoir and supplemental oxygen.

**Caution:**

**Adequate ventilation *may* require disabling the pop-off valve if the bag-valve-mask unit is so equipped!**

- b. Second choice—Pocket mask with supplemental oxygen set at greater than 10 LPM.
    - c. Third choice—Flow restricted oxygen powered ventilation device.

### C. If one or more signs of respiratory distress or respiratory arrest are present, refer immediately to the Respiratory Distress Protocol (M-11) or the appropriate Respiratory Arrest Protocol (M-7 or M-8)!

- II. Complete all other steps required in the individual treatment protocols that indicate the need for oxygen administration.
- III. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

# Hypoperfusion

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**Note:**

**Request Advanced Life Support if available.**

**Note:**

**For the purpose of this protocol, Adult Hypoperfusion is defined as:**

- 1. Signs of inadequate perfusion, such as:**
  - A. Altered mental state (restlessness, inattention, confusion, agitation)**
  - B. Tachycardia (pulse greater than 100)**
  - C. Pale, cool, moist skin**
  - D. Rapid shallow respirations**
  - E. Extreme thirst**
- 2. If a cardiac cause for hypoperfusion is suspected, refer immediately to the cardiac related protocol!**

**Note:**

**For the purpose of this protocol, Pediatric Hypoperfusion is defined as signs of inadequate perfusion, such as:**

- 1. Altered mental status**
- 2. Tachycardia (see appendix-A [pediatric])**
- 3. Weak or absent distal pulses**
- 4. Pallor**
- 5. Cold, clammy, or mottled skin**

**Caution:**

**Manually stabilize the head and cervical spine if trauma of the head and neck is suspected!**

- I. Perform initial assessment.
- II. Assure that the patient's airway is open and that breathing and circulation are adequate.
- III. Administer high concentration oxygen, and **be prepared to ventilate the patient!**

## **Hypoperfusion, continued**

- IV. Place the patient in a face-up position **and** elevate the patient's legs 8 - 12 inches if there is no trauma to the legs.
- V. Keep the patient warm while waiting for arrival of EMS unit.
- VI. Update the responding EMS unit.
- VII. Perform Physical Exam.
- VIII. Obtain History using SAMPLE.
- IX. Ongoing assessment. Repeat the initial assessment and record the patient's vital signs, including the level of consciousness as often as the situation indicates.
- X. Provide a Hand-off Report to arriving EMS unit, which will take over care of your patient.
- XI. Record all patient care information, including the patient's medical history and all treatment provided, on a Prehospital Care Report (PCR) or other approved equivalent.

## Emergency Childbirth, Resuscitation and Stabilization of the Newborn

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**Note:**

**Request Advanced Life Support if available.  
Do not delay transport to the appropriate hospital.**

- I. Perform initial assessment.
  - A. Assure that the mother's airway is open and that breathing and circulation are adequate.
  - B. Assess the mother for hypoperfusion. **If one or more signs of hypoperfusion are present, refer immediately to the Hypoperfusion Protocol!**
  - C. Obtain the mother's history to determine if the mother is in labor. The history includes:
    1. What is your due date?
    2. Number of previous pregnancies
    3. Number of previous births
    4. Frequency and duration of uterine contractions
    5. Recent vaginal discharge or bleeding
    6. Presence of urgency to move bowels or pressure in vaginal area
  - D. Be prepared to handle additional patient(s) in addition to the mother.

**Caution:**

**Do not permit the mother to go to the bathroom!**

- E. Determine if the mother is having contractions.
  1. **If the mother is having contractions** perform a visual inspection of the external genitalia and perineum for bulging and/or crowning. Have your partner present during this exam. **If there is crowning prepare for immediate delivery by:**
    - a. Updating the responding EMS unit **immediately**.
    - b. Informing the mother of the need for immediate delivery
    - c. Insuring a private, clean and sanitary environment
    - d. Positioning and draping the mother
    - e. Placing the OB kit within easy reach if one is available
    - f. Warming several towels (if possible)

## Emergency Childbirth, continued

### **Caution:**

**Never delay or restrain delivery under normal circumstances!**

#### II. Delivery procedures:

- A. During delivery support the infant's head with one hand while gently guiding it out of the birth canal to prevent an explosive delivery. Using your other hand with a sterile dressing, support the perineum (area between the vagina and the anus) to help prevent tearing during delivery of the head.
- B. If the amniotic sac has not broken, use your finger or a clamp to puncture the sac and pull it away from the infant's head and mouth as they appear.
- C. Attempt to prevent the infant's head from coming in contact with fecal material or other contaminants.
- D. **As soon as the head delivers** continue to support the infant's head with one hand. **Tell the mother to stop pushing.** Inspect the infant for the umbilical cord wrapped around the neck.
  1. **If the umbilical cord is wrapped around the infant's neck:** Gently loosen the cord and slip it over the infant's head.
  2. **If the umbilical cord is wrapped too tightly around the infant's neck or wrapped around the neck more than once, preventing the delivery of the infant, immediately** notify the responding EMS unit.
- E. After the infant's head is born, suction the infant's oropharynx with a bulb syringe if one is available. If no bulb syringe is available, wipe the baby's mouth and then the nose with gauze.
  1. Insert a compressed bulb syringe 1 –1 ½ inches into the infant's mouth.
  2. Suction the infant's oropharynx while controlling the release of the bulb syringe with your fingers.
  3. Repeat suction as necessary.
- F. Suction each of the infant's nostrils.
  1. Insert a compressed bulb syringe no more than ½ inch into the infant's nostrils.
  2. Suction the infant's nostrils while controlling the release of the bulb with your fingers.

## Emergency Childbirth, continued

3. Repeat suctioning as necessary.
- G. Instruct the mother to begin pushing during contractions so the delivery may continue.
- H. **As soon as the infant has delivered**, quickly dry the infant and place the infant on a warm towel (if available) in a face-up position with the head lower than the feet. **Keep the infant at the level of the mother's vagina until the cord is cut by the responding EMS unit!**

**Caution:**  
**Spontaneous respirations should begin within 30 seconds.**

- I. Repeat the suctioning process as needed.
- J. Perform an initial assessment of the infant. Quickly assess the infant's respiratory status, pulse and general condition.
  1. **If the infant is breathing spontaneously and crying vigorously and has a pulse greater than 100/min:**
    - a. Tie the umbilical cord with gauze three inches apart. The first tie will be 8 – 10 inches from the baby. Place the second tie 3 inches from the first clamp towards the mother.
    - b. Cover the infant's scalp with an appropriate warm covering.
    - c. Wrap the infant in a dry, warm blanket or towels **and** a layer of foil, if available, over the layer of blankets or towels, **or** use a commercial-type infant swaddler if one is provided with the OB kit. **Do not use foil alone!**
    - d. Provide an oxygen-rich environment for the infant by creating an oxygen hood out of foil or by cupping the end of the oxygen tubing with your hand. **Do not blow the stream of oxygen directly into the infant's face!**
    - e. Ongoing assessment. Obtain and record vital signs, as often as the situation indicates.
    - f. **Keep the infant warm and free from drafts.**

## Emergency Childbirth, continued

2. **Monitor the infant's respirations continuously. If the infant is not breathing spontaneously and crying vigorously:**
  - a. **If the infant's respirations are absent or depressed (less than 30/minute in a newborn):**
    - i. Rub the infant's lower back **gently**.
    - ii. Snap the bottom of the infant's feet with your index finger **gently**.
  - b. **If the respirations remain absent or become depressed (less than 30/minute in a newborn) despite stimulation, or if cyanosis is present:**
    - i. Clear the infant's airway by suctioning the mouth and nose **gently** with a bulb syringe.
    - ii. Administer high concentration oxygen as soon as possible.
  - c. **If respirations remain absent or depressed (less than 30/minute in a newborn) despite stimulation and oxygen:**
    - i. Insert the proper size oral airway **gently**.
    - ii. Ventilate the infant with high concentration oxygen at a rate of 30 – 60 /minute with an appropriately sized pocket mask or bag-valve-mask as soon as possible. **Assure that the chest rises with each ventilation.**
3. **Monitor the infant's pulse rate continuously.**
  - i. **If the pulse rate drops below 100 beats per minute at any time, assist ventilations at a rate of 30 – 60/minute with supplemental oxygen.**
  - ii. **If the pulse rate drops below 60 beats per minute at any time add chest compressions to assisted ventilations following AHA/ARC/NSC guidelines.**
4. Ongoing assessment of the newborn. Obtain and record the vital signs of all patients, and repeat as often as the situation indicates.

III. Update the responding EMS unit.

IV. Perform Physical Exam on the mother and newborn(s).



## Emergency Childbirth, continued

- V. Prepare for delivery of the placenta. Delivery of the placenta *usually* occurs within 20 minutes of the delivery of the infant. After delivery of the placenta, wrap the placenta in a towel if available, place the placenta in a plastic bag or other container and keep the bag at the level of the infant.
- VI. Place a sterile pad or large dressing over the vaginal opening, lower the mother's legs and help her hold them together. Massage the mother's abdomen where the fundus can be palpated.
- VII. Ongoing assessment of the mother.
  - A. Reassess the mother for hypoperfusion. **If one or more signs of hypoperfusion are present, refer immediately to the Hypoperfusion Protocol!**
  - B. Obtain and record the vital signs of all patients, repeat as often as the situation indicates.
  - C. Record all patient care information, including the mother's medical history and all treatment provided for each patient, on a separate Prehospital Care Report (PCR), or other approved equivalent, for each patient.
- VIII. **Complicated Childbirth.**
  - A. **Breech Birth**
    - 1. **If the buttocks presents first:**
      - a. Update the responding EMS unit **immediately**.
      - b. Administer high concentration oxygen to the mother.
      - c. Place the mother in a face-up position with her hips elevated.
    - 2. **If a limb presents first:**
      - a. Update the responding EMS unit **immediately**.
      - b. Administer high concentration oxygen to the mother.
      - c. Place the mother in a face-up position with her hips elevated.
  - B. **Prolapsed Umbilical Cord**
    - a. Update the responding EMS unit **immediately**
    - b. Administer high concentration oxygen to the mother.

## Emergency Childbirth, continued

- c. Place the mother in a face-up position with her hips elevated.
- d. Treatment based on specific signs and symptoms.

### C. Multiple Births

- a. Update the responding EMS unit **immediately**.
- b. Deliver each multiple birth according to the above protocol for **Uncomplicated Childbirth**, making sure to tie each umbilical cord between births.
- c. **If the anticipated second birth does not occur after 10 minutes, update the responding EMS unit!**

## Refusing Medical Aid (RMA)

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**Note:**

**Certified First Responders must not make an independent decision regarding a patient's refusal of medical care or transport.**

**The Certified First Responder must assure that additional EMS resources (consisting of an EMT or AEMT) will evaluate the patient.**

**Note:**

**Request Advanced Life Support if the patient's condition warrants the need.**

**Note:**

**All competent adults have the right to refuse medical treatment and/or transport. It is the responsibility of the prehospital care provider to be sure that the patient is fully informed about their situation and the possible implications of refusing treatment or transport.**

- I. Follow the protocol for “**General Approach to Prehospital Patient Management**” and any other specific treatment protocol, which is required according to the patient's condition and your assessment of the patient.
- II. When the patient or legal guardian refuses treatment or requests that you discontinue further treatment of the patient, do not initiate any new treatment modalities.
- III. Discuss with the patient the need for treatment and/or transport. If the patient still refuses treatment or transport and you feel that the patient's condition requires treatment or transport, allow the patient's family members, friends, or anyone else who is familiar with the patient to try and convince the patient of the need for treatment or transport. Update the responding EMS unit. Contact Medical Control per regional protocol and consider assistance from law enforcement.
- IV. If patient still refuses treatment or transport and the patient is 18 years of age or older, or is an emancipated minor, or is the parent of a child, or has married:
  - A. Assess level of consciousness using AVPU.
  - B. Attempt to obtain vital signs and repeat vital signs and AVPU every 5 – 10 minutes.

## **Refusing Medical Aid (RMA), continued**

- C. Evaluate the patient for any apparent medical or physical conditions, which may limit the patient's ability to think rationally. For example:
  - 1. Psychiatric or behavioral disorders.
  - 2. Patient presents a danger to themselves or others.
  - 3. Current alcohol or drug use.
  - 4. History of disease effecting mental capacity (i.e. Alzheimer's).
  - 5. Evidence of abuse to the patient.
  - 6. Inability to ambulate.
  
- D. If patient is **Alert** with and there is no evidence of any apparent medical or physical conditions, which may limit the patient's ability to think rationally:
  - 1. If patient still refuses treatment or transport offer to call Medical Control or the patient's own physician and have the patient speak with the physician.
  
  - 2. If patient still refuses treatment or transport continue to step VI.
  
- E. If patient is not **Alert** or there is evidence of an apparent medical or physical condition, which may limit the patient's ability to think rationally:

**A. Obtain assistance from Law Enforcement and if possible contact Medical Control for direction. Update the responding EMS unit.**

- V. If the patient still refuses treatment or transport and is under the age of 18, or is not an emancipated minor, or is not the parent of a child, or is not married:
  - A. These individuals cannot give effective legal/informed consent to treatment and therefore, conversely, cannot legally refuse treatment.
  
  - B. In an emergency situation when a parent or guardian is not available to give consent, emergency treatment and transport should be rendered based on implied consent.
  
  - C. In an emergency or non-emergency situation when a parent or guardian is present, the EMS provider must obtain consent from the parent or guardian prior to rendering treatment or transport.
  
  - D. If a parent or guardian is refusing to give consent for treatment or transport, and the EMS provider feels that treatment or transport is necessary, the EMS provider should obtain assistance from a Law Enforcement agency. Medical Control should be contacted and the parent or guardian should be allowed to speak with the physician.
  
  - E. If the parent or guardian is still refusing treatment or transport and Law Enforcement is not directing the removal of the patient to a hospital, proceed to VI.

## Refusing Medical Aid (RMA), continued

- VI. For any patient who refuses treatment or transport, the EMS provider must advise the patient, or if applicable the parent or guardian, of the possible consequences of their refusal.
- VII. Complete a Prehospital Care Report (PCR) or approved equivalent for the patient. At a minimum the following patient information must be documented or the EMS provider must document the reasons why this patient information cannot be documented.
  - A. Documentation Information:
    - 1. Age and sex.
    - 2. Patient's name, address, and date of birth.
    - 3. Chief complaint.
    - 4. Subjective and objective patient assessment findings.
    - 5. Pertinent history as needed to clarify the problem (mechanism of injury, previous illnesses, allergies, medications, etc.)
    - 6. Level of consciousness (AVPU).
    - 7. One complete set of vital signs
    - 8. Treatment given and the patient's response.
    - 9. Parent or guardian's name if applicable.
    - 10. Identification information of any Law Enforcement personnel, Medical Control, and EMT or AEMT directly involved with the refusal of treatment or transport.
    - 11. ***Document that risks and consequences were explained and understood.***

**Refusing Medical Aid (RMA), continued**

**SEMAC  
Advisories  
and  
Bureau of  
EMS Policies**





## **SEMAC Advisories**

### **Bureau of Emergency Medical Services Policies**

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This section of the protocol book contains medical advisories approved by the State Emergency Medical Advisory Council (SEMAC) and those policy statements published by the NYS DOH Bureau of Emergency Medical Services (BEMS), which will assist you in the use of certain protocols and patient care.

SEMAC Advisories are guidelines, which are issued under the authority of Article 30 of the Public Health Law, Section 3002-a(2) and with the Commissioner of Health's approval. While these guidelines do not have the weight of law, the issuance of guidelines are statutorily authorized and approved by the Department of Health as appropriate guidance for prehospital patient care. They should be followed in the same manner as the statewide or regional patient care protocols.

Bureau of EMS policy statements are issued by the Department of Health and are to be used to assist the EMS provider in direct and in-direct patient care. Policy statements carry the weight of regulation, but are designed to be flexible to meet Public Health needs without following a lengthy regulatory reform process. These policies are designed to assist you in providing appropriate pre-hospital healthcare and provide a standard by which all NYS certified EMS providers can function. The policies which have been included in this book are only policies which have been currently enacted and relevant to patient care and protocols.

All SEMAC Advisories and BEMS policy statements can be found on the Bureau of EMS web site at <http://www.health.state.ny.us/nysdoh/ems/main.htm>. We encourage all providers and agencies to check the web site frequently for updated information.



Advisory No.	97-01
Title	Emergency Care of Persons with Hemophilia
Date Approved	February 4, 1997
Page	1 of 1

## Emergency Care of Persons with Hemophilia

There may be no visible signs of bleeding in a person with hemophilia but bleeding episodes may be life threatening. Above all, prompt treatment (infusion of clotting factor concentrate) is essential. For a conscious patient, follow the guidelines below:

- Listen to the patient and family members. They are very knowledgeable about bleeding disorders.
- Ask if the patient has his own clotting factor concentrate.
- Allow the patient, a family member or caregiver to infuse the factor and/or bring the factor to the hospital. **(If it appears transport may be delayed Medical Control should be contacted as soon as possible.)**
- Assess the patient.
- Stabilize the patient:
  - R – Rest
  - I – Ice
  - C – Compression
  - E – Elevate
- Make early contact with Medical Control for guidance on treatment and most appropriate destination.
- Transport to the appropriate hospital.

Since factor concentrates are not stored by all hospitals in New York State, if the patient does not have factor concentrate, consult with Medical Control for hospital destination. (NOTE: The patient or family members may be able to identify the hospital with the most appropriate resources needed to best deal with a specific emergency for hemophilia patient.)

Issued by:

Mark Henry, MD  
Chair  
State Emergency Medical Advisory Committee

Barbara A. DeBuono, MD  
Commissioner  
Department of Health



Advisory No.	97-02
Title	Biphasic Automated External Defibrillator
Date Approved	February 4, 1997
Page	1 of 1

## Biphasic Automated External Defibrillator

The Food and Drug Administration (FDA) has recently approved an Automated External Defibrillator (AED) which uses a low energy "biphasic waveform" similar to the technology currently used in implantable cardioverter-defibrillator (ICD). This allows the unit to determine the patient's chest impedance (resistance to electrical flow) and delivers a measured shock in response to that impedance. We can anticipate the FDA approval of more units/models using the biphasic waveform technology in the near future.

Some EMS providers have expressed concern that the units are not set to deliver shocks at the traditionally higher energy settings (200 J to 360 J). This advisory is to clarify that the biphasic automated external defibrillator, as approved by the FDA, is an acceptable device which can be used as outlined in the current New York State, Statewide Basic Life Support Adult Treatment Protocols for the Automated External Defibrillator (AED).

Traditional AED ("monophasic waveform") units, currently approved by the FDA, also remain an acceptable device used as outlined in the current New York State, Statewide Basic Life Support Adult Treatment Protocols for the Automated External Defibrillator (AED).

**As always, the decision on the purchase of specific medical devices should be done with the approval of your Service Medical Director and under the guidelines of the Regional Emergency Medical Advisory Committee (REMAC).**

Issued by:

Mark Henry, MD  
Chair  
State Emergency Medical Advisory Committee

Barbara A. DeBuono, MD  
Commissioner  
Department of Health



Advisory No.	97-03
Title	Hyperventilation in Severe Traumatic Brain Injury
Date Approved	August 7, 1997
Page	1 of 3

**Note:** This advisory guideline announces important changes in the *Statewide Basic Life Support Adult and Pediatric Treatment Protocols*. [Revised copies of each of the protocols affected by these changes are attached.](#) Revised copies of each of the protocols affected by these changes are also being sent to all emergency medical services agencies statewide. Regional Emergency Medical Advisory Committees, and regional, system, and service medical directors are directed to facilitate use of the revised protocols at the local level, and are further advised to modify local protocols, policies, and procedures accordingly.

## Hyperventilation in Severe Traumatic Brain Injury

Current *Statewide Basic Life Support Adult and Pediatric Treatment Protocols* stipulate that hyperventilation, at a rate of 20 breaths per minute in an adult and 25 breaths per minute in a child, should be employed in major trauma whenever a head injury is suspected, the patient is not alert, the arms and legs are abnormally flexed and/or extended, the patient is seizing, or has a Glasgow Coma Scale of less than 8. The State Emergency Medical Advisory Committee has reviewed these protocols, and concludes, on the basis of recent scientific evidence, that in the patient with severe traumatic brain injury (Glasgow Coma Scale score  $\leq$  8) following open or closed head injury, aggressive hyperventilation should be avoided in the prehospital setting, unless there are active seizures or signs of transtentorial herniation.

Although hyperventilation was used throughout the 1970s and 1980s in the acute management of severe traumatic brain injury, its use has undergone critical reappraisal in recent years. This has occurred following the publication of several reports linking excessive hyperventilation ( $P_aCO_2 < 25$  mm Hg) to cerebral ischemia, as well as a large prospective randomized study which failed to demonstrate any benefit, but instead demonstrated a slight detriment, to head injured adult patients ventilated to achieve a  $P_aCO_2$  of 25 mm Hg versus head injured adult patients ventilated to achieve a  $P_aCO_2$  of 35 mm Hg. In 1995, the Brain Trauma Foundation, in collaboration with the American Association of Neurological Surgeons and the Joint Section on Neurotrauma and Critical Care, published evidence-based Guidelines for the Management of Severe Head Injury, which call for moderation in the use of hyperventilation in the acute management of severe traumatic brain injury. The State Emergency Medical Advisory Committee has reviewed these guidelines, and the scientific evidence on which they are based, and endorses the guidelines pertaining to initial resuscitation as an appropriate standard of prehospital care for patients with severe traumatic brain injury. With respect to integration of brain-specific treatments into the initial resuscitation of the severe head injury patient, the Guidelines state:

"The first priority for the head-injured patient is compete and rapid physiologic resuscitation. No specific treatment should be directed at intracranial hypertension in the absence of signs of transtentorial herniation or progressive neurological

deterioration not attributable to extracranial explanations. When either signs of transtentorial herniation or progressive neurological deterioration not attributable to extracranial explanations are present, however, the physician should assume that intracranial hypertension is present and treat it aggressively. Hyperventilation should be rapidly established. The administration of mannitol is desirable, but only under conditions of adequate volume resuscitation."

With respect to resuscitation of blood pressure and oxygenation, the Guidelines state:

"Hypotension (systolic blood pressure < 90 mm Hg) or hypoxia (apnea or cyanosis in the field or a  $P_{aO_2}$  < 60 mm Hg) must be scrupulously avoided, if possible, or corrected immediately."

With respect to use of hyperventilation in the acute management of severe traumatic brain injury, the Guidelines state:

"The use of prophylactic hyperventilation ( $P_aCO_2$  < 35 mm Hg) therapy during the first 24 hours after severe TBI should be avoided because it can compromise cerebral perfusion during a time when cerebral blood flow (CBF) is reduced."

With respect to acute neurologic deterioration or refractory intracranial hypertension, the Guidelines state:

"Hyperventilation therapy may be necessary for brief periods when there is acute neurological deterioration, or for longer periods if there is intracranial hypertension refractory to sedation, paralysis, cerebrospinal fluid (CSF) drainage, and osmotic diuretics."

Thus, normal ventilation is now recognized as the appropriate standard of care for initial management of severe traumatic brain injury. Yet, it is difficult for prehospital personnel to know whether they are achieving normal ventilation, particularly when using a bag and mask. To avoid this problem, prehospital personnel are advised to utilize strategies that maximize oxygen delivery and minimize inadequate ventilation. The State Emergency Medical Advisory Committee believes that these goals can best be accomplished by utilizing ventilatory rates that are likely to avoid both hyperventilation and hypoventilation, hence to assure adequate ventilation, an approach which is consistent with the 1997 Edition of the Advanced Trauma Life Support Course of the American College of Surgeons.

It is assumed that the recommended rates for assisted ventilation contained in the 1992 Edition of the Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care of the American Heart Association, 12 breaths per minute (1 breath every 5 seconds) for an adult and 20 breaths per minute (1 breath every 3 seconds) for a child 8 years of age or less, are sufficient to support adequate ventilation. Thus for adults with severe traumatic brain injury (Glasgow Coma Scale score < or = to 8), the assisted ventilatory rate should be 12 breaths per minute (1 breath every 5 seconds), while for children 8 years of age or less with severe traumatic brain injury (Glasgow Coma Scale score < or = to 8), the assisted ventilatory rate should be up to 20 breaths per minute (1 breath every 3 seconds). Only if active seizures, or signs of transtentorial herniation such as fixed or asymmetric pupils, neurologic posturing (decerebrate or decorticate),



Cushing's reflex (hypertension and bradycardia), periodic breathing (Cheyne-Stokes, central neurogenic, ataxic breathing), or neurologic deterioration (further decrease in Glasgow Coma Scale score of 2 or more points), are present may hyperventilation be considered, and ventilatory rates increased to 20 breaths per minute in adults and to 25 breaths per minute in children. The *Statewide Basic Life Support Adult and Pediatric Treatment Protocols* have been modified to reflect this change, and Regional Emergency Medical Advisory Committees, and regional, system, and service medical directors are advised to modify local protocols, policies, and procedures accordingly.

### Selected References

1. Brain Trauma Foundation, American Association of Neurological Surgeons, Joint Section on Neurotrauma and Critical Care: Guidelines for Management of Severe Head Injury. New York: Brain Trauma Foundation, 1995.
2. Obrist WD, Langfitt TW, Jaggi JL, et al: Cerebral blood flow and metabolism in comatose patients with severe head injury. J Neurosurg 1984;61:241-253.
3. Muizelaar JP, Marmarou A, Ward JD, et al: Adverse effects of prolonged hyperventilation in patients with severe head injury: a randomized clinical trial. J Neurosurg 1991;75:731-739.
4. Bouma GJ, Muizelaar JP, Stringer WA, et al: Ultra early evaluation of regional cerebral blood flow in severely head injured patients using xenon enhanced computed tomography. J Neurosurg 1992;77:360-368.

Issued by:

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Department of Health



Advisory No.	97-04
Title	Medical Anti-Shock Trousers
Date Approved	August 7, 1997
Page	1 of 3

**Note:** This advisory guideline announces important changes in the *Statewide Basic Life Support Adult and Pediatric Treatment Protocols*. [Revised copies of each of the protocols affected by these changes are attached.](#) Revised copies of each of the protocols affected by these changes are also being sent to all emergency medical services agencies statewide. Regional Emergency Medical Advisory Committees, and regional, system, and service medical directors are directed to facilitate use of the revised protocols at the local level, and are further advised to modify local protocols, policies, and procedures accordingly.

## Medical Anti-Shock Trousers

Current Statewide Basic Life Support Adult and Pediatric Treatment Protocols stipulate that Medical Anti-Shock Trousers (MAST), also known as the Pneumatic Anti-Shock Garment (PASG), should be inflated if the systolic blood pressure is below 90 mm Hg in adults or below 70 mm Hg in children and signs of inadequate perfusion are present, if MAST (PASG) are available. The State Emergency Medical Advisory Committee has reviewed these protocols, and concludes, on the basis of recent scientific evidence, that prehospital MAST (PASG) use in New York State should be considered only in adult major blunt trauma with severe hypotension (systolic blood pressure < 50 mm Hg) and hypotension (systolic blood pressure < 90 mm Hg) associated with unstable pelvic fracture.

In 1989, Mattox et al, in a prospective randomized study of 911 adult trauma patients, mostly with penetrating injuries, found that MAST (PASG) use was associated with longer scene times, and worsened the survival of adult patients with systolic hypotension (BP < 90 mm Hg) as well as those with primary thoracic injuries who presented in traumatic cardiac arrest. In 1992, Cooper et al, in a retrospective study of the efficacy of MAST (PASG) use in 436 pediatric trauma patients, mostly with blunt injuries, from the National Pediatric Trauma Registry who presented in hypotensive shock, found similar results. In 1993, Cayten et al reported the results of a retrospective study of MAST (PASG) use in 629 hypotensive adult trauma patients which concurred with Mattox's findings, although they were able to demonstrate a small but statistically significant survival advantage in severe hypotension (BP < 50 mm Hg). While there have been no prospective studies and no published trauma registry data in support of MAST (PASG) use for hypotension associated with unstable pelvic fractures, retrospective reviews and cases reports consistently support MAST (PASG) use in such circumstances.

In 1997, O'Connor et al performed a collective review of the scientific literature as an evaluation of MAST (PASG) in various clinical settings. On the basis of this review, Domeier et al developed a position paper on use of MAST (PASG) for the National Association of EMS Physicians, the Summary Recommendations from which, as they pertain to trauma, are summarized below.

MAST (PASG) are "usually indicated, useful, and effective" (Class I evidence) for:

- None.

MAST (PASG) are "acceptable, of uncertain efficacy, [although the] weight of evidence favors usefulness and efficacy" (Class IIa evidence) for:

- "Hypotension due to suspected pelvic fracture;
- Severe traumatic hypotension (palpable pulse, blood pressure not obtainable). \*\*

MAST (PASG) are "acceptable, of uncertain efficacy, may be helpful, probably not harmful" (Class IIb evidence) for:

- "Penetrating abdominal injury;
- Lower extremity hemorrhage (otherwise uncontrolled); \*
- Pelvic fracture without hypotension; \*
- Spinal shock. \*\*

MAST (PASG) are "inappropriate, not indicated, may be harmful" (Class III evidence) for:

- "Adjunct to CPR;
- Diaphragmatic rupture;
- Penetrating thoracic injury;
- Pulmonary edema;
- To splint fractures of the lower extremities;
- Extremity trauma;
- Abdominal evisceration;
- Acute myocardial infarction;
- Cardiac tamponade;
- Cardiogenic shock;
- Gravid uterus."

\* Data from controlled trials not available. Recommendation based on other evidence. The literature cited supports the conclusion that the role of MAST (PASG) in the prehospital emergency medical care of adult and pediatric patients is extremely limited. The State Emergency Medical Advisory committee agrees with the National Association of EMS Physicians that the weight of the evidence favors the usefulness and efficacy of MAST (PASG) only for adult major blunt trauma with severe hypotension (systolic blood pressure < 50 mm Hg) and hypotension (systolic blood pressure < 90 mm Hg) associated with unstable pelvic fracture, a position which is consistent with the 1997 Edition of the Advanced Trauma Life Support Course of the American College of Surgeons.

The State Emergency Medical Advisory Committee (SEMAC) therefore recommends their use under these circumstances, although Regional Emergency Medical Advisory Committees (REMAC) may prescribe their use under other circumstances to address specific local conditions. The *Statewide Basic Life Support Adult and Pediatric Treatment Protocols* are being modified to reflect this change, and Regional Emergency Medical Advisory Committees, and regional, system, and service medical directors are advised to modify local protocols, policies, and procedures accordingly.

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Issued by:

Mark C. Henry, M.D.  
Chairman  
State Emergency Medical Advisory Committee  
Authorized by:

Barbara A. DeBuono, M.D.  
Commissioner  
Department of Health



# ADVISORY

**Title:**

Secondary Confirmation of ETT

**Effective Date:**

07/01/2002



**Number:**

02-01

**Replaces/Supersedes:**

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## **Purpose**

To promote the use of adjuncts for secondary confirmation and monitoring of endotracheal tube placement in adult and pediatric patients.

## **Background**

Endotracheal intubation in adult and pediatric patients with severe respiratory failure or arrest can be a vital intervention for the prehospital advanced life support provider. However, since **failure to detect improper placement of an endotracheal tube can be fatal**, utmost care must be taken to ensure proper placement. Advanced life support providers should use both *primary* and *secondary* confirmation of endotracheal tube placement to reduce the chance of unrecognized misplacement or dislodgement. Use of a secondary confirmation device is particularly important in the prehospital setting and ambulance environment where movement of the patient at the scene and during transport increase the potential for unrecognized dislodgement.

Primary confirmation techniques for verifying correct intratracheal placement of the endotracheal tube include direct visualization of the endotracheal tube passing through the vocal cords, visual inspection of the chest for **presence** of symmetric chest rise, auscultation at the epigastrium for **absence** of gurgling sounds and auscultation at the anterior and lateral chest walls for **presence** of equal bilateral breath sounds.

Secondary confirmation techniques for verifying correct intratracheal placement of the endotracheal tube are used both following initial intubation and subsequently throughout transport. Secondary confirmation devices include *exhaled carbon dioxide (CO<sub>2</sub>) detector devices* and *esophageal detector devices*. Both qualitative and quantitative exhaled carbon dioxide (CO<sub>2</sub>) detector devices can be used for secondary confirmation and continuous monitoring. Qualitative devices indicate the presence of exhaled carbon dioxide (CO<sub>2</sub>) by change in color. Quantitative devices use digital numeric read outs or waveforms to document presence of exhaled carbon dioxide (CO<sub>2</sub>). Secondary confirmation devices are **not a substitute** for primary confirmation techniques that rely upon direct visualization and auscultation, but serve as an **additional method** of documenting proper endotracheal tube placement.

## **Implementation**

### General Considerations

For *secondary* confirmation of proper endotracheal tube placement, the prehospital care provider should use an exhaled carbon dioxide (CO<sub>2</sub>) detector device. Options for secondary confirmation include:

qualitative capnometry (colorimetric),  
quantitative capnometry (digital readout), or  
quantitative capnography (continuous waveforms)

When using exhaled carbon dioxide (CO<sub>2</sub>) detector devices, assessment should be made after six ventilations to clear any retained carbon dioxide that may be present after bag mask ventilation.

Because levels of carbon dioxide may be too low to register on exhaled carbon dioxide (CO<sub>2</sub>) detector devices in patients who are in cardiac arrest (or have severe airway obstruction or pulmonary edema), use of an esophageal detector device may be helpful. Esophageal detector devices (EDDs), both syringe and bulb types, suggest proper tube placement by noting easy aspiration of the syringe or rapid re-expansion of the bulb.

### Pediatric Considerations

When using a colorimetric device in children, a pediatric sized device is recommended for pediatric patients under 15 kg. If an adult sized device must be used in a pediatric patient due to the non-availability of a pediatric device, it should be removed from the breathing circuit immediately after proper endotracheal tube placement has been confirmed. This is due to the larger amount of dead space within the adult sized device, which will interfere with proper ventilation of patients under 15 kg (approximately 2 ½ years of age).



When using a capnographic device, the adapters should be consistent with manufacturer's recommendations for age or size of patients.

At present, esophageal detector devices are marketed for use in children 5 years of age and above by one manufacturer. The American Heart Association *Emergency Cardiovascular Care Guidelines 2000* notes that while the EDD has been used successfully in children, it appears unreliable for children below 1 year of age, and there are insufficient data in emergency intubations in infants and children to recommend their routine use.

## **Limitations**

Adjuncts for secondary confirmation of proper endotracheal tube placement may not be reliable under certain circumstances. As with many devices, there are limitations and special considerations that can affect results and interpretation. However, when interpreted along with primary confirmation, secondary confirmation provides further verification of successful intubation and helps to eliminate unrecognized esophageal intubation and dislodgement.

### **Exhaled Carbon Dioxide (CO<sub>2</sub>) Detector Devices**

- **Exhaled carbon dioxide (CO<sub>2</sub>) detector devices** may **detect residual CO<sub>2</sub> in the stomach** from previous bag-valve-mask ventilations, mouth-to-mouth ventilations, or carbonated beverages. This might lead an advanced life support provider to think the tube is in the trachea when in actuality the device is detecting CO<sub>2</sub> from the stomach. Therefore, it is always recommended to administer six ventilations to clear any residual CO<sub>2</sub> from the trachea before performing the exhaled CO<sub>2</sub> measurement.
- **Exhaled colormetric carbon dioxide (CO<sub>2</sub>) detector devices** that become **contaminated with gastric acid or acidic drugs**, such as **epinephrine or lidocaine**, may not be reliable. A color change that will be consistent with exhaled CO<sub>2</sub> may result but it will not change with ventilation. The EMS provider may think the tube is properly placed but it could be either in the esophagus or the trachea.
- **Exhaled carbon dioxide (CO<sub>2</sub>) detector devices** may not register CO<sub>2</sub> in circumstances where not enough CO<sub>2</sub> is delivered to the lungs or exhaled because of conditions such as cardiac arrest, status asthmaticus, and pulmonary edema. In such circumstances, there is insufficient CO<sub>2</sub> production to produce a color change (colorimetric device) or register a digital reading (capnometry), although carbon dioxide waveform (capnographic) devices register even very low concentrations of carbon dioxide. Therefore, in cardiac arrest, it is recommended that when the exhaled carbon dioxide (CO<sub>2</sub>) detector device does not register CO<sub>2</sub>, an EDD device also be used, especially if signs of primary confirmation are present.

- **Pediatric exhaled carbon dioxide (CO<sub>2</sub>) detector devices** should be employed as per manufacturer recommendations to assure use of the appropriate size for infants and children. Note that in children less than 2 kg (approximately 4½ lb), CO<sub>2</sub> monitors may not register CO<sub>2</sub> even if the tube is in the trachea. With very small infants, the smaller volumes of CO<sub>2</sub> exhaled are insufficient to produce a color change (colorimetric device), a digital readout, or the characteristic waveform (capnographic devices).

### **Esophageal Detector Devices**

- **Esophageal detector devices** may give **misleading results** when there is **excessive gas in the stomach due to CPR** and there is easy pull back of the syringe or rapid expansion of the bulb. In this situation, the EMS provider may believe the endotracheal tube is properly placed in the trachea but it could be in the esophagus.
- **Esophageal detector devices** may **meet resistance to air pull** when the tube is actually in the trachea in situations such as: **clogging of the tube** with thick secretions, **morbid obesity**, or **COPD**. In these situations, the advanced life support provider might think that the tube is in the esophagus when it could be in the trachea.

### **Application**

To confirm proper placement of an endotracheal tube, advanced life support providers should use both primary and secondary confirmation:

Primary confirmation includes:

- ✓ Direct visualization of the endotracheal tube passing through the vocal cords,
- ✓ Observation of chest rise with positive pressure ventilation,
- ✓ Auscultation of the epigastric region for absence of gurgling, and
- ✓ Auscultation of the anterior and lateral chest walls for presence of breath sounds.

### **Secondary confirmation includes:**

- ✓ Exhaled carbon dioxide (CO<sub>2</sub>) detection, using colorimetric device, capnometry or capnography.
- ✓ If the CO<sub>2</sub> detector does not register CO<sub>2</sub> and a pulse is present, rely on the CO<sub>2</sub> device.

- ✓ If the CO<sub>2</sub> detector does not register CO<sub>2</sub> and the patient is in cardiac arrest, test with the esophageal detector device.
- ✓ When in doubt about proper tube placement, visualize correct placement of the tube between the cords or remove the tube.

**Prehospital providers must continue to confirm proper tube placement with clinical signs of adequate ventilation and end tidal CO<sub>2</sub> detector devices throughout treatment and transport.** This is particularly important because the potential for dislodgement of the tube during patient movement and patient transport is high.

As with any adjunct, it is important to have proper training in its use, to follow the manufacturer's recommendations, know the device's indications and limitations, and to follow medical protocols.

## **QA/QI**

The SEMAC will develop a process to monitor the success rate of endotracheal intubation by prehospital providers, to be implemented by the REMACs. This will include at least the following:

1. Develop and implement a process to track use of secondary confirmation devices by type in adult and pediatric patients being intubated.
2. Develop and implement a process to record physician verification of proper tube placement on arrival at the emergency department.
3. Develop and implement a process to provide continuing education and appropriate remediation based on the results of 1 and 2 above.

## **References**

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Authorized:

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Commissioner of Health  
New York State

Mark C. Henry, M.D.  
Chairman  
State Emergency Medical Advisory Committee

# ADVISORY

**Title:**

AED for Pediatric Patients

**Effective Date:**

07/01/2002



**Number:**

02-02

**Replaces/Supercedes:**

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## **Purpose**

To promote safe and effective use of FDA-approved, pediatric-modified Automatic External Defibrillators (AED) in the pediatric patient under age 8.

## **Background**

Early defibrillation has been shown to reduce morbidity and mortality in patients suffering ventricular fibrillation (VF). The use of AEDs by certified or licensed professionals and the trained lay person has been promoted, in the hope that it will result in more rapid application of this lifesaving therapy in appropriate patients. Thus far the use of AEDs has been limited to patients 8 years of age or older. Concerns about the amount of energy delivered by the previously available equipment, and about the ability of the available equipment to accurately diagnose ventricular fibrillation in pediatric patients has prevented recommendation of AED use in patients less than 8 years. (1).

The Food and Drug Administration (FDA) has recently approved an adaptation to an AED that allows the device to deliver a lower dose of electricity. The dose delivered by this device is 50 joules. This would deliver a dose of 5 joules/kg in the average 10 kg, 1 year old child, and a dose of 2 joules/ kg in the average 25 kg, 8 year old child. Although the maximum safe energy dose for infants and children has not been established, current guidelines for therapeutic defibrillation recommend 2-4 joules/kg. Older animal studies and one recent case report in a child suggest that much higher doses may be well tolerated. (2-4)

The AED, for which the pediatric pad and cable adapter has been designed, has been shown in one published study of 191 children, aged 1 day-12 years, to accurately detect “shockable” rhythms. (5) This study included 74 patients under 1 year of age and documented a specificity for “shockable” rhythms of 100%, in that the AED correctly identified “non-shockable” rhythms 100% of the time, thereby precluding an inappropriate shock. Previous concerns that rapid sinus tachycardia or SVT in an infant or small child might be mistaken for VF or VT by the machine, therefore, were not confirmed by this study. Furthermore, recent data show that up to 19% of pediatric patients with cardiopulmonary arrest, present with ventricular fibrillation, and that pediatric survivors of VF arrest have better neurologic outcomes than those with asystolic arrest. (6-9)

These data, coupled with the apparent safety of this new device, and the decision of the FDA to approve the device with the contingency that the first 50 patients would be carefully monitored by the manufacturer, led the State Emergency Medical Advisory Committee to reconsider the application of AED programs to children under age 8.

In October 2001, the State Emergency Medical Advisory Committee (SEMAC) approved the use of FDA approved pediatric-modified AEDs in children under age 8, by both trained EMS professionals and trained laypersons.

The SEMAC recommendation includes the need for careful monitoring of the use of pediatric-modified AEDs in New York State in accordance with FDA guidelines, as well as the need for additional training in use of the pediatric AED pad and cable system for all potential users of pediatric-modified AEDs both in proper use of AEDs, and in pediatric basic life support (PBLs), including cardiopulmonary resuscitation (CPR).

The SEMAC previously approved, and continues to recommend, use of the standard AED pad and cable system for children 8 years of age and older.

## **Implementation**

The SEMAC recommends that EMS programs and Public Access Defibrillation (PAD) programs that choose to use automated external defibrillators (AEDs) in pediatric patients under 8 years of age, should adhere to the following:

- Use only equipment that has been FDA-approved for pediatric use.
- Use approved AEDs according to the manufacturer's instructions, with due attention to operating procedures, maintenance and expiration dates.
- Have a training program that includes (1) specific orientation to the pediatric capable AED, with particular attention to indications (no signs of circulation, especially with sudden collapse, and for the large majority of pediatric patients, the continued importance of initial respiratory/airway management, and (2) training in infant and pediatric basic CPR

- Have a quality assurance/improvement program that requires the collection of data on all pediatric AED use and a mechanism of sharing that data on a regular basis with the local REMAC and the SEMAC. At a minimum the data should include: age of patient, device used, condition of patient when applied, outcome of patient and any adverse events noted (equipment failure, burns under pads, etc.)

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New York State  
Department of Health  
Bureau of Emergency Medical Services

**POLICY STATEMENT**

*Supercedes/Updates:*

**No. 88-01**

**Date: 02/09/88**

**Re: Patient Carrying  
Devices**

**Page 1 of 2**

**SUBJECT: Patient Carrying Devices**

There are many patient carrying devices in the EMS inventory, including orthopedic stretchers, stair chairs, canvas slings, spine boards, soft or rigid stretchers (such as the Reeves and the SKED) and single or multiple level ambulance cots.

Each of these carrying devices has been designed by the manufacturer for a specific use. The orthopedic stretcher to lift or move patients with orthopedic injuries; the long spine board to immobilize patients with potential spinal column injuries; the stair chair to move on stairs and around narrow hallways; the "Reeves" to facilitate moving individuals in a semi-rigid but flat position. There are overlaps in the capabilities of many of these devices. However, it is important to recognize that each of these devices has specific limitations which restricts its use in certain circumstances. In other words, no device can be used all of the time on all patients.

The State Emergency Medical Services Program recently investigated several circumstances where patient carrying devices were inappropriately used. It appears that the reason for the use is that the ambulance crew uses a particular device for every patient. Examples of inappropriate uses of devices include transporting a non-traumatized chest pain patient on an orthopedic or Reeves stretcher, thus preventing the patient from sitting up, and attempting to immobilize the spine of an injured patient on a Reeves or other soft stretcher. While there are sometimes extenuating circumstances in the field, routine use of these devices for the purposes given is clearly inappropriate.

EMTs have an obligation to weigh carefully the decision to use a specific piece of EMS equipment, including carrying devices, in order to assure that the equipment is appropriate for the patient, the problem, and the situation.

All providers should assure that patients transported by ambulance are strapped to the stretcher or crew bench. No patient should ever be transported strapped to a Reeves or long backboard but not to the stretcher. Strapping to the stretcher is the only way to prevent movement of the initial carrying device in the event the ambulance comes to a sudden stop. Patients should never be transported within the ambulance in a chair since these can not be secured. Children, however, may be transported in their car seats if strapped to the stretcher or crew bench, assuming that their injuries do not require them to lay flat.

Your attention to these issues is expected in the interest of improving patient care.

Issued and Authorized by: Michael Gilbertson, Director



New York State  
Department of Health  
Bureau of Emergency Medical Services

**POLICY STATEMENT**

*Supersedes/Updates:*

**No. 92-02**

**Date: 05/06/92**

**Re: Tuberculosis**

**Page 1 of 4**

The incidence of tuberculosis (TB) has increased substantially in the last few years. EMS providers should be aware of this infectious disease and the procedures for protecting themselves.

As with all infectious diseases, no precaution is 100% effective; rather, these precautions are designed to reduce the probability that the disease can be transmitted from person to person.

TB is spread when small droplets from the respiratory tract of an infected person enter the air and are inhaled by another person. Precautions can be taken in three areas to reduce the danger.

**First, the patient's mouth should be covered with a mask. A disposable micron surgical mask (#M "Aseptix" sub-micron molded surgical mask, Catalog #1812; or equivalent) is best, but a standard surgical mask or even an oxygen mask is helpful. The nature of the medical treatment required by the patient should determine which mask is used.**

Second, a disposable micron mask or disposable particulate respirator (PR), should be worn by the provider. It should fit snugly on the face. A beard or mustache will markedly reduce the effectiveness of such protection.

Third, the number of infectious droplets in the air can be reduced by ensuring good ventilation in the patient compartment of the ambulance. Thus, the ventilation system should be maximized and/or side windows opened to provide a steady source of clean air.

Which patients should receive respiratory precautions?

Patients with respiratory symptoms of more than 2 weeks duration or any patient with a respiratory symptom of any duration who is a member of a higher risk group. The CDC defines high risk groups as follows:\*

- Alcoholics
- IV drug users
- Contacts of patients known to have active TB
- Low income populations
- Prisoners
- HIV infected persons
- Nursing home residents

- Refugees

Persons with other pre-existing medical conditions which compromise the ability to fight infection are also at increased risk. Such conditions include:

- Chemotherapy
- Diabetes
- Steroid Therapy
- Renal failure
- Some cancers

(source: CDC)

Clearly, TB patients receiving nebulized aerosols of Beta-agonists are likely to spread infectious droplets. In such patients, as well as those presenting with respiratory symptoms such as a persistent cough, special attention should be given to these precautions by EMS providers.

Since air-borne droplet spread is the only means of TB transmission, there is no need to decontaminate or disinfect the ambulance or equipment.

The following sections from the CDC Mortality and Morbidity Weekly Report (December 7, 1990) summarize the CDC recommendations for control of TB in pre-hospital settings:

1. Other source-control methods

A simple but important source-control technique is for infectious patients to cover all coughs and sneezes with a tissue, thus containing most liquid drops and droplets before evaporation can occur. A patient's use of a properly fitted surgical mask or disposable, valveless particulate respirator (PR) (see below) also may reduce the spread of infectious particles. However since the device would need to be worn constantly for the protection of others, it would be practical in only very limited circumstances (e.g., when a patient is being transported within a medical facility or between facilities).

2. For persons exposed to tuberculosis patients.

Appropriate masks, when worn by health-care providers or other persons who must share air space with a patient who has infectious tuberculosis, may provide additional protection against tuberculosis transmission. Standard surgical masks may not be effective in preventing inhalation of droplet nuclei, because some are not designed to provide a tight face seal and to filter out particulates in the droplet nucleus size range (1-5 microns). A better alternative is the disposable PR. PRs were originally developed for industrial use to protect workers. Although the appearance and comfort of PRs may be similar to that of cup-shaped surgical masks, they provide a better facial fit and better filtration capability. However, the efficacy of PRs in protecting susceptible persons from infection with tuberculosis has not been demonstrated.

PRs may be most beneficial in the following situations:

a) when appropriate ventilation is not available and the patient's signs and symptoms suggest a high potential for infectiousness, b) when the patient is potentially infectious and is undergoing a procedure that is likely to produce bursts of aerosolized infectious particles or to result in copious coughing or sputum production, regardless of whether appropriate ventilation is in place, and c) when the patient is potentially infectious, has a productive cough, and is unable or unwilling to cover cough.

Comfort influences the acceptability of PRs. Generally, the more efficient the PRs, the greater is the work of breathing through them and the greater the perceived discomfort. A proper fit is vital to protect against inhaling droplet nuclei. When gaps are present, air will preferentially flow through the gaps, allowing the PR to function more like a funnel than a filter, thus providing virtually no protection.

3. For tuberculosis patients.

Masks or PRs worn by patients with suspected or confirmed tuberculosis may be useful in selected circumstances (see below). PRs used by patients should be valveless. Some PRs have valves to release expired air, and these would not be appropriate for patients to use.

4. Emergency medical services

When emergency-medical-response personnel or others must transport patients with confirmed or suspected active tuberculosis, a mask or valveless PR should be fitted on the patient. If this is not possible, the worker should wear a PR (see above). If feasible, the rear windows of the vehicle should be kept open and the heating and air conditioning system be set on a nonrecirculating cycle.

Emergency-response personnel should be routinely screened for tuberculosis at regular intervals. They should also be included in the follow-up of contacts of a patient with infectious tuberculosis.

(End of CDC recommendations).

### **Treatment of Exposed Providers**

PPD testing should be conducted for pre-hospital providers who are exposed to TB patients for whom adequate infection control measures (outlined above) were not taken.

Unless a negative skin test has been documented within the preceding three months, each exposed worker (except those who are already known to be positive reactors) should receive a PPD (Mantoux) skin test as soon as possible.

If the skin test is negative, the test should be repeated within twelve weeks after the exposure ended.

Persons with skin test reaction of 5mm induration (swelling) or greater, or with symptoms suggestive of active TB, should receive chest x-ray examinations.

Persons with previously known positive skin test reactions who have been exposed to an infectious patient should be evaluated for active TB, but do not require a repeat skin test

or a chest x-ray examination, unless they have symptoms suggestive of active TB.

Optimally, arrangements for treatment should be made by each agency in advance of an exposure. Possible sources of care include: personal physician, receiving hospitals or County Health Departments.

\*Core Curriculum on Tuberculosis; Centers for Disease Control, April 1991: p. 11

Issued by: J. Lawrence Mottley, M.D.  
Senior Medical Advisor



New York State  
Department of Health  
Bureau of Emergency Medical Services

**POLICY STATEMENT**

*Supercedes/Updates:*

No. 95-04

Date: 09/01/95

Re: EMS Mutual Aid

Page 1 of 3

The purpose of this policy is to provide EMS services with guidance as mutual aid plans and policies are developed. This policy statement discusses the concept, history and legal basis for EMS mutual aid in New York State.

EMS services have the responsibility to routinely provide the type and level of service authorized and/or expected by the community, in a timely and reliable manner.

From time to time, to meet peak demand or extraordinary resource utilization, it may be necessary to request assistance to answer a call or provide additional resources. This is the concept of and intent of EMS mutual aid.

*EMS mutual aid requests must be made with the intent of having the closest<sup>1</sup> available EMS unit respond to a patient's medical need, at a time when the resources of the requesting agency are temporarily unavailable or have been expended.*

The response to multiple casualty incidents (MCI's) and other large scale events are usually conducted in accordance with a county or other pre-determined resource allocation and management plan. These may require mutual aid responses but are developed independently due to the special planning needs required.

EMS services are required by the State EMS Code (800.21.p) to have a written mutual aid plan. Regional EMS Councils are encouraged to coordinate the development of agency and/or county mutual aid plans and the Councils have the authority to approve an EMS service operating beyond its primary operating territory for purposes of fulfilling the provisions of a mutual aid agreement (PHL3010.1.b).

Issued by: John J. Clair

Associate Director - Operations

Authorized by: Edward G. Wronski

Deputy Director

**Background:**

The provision of mutual aid by fire departments is provided for in several sections of the General Municipal Law (GML) however, without definition, terms or conditions. The GML does specify that the requesting fire department is responsible for responding equipment and the responding fire service retains responsibility for personnel. The GML

does not address mutual aid with non fire agencies - eg. volunteer or commercial.

For EMS mutual aid, the provisions of Article 30 with regard to primary operating territory must prevail, all other circumstances being the same - eg. response time, location, staffing, etc.

There is no statutory or regulatory definition requiring, presuming or defining who may, or must or who can not request mutual aid. In other words, there is no definition or prohibition regarding what type of agency a requesting agency must call. Therefore any service type may request the assistance of any other EMS service:

•FD < = = > VAC

•VAC < = = > Commercial

•FD < = = > Commercial

Insurance policies are available to cover the assets and liabilities of any agency requesting or responding to a request for EMS assistance. There is no restriction with regard to who may obtain or provide such coverage.

#### Conclusion:

It may be concluded that mutual aid in New York State may be easily achieved within the current regulatory and statutory definitions if:

•Services providing an EMS response to a request for EMS assistance maintain responsibility for their own liability -specifically; vehicles, equipment and personnel.

•EMS mutual aid is requested from the closest, available, appropriate agency capable of responding at the time of the request.

#### Mutual Aid Plans:

EMS agencies need to develop and maintain written mutual aid plans (800.21.p). These plans, while agency specific, should be developed in conjunction and cooperation with counties and Regional EMS Councils.

For assistance in developing mutual aid plans, refer to NYS-EMS policy 89.2 Mutual Aid Planning Guidelines.

Mutual aid plans must insure that any request is made with the intent of having the closest [ usually means the unit with the shortest response time to the patient] available EMS unit respond to a patient's medical need, at the time the resources of the requesting service are temporarily unavailable or have been expended.

Mutual aid plans and agreements for normal day to day requests are the responsibility of the individual EMS service. Typically such agreements identify the closest EMS unit that is to be requested. Frequently, an EMS service's area of operation is divided, within a plan, to facilitate a timely response based on the location of the neighboring service. Service type (eg. volunteer, fire, hospital, commercial) must not be a consideration in any plan or to any request. Staffing, unit availability, response time and primary operating territory are the



**primary concerns to be addressed. The specific agency to be requested for a mutual aid response may vary with day or time based on availability.**

**Mutual aid plans for multiple patients are usually developed and coordinated at a county level to insure an adequate response as well as to provide coverage of all affected areas.**

**The statutory definition of mutual aid excludes inter-facility transfers and ALS intercepts.**

**Counties providing coordinated dispatch, ( 911, fire control, etc.) will need to monitor crew status and service availability, to assist in implementing agency mutual aid plans - particularly when they act as the service's dispatch.**

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**1 - usually means the unit with the shortest response time to the patient**





New York State  
Department of Health  
Bureau of Emergency Medical Services

**POLICY STATEMENT**

*Supercedes/Updates:*

**No. 98-05**

**Date: 5/23/98**

**Re:** Responsibilities of  
EMS Providers &  
Coordination of  
EMS Resources

**Page 1 of 6**

## **DEFINITION OF THE RESPONSIBILITIES OF PREHOSPITAL PATIENT CARE PROVIDERS AND THE COORDINATION OF EMS RESOURCES AT A SCENE**

### **INTRODUCTION:**

The purpose of this policy statement is to provide for the best possible patient care by:

- Identifying the statutory and medical-legal authority and responsibilities of NYS certified emergency medical services personnel who respond to situations where a sick or injured patient may be encountered. These situations include requests for medical assistance as well as motor vehicle accidents, fires, hazardous materials incidents and other circumstances where patient care is or may be required.
- Identifying the statutory authority and responsibilities of EMS services certified or otherwise authorized pursuant to Public Health Law (PHL).
- Defining the responsibilities of individuals certified as care providers (CFR, EMT, AEMT) pursuant to the provisions of the PHL.

**• Establishing guidelines for local Regional Emergency Medical Advisory Committee's (REMAC) to use in the development of Triage, Treatment, Transportation and other protocols, consistent with State Emergency Medical Advisory Committee (SEMAC) standards, which:**

- a) define the responsibility of individuals providing or directing patient care
  - b) define the responsibility of responding EMS services, and
  - c) provide for the coordination of prehospital EMS resources in a region.
- Providing guidelines and setting expectations for the management of patient care and the coordination of EMS resources in situations which are not purely a medical response, and/or where more than one public safety agency with jurisdiction has responsibility.
  - Defining the role and use of the Incident Command System, including the use of "Unified Command" concepts and operations.
  - Providing a framework for the effective and non-confrontational management of any type of emergency situation.

## **STATUTORY AUTHORITY and BACKGROUND**

Several NYS statutes provide public safety agencies and their personnel with the authority to conduct operations consistent with their responsibility to protect their citizens. These include providing services at and managing emergency conditions which may effect the health, safety or welfare of individuals and communities.

New York State statutes which define the responsibilities of public safety responders (police, fire and EMS) include the Public Health Law, General Municipal Law, County Law, Town Law, Village Law, Education Law, Penal Law and Criminal Procedures Law<sup>R</sup>.

These statutes have been extensively reviewed to determine the actual authorities, powers, duties and responsibilities of the agencies and individuals who may respond to prehospital EMS situations. *This research, concludes that the only individual in charge of patient care in the prehospital setting is the NYS certified patient care provider. Specific authority is also identified for the provision of medical control and the responsibility of ambulance and ALS First Response Services to a patient.* Additionally, while Education Law defines the scope of and authorizes the practice of medicine in general, it does not provide for or define patient care in the prehospital setting.

These statutes, which describe arrest powers for peace/police officers and the responsibilities of a fire chief during the response to a fire or explosion were adopted prior to EMS gaining formal recognition as an emergency response provider. The statutes are vague in detail and do not specifically address the responsibilities for providing patient care. *In the absence of other controlling statutes, Public Health Law, therefore, takes precedence in regard to the provision of prehospital emergency medical care.*

NYS statutes do not obligate an individual citizen, regardless of training, to respond to a situation or provide care unless there is a formal duty by job description or role expectation. Such a duty to act arises from participation with an agency having jurisdiction.

## **PROVIDING PATIENT CARE**

The provision of patient care is a responsibility given to certified and/or licensed individuals who have completed a medical training and evaluation program specified by the NYS Public Health or Education Laws and related regulations or policy. Prehospital certified providers (CFR, EMT, AEMT) are required to practice to the standards of the certifying agency (DOH) and the medical protocols authorized by the SEMAC and local REMACs. Additionally, responsibility is placed on authorized EMS agencies (Registered or Certified Ambulance, ALSFR) to insure their personnel provide care according to established standards and protocols.

Patient care takes place in many settings, some of which are hazardous or dangerous. Circumstances and the use of specialized equipment for extrication, disentanglement, decontamination, etc. can directly effect patient care and patient outcomes. The equipment and techniques used are the responsibility of locally designated, specially trained and qualified personnel. Emergency incident scenes may be under the control of designated incident commanders who are not emergency care providers. These individuals are generally responsible for scene administration, safe entry to a scene or decontamination of patients or responders. When access to a patient is restricted because of safety concerns or other limitations, *medical direction of patient care by certified EMS personnel is essential*. This can be provided by trained responders using appropriate personal protective equipment *or* by communicating instructions to those responders moving or extricating the patient.

## **STATEMENT OF POLICY**

Pursuant to the provisions of Public Health Law, the individual having the highest level of prehospital certification and who is responding with authority<sup>1</sup>, “has a duty to act” and therefore is responsible<sup>2</sup> for providing and/or directing emergency medical care and the transportation of a patient. Such care and direction shall be in accordance with all NYS standards of training, applicable State and Regional protocols and may be provided under direct medical control.

## **GUIDELINE FOR THE CONSTRUCTION OF REGIONAL PROTOCOLS**

### Rationale:

The REMAC is the local authority for prehospital patient care. Pursuant to PHL Section 3004-a, the REMAC “shall develop policies, procedures, and triage, treatment, and transportation protocols which address specific local conditions.” Protocols constructed in accordance with this policy will be restricted to medical care provided by, or directed by, Certified or Licensed medical personnel providing patient care in the prehospital setting. It is recognized that patient care may be provided in a variety of hazardous conditions and that overall scene command is the responsibility of locally designated officials (Police, Fire, Health, Municipal, etc.). The determination of overall responsibility is usually made by existing plans and/or the nature of the incident. It is also understood that all responders to an emergency situation bear a formal duty to the patient. The EMS System or EMS agency of jurisdiction is solely responsible for emergency medical care and the transportation of any patient, while overall scene command

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<sup>1</sup> Certified persons have NO authority or responsibility to respond independently. In NY there is no duty to act as an individual citizen, regardless of certification or licensure. Individuals may respond only as a part of an authorized agency’s response system and within an EMS system.

<sup>2</sup> Having an obligation, Webster’s II New Riverside Dictionary, 1984

and administration is the responsibility of the locally designated agency and/or official.

Any protocol developed by a REMAC in accordance with this policy, needs to receive input from, and should have consensus agreement by, the public safety agencies in that Region. Development in this manner will permit the protocol to be recognized as the authoritative source for identifying the responsible patient care provider and will permit the development of appropriate inter-agency agreements, understandings and training.

Regional protocol content:

Regional protocols addressing the provision of patient care and the coordination of prehospital resources should:

- Be consistent with SEMAC standards and this policy
- Identify agencies authorized as EMS providers
- Open with a statement of authority; e.g. Pursuant to Article 3004-A, the REMAC shall develop policies, procedures, and triage, treatment and transportation protocols ... etc.
- Recognize that a locally designated official may be in charge of overall scene command and administration and is responsible for the safety of all personnel
- Address patient care responsibilities *only* and define:
  - Who is in charge when two or more EMS providers with the same level of certification, from one or more agencies, are operating at the same scene
  - Who is in charge when two or more EMS agencies with jurisdiction are operating at the same scene
  - The transfer of patient care between two certified providers:

BLS FR	==>>	ALSFR or ambulance
BLS	==>>	ALS
ALS	==>>	BLS
ALS	==>>	higher ALS
ALSFR	==>>	ambulance
- Role and responsibility of physicians, nurses and other licensed medical personnel on a scene
- Identify all other applicable patient care protocols, the NYS Statewide BLS and any State or Regional ALS protocols.
- Include authority to request additional specialized EMS resources (e.g. air medical) with appropriate coordination.
- Include authority to determine transportation requirements and hospital or alternate destinations in accordance with applicable protocols
- Require visual identification for EMS providers
- Require proper documentation of patient care
- Specify any medical control
- Include any and all applicable policies or procedures unique to the Region
- Specify any quality improvement or incident review procedures

## **THE ROLE and USE OF INCIDENT COMMAND**

The Governor's Executive Order No. 26, of March 5, 1996<sup>R</sup>, establishes the National Interagency Incident Management System (NIIMS)<sup>R</sup> as the standard command and control system for emergency operations in New York State. The Incident Command System (ICS) does not define who is in charge, rather it defines an operational framework to manage many types of emergency situations. One essential component of ICS is Unified Command. Unified Command is used to manage situations involving multiple jurisdictions, multiple agencies or multiple technical needs. The principles of Unified Command apply equally to single vehicle MVA's or large scale incidents. The specific issues of the direction and provision of patient care and the associated communications among responders must be integrated into each single or unified command structure and be assigned to the appropriately trained personnel to carry out.

This policy supports ICS and provides for the best patient care within the practices of a well functioning ICS system. ICS and unified command should be used in circumstances of multiple agencies and/or jurisdictions to insure the best provision of patient care and the most effective coordination of resources.

## REFERENCES

Governor of N.Y., Executive Order 26, of March 5, 1996

National Interagency Incident Management System,  
Incident Command Training Curriculum

NYS Association of Fire Chief's, Fire Chief's Handbook 1997 Ed.

N.Y.S. Attorney Generals Informal Opinion 83-6

### Statutory References

Public Health Law, Article 30

10NYCRR800, State EMS Code

General Municipal Law 176a, 204b, 209

Education Law 6902

Criminal Procedures Law 1.2, 2.1, 2.2, 140, 150

NY Attorney General Opinion 81-106, 83-6

NY Town Law 158

NY Village Law 8-802, 10-1018

Public Officers Law 46

Executive Law 223

This policy statement of the Bureau of EMS has been developed in cooperation with the State Emergency Medical Services Council, State Emergency Medical Advisory Committee and has been reviewed and approved by the N.Y.S. Office of Fire Prevention and Control.





New York State  
Department of Health  
Bureau of Emergency Medical Services

### POLICY STATEMENT

*Supercedes/Updates:*

No. 98-09

Date: 09/01/98

Re: ALS Intercepts

Page 1 of 3

## INTRODUCTION

Advanced Life Support (ALS) is an essential level of out-of-hospital medical care. Various predictors indicate that under ordinary situations 5 to 25 percent of all calls in a system will be for patients in need of ALS care. It is important that every prehospital patient needing ALS care receive it without delay and that all are transported to definitive care at a hospital in a timely fashion.

The policy serves to:

- ◆ Define ALS intercepts.
- ◆ Define parameters for the utilization of ALS as well as to provide objectives every intercept should meet
  - \* Minimize delay in transporting patients to definitive care at a hospital.
  - \* Enhance the provision of patient care by maximizing the availability of ALS for those patients identified as being in need of ALS care.
  - \* Provide guidelines to assist in identifying and accessing the most appropriate ALS service at the time of request.
- ◆ Encourage REMACs to develop regional specific guidelines and protocols that enhance the availability of ALS and the appropriate use of ALS intercepts in the region.

## New York State Statewide BLS Protocol

In 1996, the NYS BLS protocols were changed to introduce the concept of ALS intercepts and their use as the principal method of providing ALS care to patients needing this level of care when the initial EMS system contact is a BLS ambulance.

The provision of ALS by intercept permits the appropriate utilization of ALS resources by identifying a hospital or ALS service as the nearest ALS provider at the time of need. Call location, staffed ALS unit availability and/or direction of travel will effect the decision.

### **Excerpt from NYS BLS Protocol:**

The goal of prehospital emergency medical care is DEFINITIVE CARE for the patient as rapidly and safely as the situation indicates with no deterioration of his/her condition and, when possible, in an improved condition. BLS units shall deliver their patients who will benefit from ALS care to this higher level of care as soon as possible. This may be accomplished either by intercepting with an ALS unit or by transport to an appropriate hospital, whichever can be effected more quickly.

A system of ALS intercept (when available within a given area) shall be pre-arranged. Formal written agreements for the request of ALS shall be developed in advance by those agencies not able to provide ALS.

A request for ALS intercept shall occur as noted in specific treatment protocols.

Initiation of patient transport shall not be delayed to await the arrival of an ALS unit, unless an on-line medical control physician otherwise directs.

### **Immediate Transport Decision:**

Determine patient status (CUPS):

Critical or Unstable --- Immediate transport

Potentially Unstable -- Secondary survey and transport

If the patient's condition dictates immediate transport, the vital signs, secondary assessment, and treatment should be completed en route to the nearest appropriate hospital (as defined below in Section VII, Transport).

Intercept with an ALS unit (if available) en route to the nearest appropriate hospital as noted in specific treatment protocols.

**Note: Do Not delay patient transport to await the arrival of an ALS unit.**

## **ALS Intercepts**

- ◆ An intercept is an authorized and staffed ALS unit, dispatched by request or protocol, meeting a BLS unit while it is en route to the nearest appropriate hospital.
- ◆ A BLS unit assesses the patient, determines the need for and requests ALS, packages and begins patient transport. The BLS unit shall not wait on the scene for the ALS unit's arrival. The request for ALS should be made as soon as the patient's condition is recognized as needing ALS.
- ◆ A hospital emergency department (ED) is the highest level of ALS medical care. Patients should be transported without delay to the nearest appropriate ED by the BLS unit. Definitive medical care can only be provided at a hospital ED.
- ◆ *ALS mutual aid is a misnomer and does not exist.* The statutory definition of mutual aid<sup>3</sup> as well as the need for priority transport makes the use of the term "mutual aid" inappropriate in these circumstances.

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<sup>3</sup> Reference NYS-EMS Policy 95-04, "EMS Mutual Aid"

- ◆ BLS services should identify ALS services in advance which are staffed and readily available to provide ALS intercept. More than one service may need to be identified if the BLS service regularly transports to more than one hospital. All formal response agreement needs to be established in advance. Dispatch entities should monitor actual staffing and operational status of ALS resources to insure their availability at the time of the call and minimize any potential delay. The use of the “closest unit” concept is appropriate to dispatch ALS units.
- ◆ All ALS patients should be transported to the hospital without delay by a BLS ambulance, particularly when the arrival of the ALS unit to the scene is estimated to be longer than the transport time to the hospital.
- ◆ In developing ALS intercept relationships, REMACs must consider the patient’s and ALS unit’s proximity to the hospital. Patient transport to an emergency department should not be delayed. BLS/ALS care should ideally be administered en route.
- ◆ Simultaneous dispatch of BLS and ALS resources should only be provided under the direction of dispatchers trained in the principals of emergency medical dispatch for those calls identified by a recognized dispatch algorithm.
- ◆ REMACs should develop protocols that permit a certified provider who arrives on the scene after the time of dispatch, to cancel initially dispatched ALS resources when, after assessment, it is determined that ALS care is not needed.

Issued:  
John J. Clair  
Associate Director - Operations Director

Authorized:  
Edward G. Wronski, Director





  
New York State  
Department of Health  
Bureau of Emergency Medical Services

**POLICY STATEMENT**  
*Supercedes/Updates: 85-13*

**No. 98-15**

**Date: 10/15/98**

**Re: Emergency Patient  
Destinations**

**Page 1 of 2**

**This policy is intended to clarify the responsibilities of an ambulance service in regard to the transportation destination of an emergency patient being transported by the service.**

### **BACKGROUND**

Article 30 of the Public Health Law defines an ambulance service to mean an individual, engaged in providing emergency medical care and the transportation of sick injured persons by motor vehicle, aircraft or other form of transportation to, from, or between facilities providing hospital services. Part 800, the State EMS code uses a similar definition. Neither state any requirement with regard to patient destinations.

The New York State Emergency Medical Services Council has made the following statements concerning the transport of emergency patients:

All ambulance patients can expect to be informed of the need to be taken to a medical facility capable of providing appropriate emergency medical care<sup>(1)</sup>.

The triage and transport of out of hospital patients must be based upon established principles of emergency medical practice, including pre-established state and regional medical protocols and guidelines. For any given patient, the appropriateness of the receiving facility to provide emergency care is a medical decision. Therefore, the direction or redirection of a transporting vehicle cannot be made without medical approval based upon established Regional Emergency Medical Services System protocols<sup>(2)</sup>.

### **POLICY**

It is the expressed policy of the Department that a patient, in need of emergency medical care be taken to the nearest appropriate health care facility capable of treating the illness, disability or injury of the patient. Ambulance services are under no obligation to transport patients to medical facilities not licensed under Article 28 of the Public Health Law. Ambulance services *may* make transports to facilities such as physicians' offices, HMO's, MCO's, or other destinations. However, the ambulance crew must be aware of the emergency care capabilities of such facilities at the time of the patient request.

A patient's choice of hospital or other facility should be complied with unless contraindicated by state, regional or system/service protocol or the assessment by a certified EMS provider shows that complying with the patient's request would be injurious or cause further harm to the patient. Patient transfer can be arranged

following emergency care and stabilization. In such cases, the EMT should fully document the patient's request and the reasons for the alternate destination decision, including any medical control consultation.

### **DIVERSION REQUESTS**

A hospital may notify the EMS community of its temporary inability to provide care in the emergency department (ED) and request ambulances divert patients to an alternate hospital facility. This request may be honored by EMS providers. A diversion request does not mean the hospital ED is closed but usually means the current emergency patient load exceeds the Emergency Department's ability to handle additional patients promptly. If the patient's condition is unstable and the hospital requesting diversion is the closest appropriate hospital, ambulance service personnel should notify the hospital of the patient's condition and expected arrival. This procedure should also be followed when a patient demands transport to a facility on diversion. The hospital may not refuse care for a patient presented.

#### Endnote:

1. Ambulance Patient's Bill of Rights, NYSEMS Council, 1998 Emergency Medical Services Plan
2. Access to Emergency Care in a Managed Care Environment, NYSEMS Council, 1998 Emergency Medical Services Plan

Issued by: John J. Clair, Associate Director - Operations  
Authorized by: Edward G. Wronski, Director



New York State  
Department of Health  
Bureau of Emergency Medical Services

**POLICY STATEMENT**

*Supersedes/Updates:* 84-22 Bee Sting Policy

**No. 99 - 01**

**Date: 2/2/99**

**Re: CFRasic Assisted Medications**

**Page 1 of 2**

## CFRs ASSISTING A PATIENT IN TAKING THEIR OWN PRE-PRESCRIBED MEDICATION(S)

### **Nitroglycerin (tablet or spray), Bronchodilator (inhaler), Epinephrine (auto-injector)**

#### **Definitions:**

1. Pre-prescribed medications are those medications that are prescribed for a specific patient prior to an emergency and are present at the scene of the emergency.

2. "Assisting" means delivering a patient's pre-prescribed medication, regardless of who delivers the medication.

#### **Procedure:**

1. A certified CFR should deliver pre-prescribed nitroglycerin or a bronchodilator to a patient if the patient indicates (verbally, by gesture, etc.) their desire to take their medication and the delivery of such medication is not contraindicated by protocol or the CFR's training. If there is any question, contact Medical Control.

[NOTE: There is no circumstance when it would be proper to deliver either nitroglycerin or a bronchodilator to a patient who can not indicate their desire to take their pre-prescribed medication. As stated, this procedure prevents an CFR from delivering either of these medications to an unconscious or unwilling patient. The contraindication statement is added for cases where the patient indicates their desire to take their medication but it is contraindicated.]

2. A certified CFR should deliver pre-prescribed Epinephrine to a patient who exhibits signs/symptoms consistent with the indications for the medication and the medication is not contraindicated by protocol or the CFR's training. If there is any question, contact Medical Control.

[NOTE: There are many scenarios in which the patient may not be able to indicate their desire to take their pre-prescribed Epinephrine and the CFR must make the decision to do so. CFRs are trained to recognize the signs and symptoms of

anaphylaxis and the contraindications for epinephrine. In cases of an allergic reaction, as opposed to anaphylaxis, the patient should be able to participate in the decision and the delivery of the epinephrine.]

### **Special Circumstances**

Experience has shown that "assisted medications" may not be labeled with the patient's name on the container, inhaler or auto-injector carried by the patient. In this circumstance if the patient indicates a desire to take the medication, the medication has been identified as being the patient's pre-prescribed medication by a claim or an appearance (is in the patient's pocket or purse, etc), the patient exhibits signs/symptoms consistent with the indications for the medication, the medication is not contraindicated by protocol or the CFR's training, the CFR should assist in delivering the medication. In addition, the container, inhaler or auto-injector may not be labeled with the name of the medication. In no case should an CFR assist in the delivery of a medication from a container, inhaler, or auto-injector that is not labeled with the name of the medication. In cases where the label indicates that the medication is outdated, the CFR must contact Medical Control for direction. If there is any question, contact Medical Control.

**[NOTE: Signs/symptoms and indications for the assisted medication are part of the CFR curriculum.]**

Developed by:  
New York State Emergency Medical Advisory Committee

Issued by:  
Bureau of Emergency Medical Services  
New York State Department of Health





New York State  
Department of Health  
Bureau of Emergency Medical Services

**POLICY STATEMENT**

*Supersedes/Updates: 98 - 19*

**No. 99 – 06**

**Date: 9/1/99**

**Re:**

**Exposure to  
Blood and/or  
Body Fluids**

**Page 1 of 5**

## **GUIDELINES FOR EXPOSURE TO BLOOD AND/OR BODY SECRETIONS**

### **BACKGROUND**

The New York State Department of Health receives many requests for guidance in the area of infection control from emergency medical service (EMS) personnel who may be exposed to contaminated or potentially contaminated blood or body secretions.

**For many years the medical community has been aware of problems caused by human immunodeficiency virus (HIV) and has more recently identified the hepatitis C (HVC) virus as a potential problem.**

This policy statement, developed with the assistance of the Department's Wadsworth Center for Laboratories and Research, updates the information published in previous versions of this policy.

### **UNIVERSAL PRECAUTIONS**

These guidelines are intended to prevent or minimize exposure to the transmission of bloodborne infectious diseases, particularly HIV and viral hepatitis, to employees whose duties put them at risk. All emergency medical services organizations should ensure full implementation of universal precautions and body substance isolation<sup>4</sup> (BSI) techniques, and require immunization of all employees<sup>5</sup> who are identified as being at risk.

According to the U.S. Department of Labor, Occupational Safety and Health Administration, "universal precautions" refers to the method of infection control in which all human blood and certain human blood fluids are treated as if known to be infectious for bloodborne pathogens. Universal precautions are to be observed in all situations where there is a potential for contact with blood or other potentially infectious material. In emergency situations, differentiating between body fluid types is difficult or impossible, and all body fluids are to be considered potentially infectious. Universal precautions and BSI techniques must be applied correctly and consistently, to provide a very low incidence of worker exposure to HIV and various hepatitis viruses.

### **BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN**

EMS services are encouraged to review, with their medical director, the service exposure control plan and the federal Bloodborne Pathogen Regulations, 29CFR Part 1910.1030, to ensure that all appropriate and required actions are taken with regard to EMS personnel education and training, personal protective equipment, the use of new safer equipment, particularly for sharps, pre-exposure vaccination and post-exposure follow-up.

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<sup>4</sup> Body substance isolation – an infection control concept and practice that assumes that all body fluids are potentially infectious. Emergency Care and Transportation of the Sick and Injured, AAOS 7<sup>th</sup> Edition 1998

<sup>5</sup> For these purposes, employee means volunteer and paid individuals who act on behalf of the EMS service.

Issued:  
John J. Clair  
Assoc. Director – Operations

Authorized:  
Edward G. Wronski  
Director

## **SAMPLE OPERATING PROCEDURE**

The Department recommends these sample operating procedures be included in EMS service exposure control plans.

### **What to Report**

EMS personnel should *immediately* report to their supervisor all percutaneous, nonintact skin or mucous membrane contact with blood or body secretions; and supervisors should refer exposed employees for immediate medical attention.

### **Initial Response**

- *Thoroughly cleanse area of exposure. (See below for cleansing instructions.)*
- Seek immediate attention and exposure evaluation.
- Review the exposed employee's immunization history.
- Refer the exposed employee for appropriate medical evaluation, care and any necessary post exposure follow up treatment.
- Have the exposed employee's supervisor complete necessary documentation and required reports. (See below for administrative responsibilities).

### **Testing**

- Have service designated officer (DO) seek any existing information on the source..
- Inform the patient of applicable laws and regulations concerning disclosing the identity and infectious status of the source individual.
- Have the *source individual's* blood tested for HIV and the various forms of hepatitis as soon as consent has been obtained.
- Test the *exposed employee* for HIV and the various forms of hepatitis.

### **Notification and Counseling**

Share test results with the exposed employee, who should also be counseled about his or her health status and, if necessary, treatment options.

### **Wound Cleansing**

- For a puncture cleanse with betadine immediately and follow up by soaking the site for five minutes in a solution of betadine and sterile water.
- For skin contact, first wash the area with soap and water. Then, clean it with betadine.
- For mucous membranes: if in mouth, rinse out mouth with large quantity of tap water; if eyes, flush with water from eyewash. If eyewash is not available, use tap water.

### **Administrative Responsibilities**

*Once the area of contact has been cleansed, and the exposed employee referred for further medical treatment, the supervisor should do all paperwork needed to document the incident. He or she should:*

- Direct the member/employee to the appropriate location for evaluation and immediate medical treatment.
- Prepare an incident report and note the incident on the prehospital care report for the call in which the exposure took place.
- Advise the employee to initiate a Workers' Compensation claim.
- Verify that appropriate employee health records have been updated.
- Follow-up on the employee's medical care, and confirm that appropriate medical care has been given.

## **Testing Guidelines**

Supervisors should arrange to have the *source individual's* blood tested for HIV and various forms of hepatitis as soon as possible after consent has been obtained. If the source individual is unable or unwilling to give consent, the EMS organization should consider seeking the legal authority to act without his or her consent. If it is impossible to draw blood from the source individual, but some other sample of his or her blood is available, this should be used. (If the source individual is already known to be infected with one or more bloodborne pathogens, the test for that pathogen may be omitted.)

Supervisors should ask the *exposed employee* for his or her permission to begin baseline blood tests for HIV and various forms of hepatitis. This should be done as soon as possible after exposure. Follow-up testing for HIV should take place at six weeks, 12 weeks, 26 weeks and 52 weeks after exposure.

## **Treatment Possibilities**

HIV prophylaxis may include the administration of antiretroviral treatment. Highly active retroviral therapy (HAART) should be initiated as soon as possible, preferably within one hour following exposure, particularly if the EMS provider is HIV negative and the source is HIV positive or at risk.

The risk of transmission of hepatitis B (HBV) or hepatitis C (HCV) is significantly greater than the risk of transmission of HIV. Chronic HBV infection can be prevented in the nonimmune employee by administration of prophylactic hepatitis B immune globulin (HBIG) and the hepatitis B vaccine series. There is no known effective prophylaxis for HCV. The exposed employee should be referred for medical management to a specialist knowledgeable in this area. Obtained baseline HCV serology should be repeated in four to six months.

In cases of possible HBV infection, use the attached treatment protocol, developed and recommended by the Wadsworth Center.

Because the treatment of pregnant woman can present special medical problems, medical personnel treating women who may be pregnant should implement appropriate additional safeguards.



New York State  
Department of Health  
Bureau of Emergency Medical Services

## POLICY STATEMENT

*Supercedes/Updates:*

No. 99 – 09  
Date: 11/24/99  
Re: Patient Care  
and Consent  
for Minors

Page 1 of 4

It is the purpose of this policy to clarify the legal issues surrounding consent to medical care and/or the refusal of care by minors in the pre-hospital EMS setting. Emergency Medical Services (EMS) providers are often presented with patients who are considered by law to be minors. The issue of providing care and/or the patient's right to refuse care becomes a complex circumstance EMS providers must address. In the prehospital situation the issue at hand is not usually providing care but rather the failure to treat.

## Legal Background

A minor, in New York State, is defined as a person who is under eighteen (18) years of age. This is defined by the General Obligations Law 1-202, Domestic Relations Law 2 and Public Health Law 2504. Under this section of Public Health Law, a person who is eighteen or older may give effective consent for health care.

### *Public Health Law 2504*

#### ***Enabling certain persons to consent for certain medical, dental, health and hospital services.***

- 1. Any person who is eighteen years of age or older, or is the parent of a child or has married, may give effective consent for medical, dental, health and hospital services for himself or herself, and the consent of no other person shall be necessary.***
  
- 2. Any person who has been married or who has borne a child may give effective consent for medical, dental, health and hospital services for his or her child.*
  
- 3. Any person who is pregnant may give effective consent for medical, dental, health and hospital services relating to prenatal care.*
  
- 4. Medical, dental, health and hospital services may be rendered to persons of any age without the consent of a parent or legal guardian when, in the physician's judgment an emergency exists and the person is in immediate need of medical attention and an attempt to secure consent would result in delay of treatment which would increase the risk to the person's life or health.*

*5. Anyone who acts in good faith based on the representation by a person that he is eligible to consent pursuant to the terms of this section shall be deemed to have received effective consent.*

In addition to these provisions for health care consent by 'emancipated' individuals, there are other statutory provisions for minors who are in military service or are seeking treatment for AIDS (PHL 2781) and other sexually transmitted diseases (PHL 2305). So long as the individual is a minor, the presumption is that he or she is not emancipated and the burden of proof rests on the individual asserting it.

The Mental Hygiene Law also addresses consent but for situations not usually within the scope of EMS. Additionally in §9.41 it permits peace and police officers to 'direct the removal of any person to a hospital who is conducting himself in such a manner which is likely to result in serious harm to himself or others'.

Other governmental agencies, such as law enforcement, mental health or corrections, may have legal definitions for individuals under eighteen that describe specific rights or responsibilities. Unfortunately, these do not impact health care decisions including the ability to consent or refuse care in the prehospital setting.

### **Refusal of Medical Assistance (RMA)**

An individual who is legally a minor cannot give effective legal/informed consent to treatment and therefore, conversely, cannot legally refuse treatment.

### Documentation

**Complete an assessment of the patient. Fully document all circumstances including subjective and objective findings, attempts to contact parents, note any objections or refusals by the patient and all other pertinent situational facts. Include witness statements. Always consider contacting medical control for assistance.**

### **Collaboration with other Agencies**

EMS agencies are advised to work with hospital administrators, local law enforcement agencies, school administrators and community youth group leaders to develop policies and procedures to best serve the medical needs of minors in time of an emergency.

There are alternatives to EMS and hospitals for custody and supervision of minors. An uninjured child **may** be supervised by law enforcement personnel or a school or activity (soccer, etc.) supervisor until a parent is contacted. In some situations, a responsible adult (grandparent, aunt, brother, etc.) with the child can assist in the decisions making.

EMS agencies should work with local youth activities to ensure they have made plans to contact parents, have provided consent to treatment forms or have other permissions in place for the children in their supervision.

EMS agencies also need to work and plan with all police agencies for those situations involving minors, particularly those who are not injured and do not require hospitalization. Local and state police have

broad powers which can be used to protect minors and facilitate custody. However, all else failing, the EMS provider may remain responsible for providing care and/or transportation of a minor to a hospital.

## **EMS Agency Protocols**

Agency policies and regional BLS and ALS protocol sets can contain guidance for treating minors in the prehospital setting. Contacting medical control is always an acceptable option for EMS providers faced with uncertain situations. Medical control may be able to influence the situation, even if it can't change the consent options.

### **Recommendations**

**EMS providers may find themselves responsible for minors, in situations they have been called to when there is no parent or guardian present or reachable.**

Although it is easy to determine a legal definition of a minor, the responsibility to treat or release is a much more complex legal, ethical, social and public relations problem. The

nature of children and their special needs coupled with their inability to legally give informed consent, present special and unique matters for EMS personnel to consider and evaluate. Careful assessment, decision making and documentation are key as is discussion and planning with other agencies.

*Act in the best interest of the patient* – EMS providers must strike a balance between abandoning the patient and forcing care. There may be instances in which a minor appears mature enough to make an independent judgment, however legally, the minor is unable to make a decision. Always contact medical control for assistance if there is any question !

**Common sense, prior agreements, sufficient documentation, and acting in the best interest of the patient must prevail.**

Issued:  
John J. Clair  
Associate Director – Operations

Authorized:  
Edward G. Wronski  
Director







New York State  
Department of Health  
Bureau of Emergency Medical Services

### POLICY STATEMENT

*Supercedes/Updates:*

No. 00 - 01

Date: 4/10/00

Re:

Use of  
Epinephrine  
Auto Injectors By EMS  
Agencies

Page 1 of 2

## BACKGROUND

The purpose of this policy is to explain the provisions of Chapter 578 of the Laws of 1999 authorizing the use of an epinephrine auto injector device by certain individuals in ambulance and advanced life support services and childrens' overnight, summer day or traveling camps. This change in the law is designed to encourage greater acquisition and use of epinephrine auto injectors in communities across the state in an effort to reduce the number of deaths associated with anaphylaxis from increased sensitivity to insects and certain food substances.

## AUTHORIZATION

To be authorized to possess and use an epinephrine auto injector under this statute an individual or organization as defined above needs to make specific notification of intent to the local Regional Emergency Medical Services Council (REMSCO) and the Department of Health (DOH). *There are no approvals or certifications required.*

To be authorized to possess and use an epinephrine auto injector:

- Identify a physician or hospital knowledgeable and experienced in emergency cardiac care to serve as "emergency health care provider (EHCP)" and participate in a collaborative agreement. (This may be the EMS service's medical director)
- Complete a training course approved by the Commissioner of Health (Attachment 1).
- Develop with the EHCP, a written collaborative agreement which shall include at least the following:
  - written practice protocols for the use of the epinephrine auto injector;
  - written policies and procedures for the training of authorized users;
  - notice to the EHCP of the use of the epinephrine auto injector;
  - documentation of the use of the epinephrine auto injector;
  - written policy and procedure for acquisition, storage, accounting, and proper disposal of used auto-injectors.
- Provide written notice to 911 and/or the community equivalent ambulance dispatch entity of the availability of epinephrine auto injectors at the organization's location.
- File with the REMSCO serving the area a copy of the "Notice of Intent to Possess and use an Epinephrine Auto Injector (DOH-4188) along with a signed copy of the Collaborative Agreement.
- File a new Collaborative Agreement with the REMSCO if the EHCP changes or with a change in content of the agreement.

**REMSCO Actions**

REMSCOs must develop a procedure for the following:

- insuring that a copy of the organization's "Notice of Intent ... (DOH-4188)" is forwarded to the Bureau of EMS.
- maintaining a copy of the "Notice of Intent... (DOH-4188) and the Collaborative Agreement.

*There are no approvals or certifications required by the REMSCO.*

Authorized:

Edward G. Wronski  
Director



New York State  
Department of Health  
**Bureau of Emergency Medical Services**

**POLICY STATEMENT**

*Supercedes/Updates:* New Policy

**No. 00-03**

**Date: 05/19/00**

**Re:**

**Transition of Care**

**Page 1 of 2**

### **Transition of Care**

With the passage of Chapter 552 of the Laws of 1998 (**Public Access Defibrillation**) and more recently, Chapter 578 of the Laws of 1999 (**Epinephrine Auto-Injector**), EMS Providers will increasingly encounter situations where a patient has been defibrillated or administered epinephrine, prior to the arrival of EMS, by a non-license/non-certified "first responder." It is important that there be a smooth and orderly "transition of care" between civilians and EMS providers as well as between EMS providers of different levels. This includes the transfer of information and continuation of appropriate care.

### **Public Access Defibrillation**

When arriving at a call where a patient is being treated by a "first responder" with an AED, the EMS Provider should immediately confirm the patient's status (responsive, unresponsive, apneic, pulseless, etc.), and determine if a "shock" is indicated. Treat the patient appropriately, request ALS if available and prepare for immediate transport. The "first responder's" AED should remain on the patient until a full cycle of the AED has been completed. The AED and/or pads are usually changed when the patient is ready for transport or upon treatment by an ALS provider.

For patients where "no shock" is indicated, the EMS Provider should continue CPR (verify that CPR is being performed correctly) and prepare for immediate transport.

For patients where a "shock" is indicated, the EMS Provider should administer a complete set of 3 "shocks" and prepare for immediate transport.

If the EMS unit does not have a defibrillator/AED, the "first responder" should accompany the patient to the hospital, follow regional protocols and provide CPR as indicated (the ambulance should pull over and stop when analyzing and shocking the patient).

The EMS Provider should attempt to gather the following information:

1. how long the patient has been down,
2. when was CPR initiated,
3. when was the patient first "shocked,"
4. how many "shocks" the patient has received, and
5. any pertinent patient history that is available.

**Transition of Care**  
**Policy 00-03**  
**05/19/00**

**Epinephrine Auto-Injector for Anaphylactic Reactions with Respiratory Distress or Shock**

When arriving on the scene of a patient experiencing an anaphylactic reaction, if the patient is being treated by a "first responder" who has administered epinephrine by an auto-injector, the EMS Provider should immediately confirm the patient's status. The EMS Provider should pay close attention to the patient's airway, respiratory distress and any signs or symptoms of hypoperfusion (shock). Treat the patient appropriately, request ALS if available and prepare for immediate transport.

The EMS Provider should attempt to gather the following information:

1. determine the substance the patient was exposed to,
2. how long ago the exposure occurred,
3. the initial symptoms the patient reported,
4. the time and dosage of the epinephrine administered,
5. the name of the individual who administered it, and
6. the patient's response to the treatment.

Medical Control must be contacted prior to administering a second epinephrine injection.

Authorized: Edward G. Wronski, Director



### Purpose

Due to the unique nature of the prehospital environment, medications and intravenous fluids that are stored and used in the prehospital setting are subjected to extreme environmental changes. This may have a negative impact on the stability, strength, quality and purity of these medications. Ultimately this may negatively impact the patients who receive these medications. As such, programs should be implemented with regards to how medications and intravenous solutions are stored in the prehospital setting. This policy applies to all BLS and ALS agencies that carry medications and/or intravenous fluids.

### Policy

In an effort to assist agencies in maintaining the integrity of prehospital medications and intravenous fluids, the following should be the **minimum** requirements implemented by each service authorized to carry prehospital medications and intravenous fluids.

- All EMS services authorized to carry medications and intravenous fluids must develop a policy to define the appropriate storage and maintenance of all medications and intravenous fluids. The policy should also be incorporated in to the agency's policies and procedures as well as the QI program for the agency.
- All medications and intravenous fluids must be stored in an environment that protects them from extreme temperature changes and light according to each medication's manufacturer's guidelines. This includes all vehicles, cabinets or any other storage facilities where medications and intravenous fluids are stored. According to manufacturer's guidelines, most medications must be stored at temperatures that range from 59 degrees to 77 degrees Fahrenheit<sup>6</sup>. However, the temperature ranges may differ for many medications.

- Agencies must routinely monitor and record the temperatures for all locations where medications and intravenous solutions are stored.

Authorized by: Edward G. Wronski, Director



### Purpose

**The medications approved for use by CFRs are considered to be a lifesaving measure. As such, care should be taken to allow for immediate access, while safe guarding the medications when not caring for a patient. This policy is developed to address concerns regarding the storage and safe guarding of medications that may be administered in accordance with state and local BLS protocols by CFRs.**

### Policy

**It is recommended that all EMS services carrying medications for use by CFRs develop a policy before placing them into use that includes, but may not be limited to the following items; inventory control, storage and replacement of these items.**

In an effort to assist agencies in maintaining control of the medications that may be administered by CFRs, the following should be the minimum requirements implemented by each service providing this level of care.

- ❑ The medications must be stored in an environment that protects them from extreme temperature changes and light. According to the medication manufacturer's guidelines, the medications must be stored at temperatures that range from 59 degrees to 77 degrees<sup>7</sup>.
- ❑ All medications must be secured in a container or location capable of being secured with a lock or numbered tear-away-type inventory control tag when not being used for patient care.
- ❑ The medication must be placed in either a closed ambulance compartment or inside a bag or box that is taken to the patient.

- It is strongly recommended that these medications not be placed in the same locked cabinet with medications, syringes or needles used by Advanced Life Support Providers.

Authorized by: Edward G. Wronski, Director





New York State  
Department of Health  
Bureau of Emergency Medical Services

**POLICY STATEMENT**

*Supersedes/Updates:* New

**No. 01 - 05**

**Date: 06/1/01**

**Re: Abandoned Infant  
Protection Act**

**Page 1 of 2**

**Background Information**

The **Abandoned Infant Protection Act** was created in Chapter 156 of the Laws of 2000. Under this provision a parent, guardian or other legally responsible person may leave their infant (who must be five days old or less) at a safe place. The law requires that an adult must intend that the child be safe from physical injury, cared for in an appropriate manner, with an appropriate person, in a suitable location and promptly notify an appropriate person of the child's location. People leaving an infant in compliance with this law are not required to provide their names. Such individuals will not be prosecuted as a class E felony of Abandonment of a Child and class A misdemeanor of Endangering the Welfare of a Child.

The governing legislation did not specify or define what is an acceptable safe location. Instead, local district attorneys are to determine whether the parent left the child in an appropriate location. Individuals who give up their infants do not automatically surrender their parental rights; and may later seek to reclaim the child. It is important to note that this legislation does not amend provisions of the Social Services law which make abandonment of an infant reportable to the New York State Central Register for Child Abuse and Maltreatment.

The New York State Office of Children and Family Services has released several Public Service Announcements and brochures about this program. In these materials; the public is provided with the intent of the new law; including a listing of suggested safe places where infants may be brought. The sites include hospitals, police stations, fire stations and other safe places. Some county district attorneys have already defined what constitutes a safe place within their county. Other counties have not yet done so.

## Role of Emergency Medical Services Agencies

### **In the event a parent or legal guardian chooses to relinquish care of their newborn infant to an emergency medical service agency; the following guidelines should be considered:**

1. In keeping with the intent of the governing legislation; parents are not required to provide their names to the safe location or staff. In a non-judgmental manner, EMS staff may ask the presenting adult if there is any medical information that is important to know in the care of the infant.
2. EMS services and systems may want to contact their county Office of the District Attorney to determine what if any locations have been identified as “safe places” by the District Attorney for the purposes of this legislation.
3. Infants received by an EMS service agency should be transported to the nearest hospital for medical assessment/care. EMS agencies should not be expected to interact with local child protection service agencies unless directed to do so.
4. If a parent seeks follow up information about the child they relinquished to the care of the EMS service agency; a referral should be made to the hospital where the infant was transported or the local office of social services.

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### **Further Information**

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Information about this program may be obtained by contacting:

New York State Office of Children and Family Services  
**Capital View Office Park**  
52 Washington Street  
Rensselaer, New York 12144

1-800-345-SAFE  
<http://www.dfa.state.ny.us>

Issued by  
Edward Wronski, Director  
Bureau of Emergency Medical Services



New York State  
Department of Health  
Bureau of Emergency Medical Services

### POLICY STATEMENT

*Supercedes/Updates:*

No. 02 - 01

Date: 01/02/02

**Re: Requirement to report instances of suspected child abuse or maltreatment.**

Page 1 of 7

On November 13<sup>th</sup>, 2001 § 413 of the Social Services Law was amended, in relation to persons and officials who are required to report cases of suspected child abuse or maltreatment. Effective February 1<sup>st</sup>, 2002 the law will require Emergency Medical Technicians to report suspected child abuse they come across while performing their jobs. ***The Bureau of EMS will not require EMTs to attend a specialized course for child abuse.*** The current EMS course curricula include sections on child abuse. However, the Bureau does reserve the right to amend the curricula in the future. Therefore, this Policy Statement and attached fact sheet are intended to be used by New York State EMTs to help them better understand their obligations as well as the signs and symptoms of possible child abuse or maltreatment.

#### **Reporting Procedures:**

§ 415 of the Social Services Law states that, *“Reports of suspected child abuse or maltreatment made pursuant to this title shall be made immediately by telephone or by telephone facsimile machine on a form supplied by the commissioner. Oral reports shall be followed by a report in writing within forty-eight hours after such oral report. Oral reports shall be made to the statewide central register of child abuse and maltreatment unless the appropriate local plan for the provision of child protective services provides that oral reports should be made to the local child protective service.”*<sup>1</sup>

**Oral Reports of suspected child abuse or maltreatment shall be made by calling the NYS Child Abuse and Maltreatment Register at:**

**1-800-635-1522**

**NOTE: This phone number is for mandated reporters ONLY and should NOT be provided to the general public.**

- All oral reports must be followed up with a written report within 48 hours using Form DSS-2221-A, “Report of Suspected Child Abuse or Maltreatment” (Attached).
- A copy of the completed and submitted Form DSS-2221-A should be attached to the agency copy of the Prehospital Care Report retained by the agency.

#### **Agency Policies**

10 NYCRR Part 800.21(p)(11)(ii) requires all ambulance services to have and enforce a written policy regarding the reporting of child abuse. Based on the addition to §413 of Social Services Law all services should ensure that the policy developed regarding this requirement includes the mandatory reporting requirement and the process required by Social Services Law § 415. The agency policy needs to address areas such as Prehospital Care Report documentation, notifying the Emergency Room staff, calling the above 800 telephone number, and the completion of form DSS-2221-A.

## **Immunity From Liability**

Immunity from liability for reporting cases of suspected child abuse or maltreatment is provided to those individuals required to report such cases under § 419 of the Social Services Law so long as the individual was acting in, “good faith”.

## **Failure To Report**

**§ 420 Of the Social Services Law states:**

- 1. Any person, official or institution required by this title to report a case of suspected child abuse or maltreatment who willfully fails to do so shall be guilty of a class A misdemeanor.**
- 2. Any person, official or institution required by this title to report a case of suspected child abuse or maltreatment who knowingly and willfully fails to do so shall be civilly liable for the damages proximately caused by such failure.**

### **Attachments:**

**Child Abuse/Maltreatment Fact Sheet  
Form DSS-2221-A**

**Issued and Authorized by:  
Edward G. Wronski, Director  
Bureau of Emergency Medical Services**

<sup>i</sup> Pertains to Onondoga and Monroe Counties Only

# Child Abuse and Maltreatment

## Fact Sheet

This fact sheet is intended to be used by New York State EMTs as a learning tool and guide to help them better understand the signs and symptoms of possible child abuse or maltreatment. **The signs and indicators listed in this document are not conclusive proof of child abuse or maltreatment. There can be other, reasonable explanations for what you observe.**

### Definition of Child Abuse:

An “abused child” is a child less than eighteen (18) years of age whose parent or other person legally responsible for his/her care:

1. Inflicts or allows to be inflicted upon the child serious physical injury, or
2. Creates or allows to be created a substantial risk of physical injury, or
3. Commits or allows to be committed against the child a sexual offense as defined in the penal law.

### Definition of Child Maltreatment:

A “maltreated child” is a child under eighteen (18) years of age who has had serious physical injury inflicted upon him/her by other than accidental means.

A “maltreated child” is also a child under eighteen (18) years of age whose physical, mental or emotional condition has been impaired or is in danger of becoming impaired as a result of the failure of his/her parent or other person legally responsible for his/her care to exercise a minimum degree of care:

1. In supplying the child with adequate food, clothing, shelter, education, medical or surgical care, though financially able to do so or offered financial or other reasonable means to do so; or
2. In providing the child with proper supervision or guardianship; or
3. By unreasonable inflicting, or allowing to be inflicted, harm or substantial risk thereof, including the infliction of excessive corporal punishment; or
4. By using a drug or drugs; or
5. By using alcoholic beverages to the extent that he/she loses self-control of his/her actions; or
6. By any other acts of a similarly serious nature requiring the aid of the Family Court.

### Some of the physical indicators of possible child abuse:

- ◆ Bruises in different stages of healing, welts, or bite marks on face, lips, mouth, neck, wrist, thighs, ankles, or torso, or on several area of the body such as:
  - ✓ Injuries to both eyes or both cheeks (usually only one side of the face is injured in an accident)
  - ✓ Marks that are clustered, that form regular patterns, that reflect the shape of such articles as an electrical cord, belt buckle, fork tines, or human teeth.
  - ✓ Grab marks on the arms or shoulders; and/or
  - ✓ Bizarre marks, such as permanent tattoos

- ◆ Lacerations or abrasions to mouth, lips, gums, eyes, external genitalia, arms, legs, or torso.
- ◆ Burns:
  - ✓ From cigars or cigarettes, especially on soles, palms, back, or buttocks.
  - ✓ From immersion in scalding water (socklike or glovelike on feet or on hands, doughnut-shaped on buttocks or genitalia)
  - ✓ That are patterned like an object, such as an iron or electric burner; burns from ropes on arms, legs, neck, or torso.
- ◆ Any fractures:
  - ✓ Multiple or spiral, of the long bones, to skull, nose, or facial structure.
  - ✓ Other injuries, such as dislocation.
- ◆ Head Injuries:
  - ✓ Absence of hair or hemorrhage beneath the scalp from hairpulling.
  - ✓ Subdural hematomas
  - ✓ Retinal hemorrhage or detachment, from shaking
  - ✓ Eye injuries
  - ✓ Jaw and nasal fractures
  - ✓ Tooth or frenulum injury
- ◆ Symptoms that suggest fabricated or induced illness, sometimes known as Munchausen Syndrome by Proxy (MSP); for example, a parent might be repeatedly feeding a child quantities of laxatives sufficient to cause diarrhea, dehydration, or hospitalization, without revealing the child has been medicated.

**Some of the emotional and behavioral signs of possible child abuse:**

- ✓ Apprehension when other children cry
- ✓ Aggressiveness
- ✓ Withdrawal
- ✓ Fear of going home
- ✓ Fear of parents and other adults
- ✓ Extreme mood swings
- ✓ Inappropriate mood
- ✓ Habit disorder, such as nail-biting
- ✓ Low self-esteem
- ✓ Neuroses, such as hypochondria, obsessions
- ✓ Refusal to remove outer garments
- ✓ Attempted suicide

**Some of the physical signs of possible child neglect:**

- ✓ Newborn with positive toxicology for drugs
- ✓ Lags in physical development
- ✓ Constant hunger
- ✓ Speech disorder
- ✓ Poor hygiene
- ✓ Inappropriate dress for the season
- ✓ Lack of medical care
- ✓ Inadequate supervision

**Some of the emotional and behavioral indicators of possible child neglect:**

- ✓ Chronic fatigue
- ✓ Habit disorder, such as thumb-sucking by a ten-year-old, rocking, biting
- ✓ Reports no caregiver at home
- ✓ Frequent absences from school or lateness
- ✓ Hypochondria
- ✓ Shifts from complaint to aggressive behavior
- ✓ Age-inappropriate behavior
- ✓ Begging for food
- ✓ Lags in emotional or mental development
- ✓ Use of alcohol or drugs

**Some of the signs of possible child sexual abuse:**

- ✓ Difficulty in walking and sitting
- ✓ Pain or itching in the genital area
- ✓ Torn, stained, or bloody underclothing
- ✓ Bruises or bleeding of external genitalia or vaginal or anal areas
- ✓ Bruises to the hard or soft palate
- ✓ Sexually transmitted diseases, especially in preteens
- ✓ Painful discharge of urine or repeated urinary infections
- ✓ Foreign bodies in the vagina or the rectum
- ✓ Pregnancy, especially in early adolescence

**Some emotional and behavioral signs of possible child sexual abuse:**

Many of the following indicators may also reflect problems unrelated to sexual abuse. Moreover, no one child will show all of these signs.

*Particularly in children who are less than eight years of age look for:*

- |  |   |
|--|---|
| ✓ Eating disorders                                     | ✓ Crying spells   |
| ✓ Fear of sleeping alone                               | ✓ Hyperactivity   |
| ✓ Enuresis (bed wetting at night or daytime accidents) | ✓ Change in school behavior (fear of school, drop in grades, trouble concentrating) |
| ✓ Separation anxiety                                   | ✓ Regular tantrums  |
| ✓ Thumb or object sucking                              | ✓ Excessive fear (including of men or women)  |
| ✓ Encopresis (soiling)                                 | ✓ Nightmares or night terrors   |
| ✓ Language regression                                  | ✓ Sadness or depression   |
| ✓ Sexual talk  | ✓ Suicidal thoughts   |
| ✓ Excessive masturbation                               | ✓ Extreme nervousness   |
| ✓ Sexual acting out, posturing                         | ✓ Hypochondria  |

*In children over eight through adolescence:*

- ✓ Fear of being alone
- ✓ Peer problems
- ✓ Frequent fights with family members
- ✓ Poor self-esteem
- ✓ Excessive nervousness
- ✓ Emotional numbness (out-of body experiences, or feelings of unreality)
- ✓ Substance Abuse
- ✓ Excessive guilt or shame
- ✓ Mood swings
- ✓ Sexual concerns or preoccupations
- ✓ Withdrawn, isolated behavior
- ✓ Overly compliant behavior
- ✓ Suicidal thoughts or gestures
- ✓ Self-mutilation
- ✓ Hyperalertness
- ✓ Sexual acting out
- ✓ Avoidant, phobic behavior, including sexual topics
- ✓ Unwillingness to change into gym clothes
- ✓ Violent fantasies
- ✓ Memory problems
- ✓ Fear of future abuse
- ✓ Intrusive, recurrent thoughts, or flashbacks





# STATE OF NEW YORK DEPARTMENT OF HEALTH

Corning Tower

The Governor Nelson A. Rockefeller Empire State Plaza  
Albany, New York 12237

Antonia C. Novello, M.D., M.P.H., Dr.P.H.  
*Commissioner*

Dennis P. Whalen  
*Executive Deputy Commissioner*

March 6, 2002

Dear EMS Agency:

In an earlier letter we shared that effective February 1, 2002, emergency medical technicians (EMTs) are required to report suspected cases of child abuse or maltreatment to the New York State central child abuse registry. We had also provided a copy of the Department of Health's Policy Statement # 02-01, which describes how EMTs and ambulance services are to comply with this new reporting requirement.

At this time we would like to clarify a few issues that have come to our attention concerning the reporting of suspected child abuse cases by EMTs. Listed below is a summary of these issues:

1. EMTs are not required to take a course on how to comply with the reporting requirements. However, Regional EMS Councils, EMS services, EMS Course Sponsors and other interested parties may offer an overview of the legislation and guidelines on how best to achieve the desired results within their community or EMS agency. Such a course may be designed to meet the continuing medical education requirements of the Pilot Project.
2. For the time being, EMTs are required to be the reporter of record for suspected cases even if the child is transported and admitted to a hospital. EMTs can not and should not transfer the responsibility for reporting a suspected case to hospital personnel or any other health provider.
3. If there are multiple EMTs responding to a call from the same EMS agency, it is only necessary for the EMT of record (in-charge of patient care) from that agency to submit the required form. This may be confusing when there are multiple agencies responding, treating, and transporting the same patient. The EMT of record from each agency must file a separate report.
4. Reporting Procedures: An oral report must be made immediately to the NYS Child Abuse and Maltreatment Register at 1-800-635-1522. This must be followed by a written report, using Form DSS-2221-A, within 48 hours to the **local child protective services for where the child resides**. The only time Form DSS-2221-A is to be sent directly to the NYS Central Register is when the child resides in a Residential Institution.

5. EMS agencies are reminded that they must update their policies and procedures with regards to their personnel reporting child abuse and/or neglect. These policies and procedures need to reflect the guidelines in BEMS policy statement #02-01 as well as the required local reporting procedures for their area.
6. It is understood that EMTs will need to complete the DSS-2221-A form after an emergency situation. EMTs are not expected to have the form filled out in its entirety. EMTs should fill out as much information as possible, with the limited information they have and submit the form to their local child protective service who will obtain the rest of the information on the form.
7. The Bureau of EMS encourages EMS agencies to continue to have open dialogue with their local Child Protective Service to better understand issues at the local level

For assistance on how best EMTs and/or ambulance services can meet the new reporting requirements, please contact the Bureau of EMS at 518-402-0996 Ext. 1, 4 (Education Unit). . EMTs should refrain from contacting the NYS Central Register. The Requirement to Report Instances of Suspected Child Abuse or Maltreatment Policy Statement is accessible at [www.health.state.ny.us](http://www.health.state.ny.us) (click on providers for EMS webpage). If you have questions about the mandatory reporter program, please visit the New York State Office of Children and Family Services at <http://www.ocfs.state.ny.us> or contact them at 518-474-4670.

Thank you for your cooperation with this important reporting initiative.

Sincerely,



Edward G. Wronski, Director  
Bureau of Emergency Medical Services

cc: Regional EMS Councils  
Regional Emergency Medical Advisory Committees  
EMS Course Sponsors

# Appendices



## Appendix – Pediatric

### Appropriate Ventilatory Rates for Assisted Ventilation

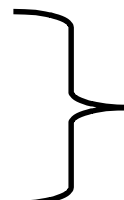
<u>Age Group</u>	<u>If Respiratory Rate is:</u>	<u>Ventilate At:</u>
Infant (<1 yr)	< 30/min	20/min
Toddler (1 – 2 yr)	< 24/min	20/min
Preschooler (3 – 5 yr)	< 20/min	20/min
School Age (6 – 12 yr)	< 15/min	20/min
Adolescent (13 – 18)*	< 10/min	12/min

### Appropriate Ventilatory Rates for Hyperventilation

<u>Age Group</u> <u>At:</u>	<u>If Glasgow Coma Scale Score Is:</u>	<u>Hyperventilate</u>
Infant (<1 yr)	< 8	25/min
Toddler (1 – 2 yr)	< 8	25/min
Preschooler (3 – 5 yr)	< 8	25/min
School Age (6 – 12 yr)	< 8	25/min
Adolescent (13 – 18)*	< 8	20/min

### Criteria for Tachypnea (Rapid Respiratory Rate)

<u>Age Group</u>	<u>Respiratory Rate:</u>
Infant (<1 yr)	< 60/min
Toddler (1 – 3 yr)	< 40/min
Preschooler (3 – 5 yr)	< 35/min
School Age (6 – 12 yr)	< 30/min
Adolescent (13 – 18)*	< 30/min

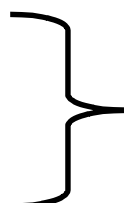


**Use this formula to estimate the upper limit of respiratory rates in pediatric patients 1 – 10 yr**

$$40 - (2x \text{ age})$$

### Criteria for Tachycardia (Rapid Heart Rate)

<u>Age Group</u>	<u>Heart Rate:</u>
Infant (<1 yr)	< 160/min
Toddler (1 – 3 yr)	< 150/min
Preschooler (3 – 5 yr)	< 140/min
School Age (6 – 12 yr)	< 120/min
Adolescent (13 – 18)*	< 100/min

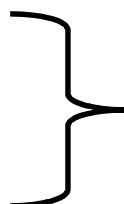


**Use this formula to estimate the upper limit of heart rates in pediatric patients 1 – 10 yr**

$$150 - (5x \text{ age})$$

### Criteria for Hypotension (Low Blood Pressure)

<u>Age Group</u>	<u>Blood Pressure:</u>
Infant (<1 yr)	< 60 mm Hg
Toddler (1 – 3 yr)	< 70 mm Hg
Preschooler (3 – 5 yr)	< 75 mm Hg
School Age (6 – 12 yr)	< 80 mm Hg
Adolescent (13 – 18)*	< 90 mm Hg



**Use this formula to estimate the lower limit of systolic blood pressure in pediatric patients 1 – 10 yr**

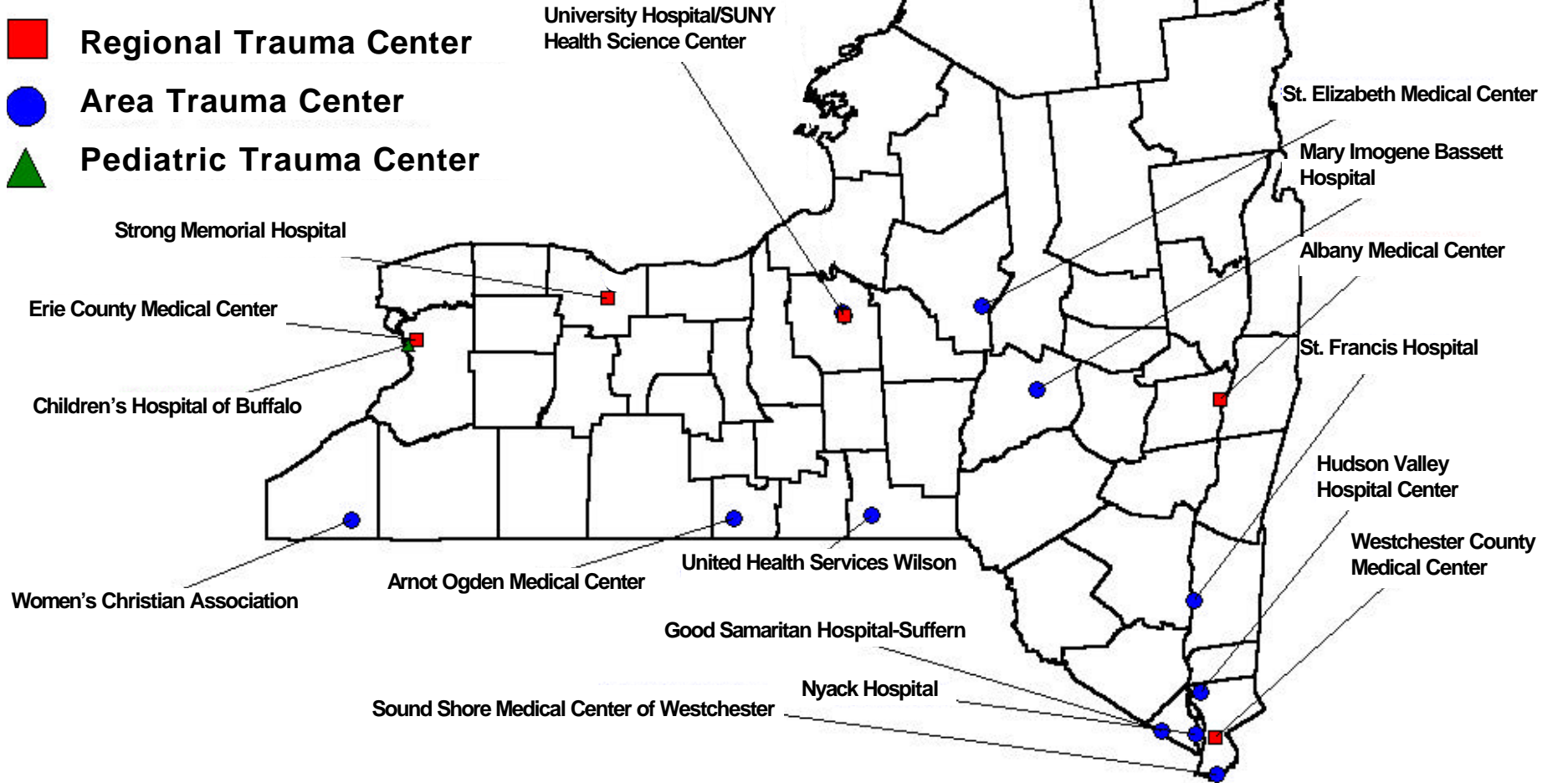
$$70 + (2x \text{ age})$$

\* Adult value used

**Appendices A – Pediatrics, continued**

Appendix - B  
New York State Designate Trauma Centers

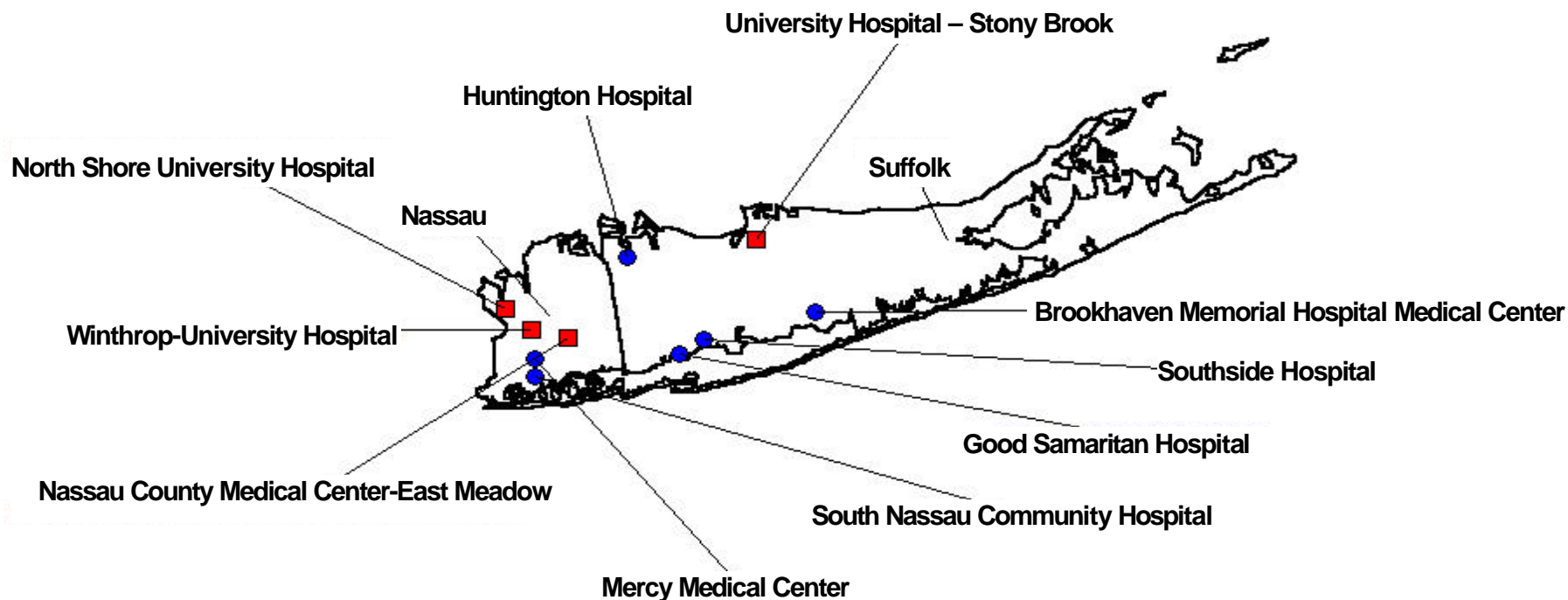
# New York State Trauma Centers



Appendix - B  
New York State Designate Trauma Centers

# Trauma Centers of Long Island

- Regional Trauma Center
- Area Trauma Centers

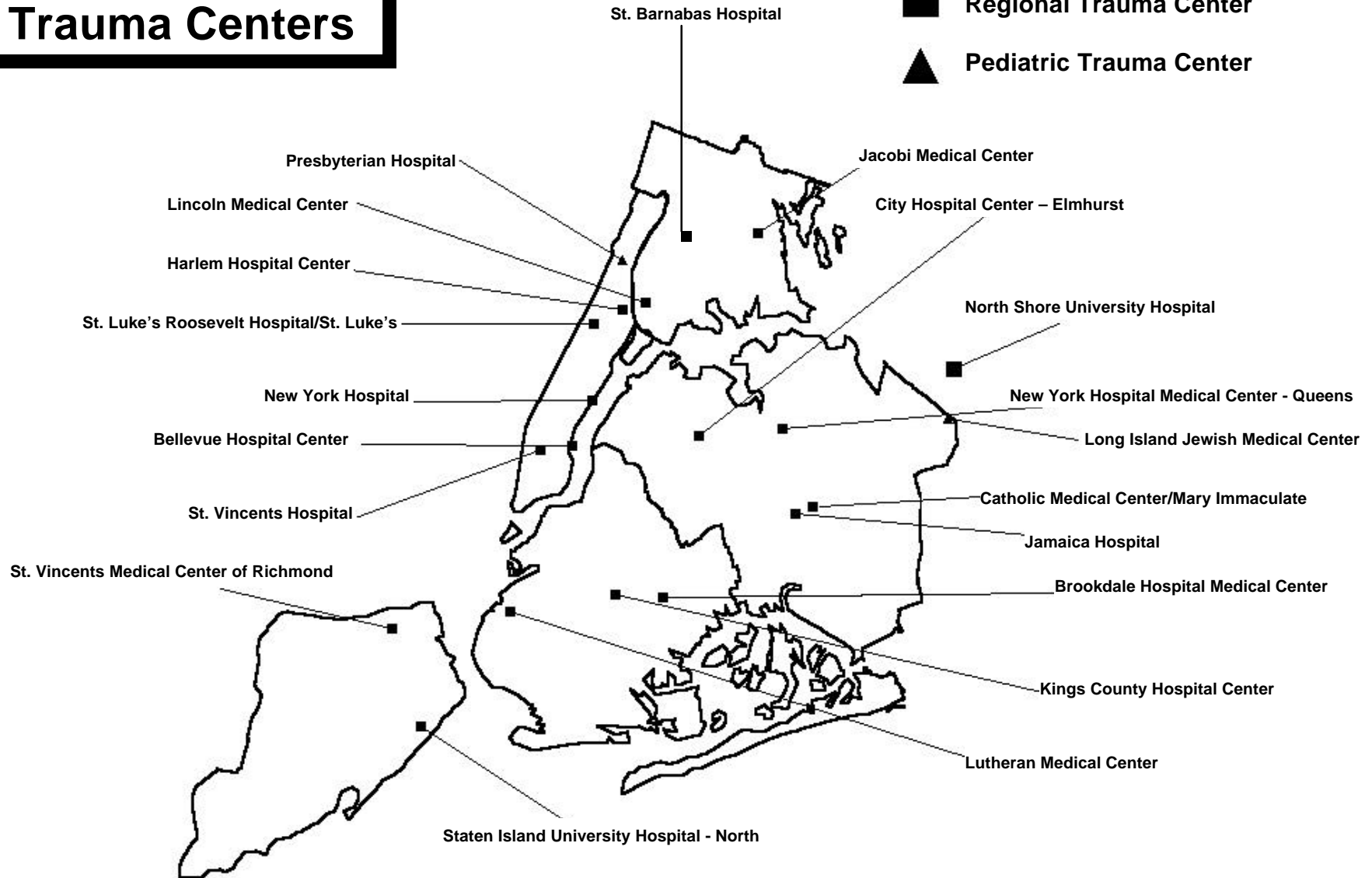




New York State Designate Trauma Centers

**New York City  
Trauma Centers**

- Regional Trauma Center
- ▲ Pediatric Trauma Center



**Appendix - B**  
**New York State Designate Trauma Centers**

## WESTERN NEW YORK REGION

### Regional Trauma Center

Erie County Medical Center  
462 Grider Street  
Buffalo, New York 14215

### Regional Pediatric Trauma Center

The Children's Hospital of Buffalo  
219 Bryant Street  
Buffalo, New York 14222

### Area Trauma Center

Woman's Christian Association  
207 Foot Avenue  
Jamestown, New York 14701

## FINGER LAKES REGION

### Regional Trauma Center

Strong Memorial Hospital  
601 Elmwood Avenue  
Box SURG  
Rochester, New York 14642

### Area Trauma Center

Arnot Ogden Medical Center  
Trauma Services  
600 Roe Avenue  
Elmira, New York 14905

**NOTE:** All Regional and Area Trauma Center have the capability to treat pediatric trauma patients. However, EMS providers should refer to local protocols and REMAC directions on any differences in local trauma center capabilities to receive and treat pediatric trauma.

## **CENTRAL NEW YORK REGION**

### **Regional Trauma Center**

University Hospital  
State University of New York Health Science Center  
750 East Adams Street  
Syracuse, New York 13210

### **Area Trauma Centers**

St. Elizabeth's Hospital  
2209 Genesee Street  
Utica, New York 13501

Wilson Memorial Regional Medical Center  
33-57 Harrison Street  
Johnson City, New York 13790

## **NORTHEASTERN NEW YORK REGION**

### **Regional Trauma Center**

Lifestar Regional Trauma System  
A-126, Albany Medical Center Hospital  
47 New Scotland Avenue  
Albany, New York 12208

### **Area Trauma Centers**

Mary Imogene Bassett Hospital  
One Atwell Road  
Cooperstown, New York 13326-1394

Champlain Valley Physicians= Hospital Medical Center  
100 Beekman Street  
Plattsburgh, New York 12901

**NOTE:** All Regional and Area Trauma Center have the capability to treat pediatric trauma patients. However, EMS providers should refer to local protocols and REMAC directions on any differences in local trauma center capabilities to receive and treat pediatric trauma.

## HUDSON VALLEY REGION

### Regional Trauma Center

Westchester County Medical Center  
Office of Emergency Medical Services and Trauma  
Macy Pavillion, Room 1419  
Valhalla, New York 10562-8251

### Area Trauma Centers

Nyack Hospital  
160 North Midland Avenue  
Nyack, New York 10960

St. Francis Hospital  
North Road  
Poughkeepsie, New York 12601

Hudson Valley Hospital Center  
1980 Crompond Road  
Peekskill, New York 10566

Sound Shore Medical Center of Westchester  
16 Guion Place  
New Rochelle, New York 10802

Good Samaritan Hospital  
255 LaFayette Avenue  
Suffern, New York 10901-4869

**NOTE:** All Regional and Area Trauma Center have the capability to treat pediatric trauma patients. However, EMS providers should refer to local protocols and REMAC directions on any differences in local trauma center capabilities to receive and treat pediatric trauma.

## NASSAU REGION

### Regional Trauma Centers

North Shore University Hospital  
300 Community Drive  
Manhasset, New York 11030-3876

Nassau County Medical Center  
2201 Hempstead Turnpike  
East Meadow, New York 11554-1854

Winthrop University Hospital  
259 First Street  
Mineola, New York 11501-3932

### Area Trauma Centers

Mercy Medical Center of Long Island  
1000 North Village Avenue  
Rockville Centre, New York 11570-1098

South Nassau Communities Hospital  
2445 Oceanside Road  
Oceanside, New York 11572-1506

**NOTE:** All Regional and Area Trauma Center have the capability to treat pediatric trauma patients. However, EMS providers should refer to local protocols and REMAC directions on any differences in local trauma center capabilities to receive and treat pediatric trauma.

## SUFFOLK REGION

### Regional Trauma Center

University Hospital  
State University of New York Health Sciences Center  
Division of Trauma, Department of Surgery  
Stony Brook, New York 11794-8191

### Area Trauma Centers

Huntington Hospital  
270 Park Avenue  
Huntington, New York 11743-2799

Good Samaritan Hospital  
1000 Montauk Highway  
West Islip, New York 11795

Southside Hospital  
Montauk Highway  
Bay Shore, New York 11706

Brookhaven Memorial Hospital Medical Center  
101 Hospital Road  
Patchogue, New York 11772

**NOTE:** All Regional and Area Trauma Center have the capability to treat pediatric trauma patients. However, EMS providers should refer to local protocols and REMAC directions on any differences in local trauma center capabilities to receive and treat pediatric trauma.

## NEW YORK CITY REGION

### Regional Trauma Centers

#### Bronx County

Lincoln Medical and Mental Health Center  
234 East 149th Street  
Bronx, New York 10451

Jacobi Medical Center  
1400 Pelham Parkway South  
Bronx, New York 10461

St. Barnabas Hospital  
Third Avenue and 183rd Street  
Bronx, New York 10457-2594

#### Kings County

The Brookdale Hospital Medical Center  
One Brookdale Plaza, Room 186  
Brooklyn, New York 11212

Kings County Hospital Center  
451 Clarkson Avenue  
Brooklyn, New York 11203

Lutheran Medical Center  
150 55th Street  
Brooklyn, New York 11220

#### New York County

New York Presbyterian Hospital  
New York Weill Cornell Medical Center  
525 East 68th Street  
New York, New York 10021

St. Vincent's Hospital and Medical Center of New York  
153 West 11th Street  
New York, New York 10011

**NOTE:** All Regional and Area Trauma Centers have the capability to treat pediatric trauma patients. However, EMS providers should refer to local protocols and REMAC directions on any differences in local trauma center capabilities to receive and treat pediatric trauma.



St. Luke's/Roosevelt Hospital Center  
Amsterdam Avenue and 114th Street  
New York, New York 10019

**New York County**

Bellevue Hospital Center  
East 27th Street and First Avenue  
New York, New York 10016

Harlem Hospital Center  
506 Lenox Avenue  
New York, New York 10037

**Queens County**

Catholic Medical Center of Brooklyn and Queens  
Mary Immaculate Division  
Parson's Manor  
86-25 153 Street  
Jamaica, New York 11432

New York Hospital Center of Queens  
56-45 Main Street  
Flushing, New York 11315

City Hospital Center at Elmhurst  
79-01 Broadway  
Elmhurst, New York 11373

Jamaica Hospital  
89th Avenue and Van Wyck Expressway  
Jamaica, New York 11418

**Richmond County**

St. Vincent's Medical Center Richmond  
355 Bard Avenue  
Staten Island, New York 10310

Staten Island University Hospital  
475 Seaview Avenue  
Staten Island, New York 10305

**NOTE:** All Regional and Area Trauma Center have the capability to treat pediatric trauma patients. However, EMS providers should refer to local protocols and REMAC directions on any differences in local trauma center capabilities to receive and treat pediatric trauma.

## **Regional Pediatric Trauma Center**

Long Island Jewish Medical Center, Schneider Children's Hospital  
Regional Pediatric Trauma Center  
270-05 76th Avenue  
New Hyde Park, New York 11040

Children's Hospital of New York  
Columbia Presbyterian Medical Center  
3959 Broadway, 2 North  
New York, New York 10032-3784

**NOTE:** All Regional and Area Trauma Center have the capability to treat pediatric trauma patients. However, EMS providers should refer to local protocols and REMAC directions on any differences in local trauma center capabilities to receive and treat pediatric trauma.







