

**Regional  
Medical Response Technician  
Protocols**

**Region V  
Medical Advisory Committee  
2009**

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**Charlotte Hungerford Hospital  
Danbury Hospital  
New Milford Hospital  
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These protocols & procedures were developed from the original document *Connecticut State BLS Guidelines*, published by the State of Connecticut Department of Public Health, Office of Emergency Medical Services. The source document for these procedures can be found at <http://www.northcentralctems.org/documents/blsguide.pdf>

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## Protocol #1

### ASSESSMENT

Body substance isolation (BSI) precautions must be routinely taken to avoid skin and mucous membrane exposure to body fluids.

The evaluation of scene safety involves an assessment of the scene to ensure the well being of the MRT, the crew, the patient(s), and bystanders.

- 1) Scene Size-Up
  - a) Take BSI precautions
    - i) Includes eye protection, gloves, gown, and mask as needed
    - ii) Wash hands after each patient contact
  - b) Determine scene safety
    - i) Evaluate responder's and patient's safety
    - ii) Determine number of patients / resources needed
- 2) Initial Patient Assessment
  - a) Level of consciousness - categorize as below (AVPU):
    - i) Alert: recognizes surroundings and responders
    - ii) Responds to verbal stimulus
    - iii) Responds to painful stimulus
    - iv) Unresponsive
  - b) Evaluate the situation e.g., chief complaint and why you were called. Consider the potential of C-spine involvement by mechanism, location and scope of injury. If there is potential spinal injury, stabilize before moving patient.
  - c) Airway - determine that airway is unobstructed.
  - d) Breathing - assure an open airway. Ventilate as needed.
  - e) Circulation/Significant Bleeding - establish presence of pulses.
    - i) Begin compressions as needed. Control bleeding as needed.
- 3) Vital Signs
  - a) Evaluate Breathing
    - i) Count respiratory rate
    - ii) Observe if face, neck or chest muscles are used during respiration
    - iii) Examine the mucosa of the mouth and lips for color (cyanosis)
    - iv) Observe for irregular respirations or a recognizable pattern
  - b) Evaluate Circulation
    - i) Heart rate
    - ii) Skin color, temperature, moisture
    - iii) Skin turgor
    - iv) Capillary refill
    - v) Blood pressure
  - c) Evaluate disability / deformity
    - i) Pupils
    - ii) Neurological exam as appropriate
- 4) Recent History. Obtain the pertinent information relevant to this episode such as onset and duration of symptoms, characteristics of pain, and any associated symptoms. Then identify chronic conditions:
  - a) O = Onset
  - b) P = Provoking factors
  - c) Q = Quality of pain

- d) R = Radiation
  - e) S = Severity
  - f) T = Time of onset
- 5) Obtain Past Medical History
- a) S = Signs/Symptoms
  - b) A = Allergies
  - c) M = Medications currently used
  - d) P = Past illnesses
  - e) L = Last meal
  - f) E = Events preceding
- 6) Detailed Physical Exam (time and critical care needs permitting)
- a) Remove clothing as needed
  - b) Perform Detailed Physical Exam, including:
    - i) D = Deformities
    - ii) C = Contusions
    - iii) A = Abrasions
    - iv) P = Punctures/Penetrations
    - v) B = Burns
    - vi) T = Tenderness
    - vii) L = Lacerations
    - viii) S = Swelling
- 7) Locate and treat injuries/conditions according to the appropriate protocol without unnecessary delay in transport.

*Note: With EVERY patient, look for a Medical Alert tag*

## Protocol #2

### OXYGEN

- 1) Flow Rates:
  - a) All patients in respiratory distress shall receive supplemental O<sub>2</sub> as follows:
    - i) 15 liters per minute (LPM) by non-rebreathing mask
    - ii) 6 LPM by nasal cannula for patients who do not tolerate the non-rebreathing mask
- 2) Airway/O<sub>2</sub> adjuncts for the use of MRTs include:
  - a) Oropharyngeal Airway (OPA)
  - b) Nasopharyngeal Airway (NPA)
  - c) Pocket Mask
  - d) Bag Valve Mask
  - e) Non-rebreathing Mask
  - f) Nasal Cannula
- 3) Assessment of need for supplemental O<sub>2</sub> should include the following:
  - a) Respiratory rate <8 breaths per minute or >24 breaths per minute
  - b) Respiratory quality
  - c) Color
  - d) Nature of Illness / Mechanism of Injury
  - e) Pre-existing conditions
  - f) Mental status
  - g) Chest pain
- 4) If respiratory rate <8 breaths per minute or >24 breaths per minute, administer O<sub>2</sub> as per section 1a above
- 5) If the patient is apneic:
  - a) Mouth to mask with supplemental oxygen
  - b) Bag valve mask used by two (2) persons
  - c) Bag valve mask used by one (1) person (*only* as a last resort)

## Protocol #3

### ABDOMINAL PAIN

- 1) Perform initial assessment:
  - a) Maintain airway, breathing and circulation
  - b) Provide oxygen according to Protocol #2
- 2) Perform focused history and physical exam
  - a) Take and record baseline vital signs
- 3) Allow patient to seek position of comfort. Suggest knees flexed.
- 4) Do not administer anything by mouth

*Note: Women should be assessed for obstetrical/gynecological emergencies.*

## Protocol #4

### ALLERGIC REACTION

Always be prepared to initiate basic cardiac life support measures: CPR, AED and treat for shock (hypoperfusion).

- 1) Perform initial assessment:
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2
- 4) Perform focused history and physical exam:
  - a) Patient has history of allergies
  - b) Substance patient was exposed to
  - c) How was patient exposed?
  - d) Time of exposure
  - e) Take and record baseline vital signs
  - f) Determine if the patient has taken any medication in an attempt to relieve the current symptoms
- 5) Mild allergic reactions with hives and itching but without signs of respiratory distress or hypoperfusion:
  - a) Continue focused physical exam
- 6) Severe Reactions: Patient complains of itching, hives, difficulty swallowing, or difficulty breathing, and upper airway obstruction and stridor. Wheezing may be audible without a stethoscope or may be absent. Patient shows signs of shock (hypoperfusion).
  - a) Place patient in position appropriate to condition (supine or sitting up)



## Protocol #5

### BEHAVIORAL EMERGENCIES

Behavioral emergencies are those situations where the patient exhibits behavior within a given circumstance that is inappropriate or may constitute a significant danger to the health of the patient or of bystanders.

- 1) Perform scene size-up:
  - a) If the patient has the potential to act in an aggressive or combative manner, displays a weapon, or has possible access to a weapon, immediately summon police for assistance and withdraw to a safe area.
- 2) Numerous medical conditions may mimic a behavioral emergency, including:
  - a) Low blood sugar (hypoglycemia)
  - b) Alcohol and/or drugs
  - c) Head trauma
  - d) Lack of oxygen (hypoxia)
  - e) CVA/Stroke
- 3) Perform initial assessment:
  - a) If patient restraint is required, ensure police AND ADEQUATE PERSONNEL ARE present
  - b) Identify yourself, your role, and attempt to interview patient
  - c) Maintain at least three (3) feet from the patient
  - d) Be alert for changes in the patient's emotional status
  - e) Evaluate the patient for the possibility of self-destructive behavior and/or suicidal ideation
- 4) Perform ongoing assessment according to patient's behavior

*Note: Protect against false accusations! Documentation of abnormal behavior exhibited by patient is very important. Have witnesses in attendance, especially during transport, if possible. Accusing EMS of sexual misconduct is common by emotionally disturbed patients.*

## Protocol #6

### CARDIAC ARREST

#### Non-Traumatic Arrest

- 1) Establish unresponsiveness
- 2) Establish and maintain airway
- 3) Call or verify dispatch of Paramedic
- 4) Refer to see Protocol #29 for Guidelines for Withholding Resuscitation
- 5) Initiate CPR
- 6) IF STARTED, resuscitation effort *must* be continued until relieved by hospital staff or other emergency provider except as follows:
  - a) Exhaustion of team member(s).
  - b) Directed to stop by Online Medical Oversight, on-scene paramedic, or on-scene, identified, licensed physician (with approval of medical direction)
  - c) Patient is resuscitated
  - d) Valid DNR bracelet and Transfer Form are found
- 7) Provide all quality assurance records from AED to Saint Mary's Hospital Emergency Medical Services Coordinator within 24 hours

#### Traumatic Arrest

- 1) Establish unresponsiveness
- 2) Establish and maintain airway.
- 3) Provide manual cervical stabilization
- 4) Call or verify dispatch of Paramedic
- 5) Refer to Protocol #29 for Guidelines for Withholding Resuscitation
- 6) Initiate CPR.
- 7) Attach AED as per manufacturer's instructions
- 8) IF STARTED, resuscitation effort *must* be continued until relieved by hospital staff or other emergency provider except as follows:
  - a) Exhaustion of team member(s).
  - b) Directed to stop by Online Medical Oversight, on-scene paramedic, or on-scene, identified, licensed physician (with approval of medical direction)
  - c) Patient is resuscitated
  - d) Valid DNR bracelet and Transfer Form are found
- 9) Provide all quality assurance records from AED to Saint Mary's Hospital Emergency Medical Services Coordinator within 24 hours

*Note: For further information, refer to Protocol #29 - State of Connecticut EMS Policy and Procedures, Reference #908, Guidelines for Withholding Resuscitation and Protocol #30 - Do Not Resuscitate (DNR).*

*All AEDs used must be updated to the latest American Heart Association Basic Life Support Guidelines within 6 months of their initial publication.*

*The use of Cervical Collars, Long Spine Boards, and/or Cervical Immobilization Devices IS NOT AUTHORIZED at the MRT level, per the State of Connecticut Department of Public Health, Office of Emergency Medical Services.*

## Protocol #7

### CHEST PAIN

Always be prepared to initiate basic cardiac life support measures, e.g., CPR and AED.

- 1) Perform initial assessment:
  - a) Maintain airway, breathing and circulation.
  - b) Provide oxygen according to Protocol #2.
- 2) Perform focused history and physical exam.
  - a) Take and record baseline vital signs.
  - b) If the patient has a systolic blood pressure  $<100\text{mmHg}$  and/or an altered level of consciousness:
    - i) Place patient in supine position if tolerated.
  - c) If the patient is alert and has a systolic blood pressure of  $\geq 100\text{mmHg}$ :
    - i) Place the patient in a position of comfort.
- 3) Perform ongoing assessment.

## Protocol #8

### LABOR & DELIVERY

- 1) Ensure full body substance isolation precautions
- 2) Perform initial assessment:
  - a) Maintain airway, breathing and circulation
  - b) Provide supplemental oxygen according to Protocol #2
- 3) Perform focused history and physical exam.
- 4) Determine number of prior pregnancies and number of live births.
- 5) Take and record baseline vital signs.
- 6) Check for crowning of baby. If limb or buttocks are presenting, see Special Considerations. If crowning present, prepare for emergency delivery:
  - a) Perform delivery (consider contacting medical direction for guidance):
    - i) Place sterile sheet under the patient's buttocks
    - ii) Assist with the delivery of the baby
    - iii) Note any meconium staining
    - iv) Suction mouth and nares
    - v) If the umbilical cord is around the baby's neck, attempt to reposition
    - vi) Provide tactile stimulus to the baby in order to initiate respiratory effort
    - vii) As pulsations cease, clamp, tie and cut the umbilical cord approximately four fingers width from the baby
    - viii) Note the time of delivery
    - ix) Determine APGAR score at 1 minute and 5 minutes post delivery
    - x) Be prepared to provide the following:
      - (1) Supplemental oxygen
      - (2) Rescue breathing
      - (3) Chest compressions
    - xi) Thoroughly dry the baby and maintain body warmth
    - xii) Place the baby on the mother's abdomen
    - xiii) Monitor mother for the delivery of the placenta
    - xiv) Perform ongoing assessment of mother and baby every 5 minutes

## Protocol #9

### OBSTETRIC AND GYNECOLOGICAL EMERGENCIES: SPECIAL CONSIDERATIONS

Complications of pregnancy may include ectopic pregnancy, hypertension in pregnancy (preeclampsia), seizures in pregnancy (eclampsia) and vaginal hemorrhage.

- 1) Perform initial assessment
  - a) Maintain airway, breathing and circulation.
  - b) Provide supplemental oxygen according to Protocol #2.
- 2) Perform focused history and physical exam.
- 3) Determine number of prior pregnancies and number of live births.
- 4) Take and record baseline vital signs.
- 5) Perform ongoing assessment every 5 minutes.

*Contact Online Medical Oversight for guidance for the following:*

- 1) If presenting fetal part is a limb, prevent further delivery by placing the patient in the trendelenburg position.
- 2) If presenting part is the placenta (placenta previa), vaginal hemorrhage should be treated by placing a trauma dressing over the vagina and place the patient in the trendelenburg position
- 3) If the presenting part is the buttocks or both-legs-first (breech) of the baby:
  - a) Be ready to assist in delivery of the fetus
  - b) Place patient in trendelenburg position
  - c) Do not pull on the pelvis or legs of the baby
  - d) If torso delivers and head remains in vagina:
    - i) Place sterile glove in vagina with MRT's palm toward baby's face
    - ii) With index finger and middle finger, form a "v" around baby's nose helping to push the vaginal wall away from baby's face
- 4) If prolapsed umbilical cord:
  - a) Place the prolapsed section of the umbilical cord in a gloved hand, than place two gloved fingers of the same hand in the vagina near the presenting cord in order to prevent the baby from crushing the cord
  - b) Wrap cord in sterile, moist towel
- 5) In cases of trauma in pregnancy, perform the following:
  - a) Provide resuscitation if necessary
  - b) Provide oxygen according to Protocol #2
  - c) Be ready to suction
  - d) Place patient in left lateral recumbent position unless a back or neck injury is suspected
  - e) Provide emotional support

*Note: Place all pregnant patients in the left lateral recumbent position if possible.*

*If pregnant patient is hypertensive (systolic blood pressure >150mmHg, and/or diastolic blood pressure >100mmHg), be prepared to treat for seizures.*

*If pregnant patient has severe vaginal bleeding present, place trauma dressing over vagina. NEVER place anything in vagina to stop vaginal bleeding.*

## Protocol #10

### CVA

Always be prepared to initiate basic cardiac life support measures, e.g., CPR, AED, treat for shock (hypoperfusion).

- 1) Perform initial assessment:
  - a) Maintain airway, breathing and circulation
  - b) Provide oxygen according to Protocol #2
  - c) Suction airway if necessary
- 2) Perform focused history and physical exam
  - a) Attempt to identify time of onset for signs
  - b) Determine symptoms for CVA/Stroke
  - c) Determine Glasgow Coma Scale (see Protocol #31)
  - d) Ongoing assessment will be performed according to patient's condition.

## Protocol #11

### DIABETIC EMERGENCIES

Always be prepared to initiate basic cardiac life support measures, e.g., CPR, AED, treat for shock (hypoperfusion).

- 1) Perform Initial Assessment:
  - a) Maintain airway, breathing and circulation.
  - b) Provide oxygen according to Protocol #2.
- 2) Perform focused history and physical exam:
  - a) History of diabetes
  - b) Patient is prescribed and is compliant with medication for diabetes (insulin or oral medication)
  - c) Patient's last oral intake
- 3) Determine Glasgow Coma Scale (see Protocol #31)
- 4) Perform ongoing assessment will be performed every 5 minutes.

## Protocol #12

### ENVIRONMENTAL EMERGENCIES

#### Systemic Hypothermia

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation:
  - a) Provide oxygen and assist ventilations according to Protocol #2
  - b) Assess circulation for up to 30 seconds as the rate may be extremely slow. If there is no pulse, proceed to Cardiac Arrest Protocol #6, but, if indicated, administer, at most, only one shock via AED.
- 3) Remove any wet clothing and warm patient by completely wrapping in blanket, including under the patient.
- 4) Perform focused history and physical exam
- 5) Take and record baseline vital signs
- 6) Perform ongoing assessment every 5 minutes

*Note: Do not presume death in the unresponsive, apneic, pulseless patient with suspected hypothermia.*

#### Localized Hypothermia (Frostbite)

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2
- 4) Perform focused history and physical exam:
  - a) Take and record baseline vital signs
  - b) Remove all coverings from injured parts. Protect injured areas from pressure, trauma and friction. Do not rub or massage any extremities. Do not break blisters.
- 5) Do not allow patient to ambulate
- 6) Do not allow the limb to thaw if there is a chance that the limb may refreeze before evacuation is complete
- 7) Keep the patient warm with blankets
- 8) Ongoing assessment every 5 minutes

*Note: Handle all hypothermia patients with care. Rough handling may precipitate cardiac arrest.*

#### Hyperthermia

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2
- 4) Remove from source of heat
- 5) Perform focused history and physical exam
  - a) Take and record baseline vital signs. Note skin moisture, temperature and color.
  - b) Ongoing assessment every 5 minutes
  - c) Fan aggressively

*Note: Not all heat emergencies are environmental in nature. The patient may have febrile or neurological etiology. High body temperature may cause seizure, particularly in infants.*



## Protocol #13

### ADULT OBSTRUCTED AIRWAY

#### Responsive Patient:

- 1) Perform initial assessment:
  - a) If patient cannot speak but is coughing, encourage a strong and forceful cough
  - b) When patient is no longer producing an effective cough and cannot speak, perform the Heimlich maneuver. Continue Heimlich maneuver until obstruction is removed or patient becomes unconscious.
- 2) If patient becomes unresponsive and airway remains obstructed, see Unresponsive / Unwitnessed Patient Protocol below
- 3) If obstruction is removed, check patient for breathing:
  - a) Maintain airway, breathing and circulation
  - b) Provide oxygen according to Protocol #2
- 4) Perform focused history and physical exam
- 5) Take and record baseline vital signs

#### Unresponsive / Unwitnessed Patient:

- 1) Determine responsiveness
- 2) Determine breathing:
  - a) If no breathing, attempt a rescue breath
  - b) If breath does not enter, reposition the victim's head and reattempt
  - c) If breaths still do not enter, administer 30 chest compressions (as in a cardiac arrest)
  - d) Repeat the sequence from 2a above until the obstruction is removed
- 3) If obstruction is removed, check patient for breathing
- 4) Maintain airway, breathing and circulation
- 5) Provide oxygen according to Protocol #2
- 6) Perform focused history and physical exam
- 7) Obtain baseline vital signs

## Protocol #14

### OVERDOSE/POISONING

CONNECTICUT POISON CONTROL CENTER: (800) 343-2722

Always be prepared to initiate basic cardiac life support measures, e.g., CPR, AED, treat for shock (hypoperfusion).

Principle: Treat the patient, not the poison. Contact Poison Control Center rather than relying solely on label instructions. If exposure is to a *hazardous material*, follow protocol established by the incident command structure. Otherwise, if the material is not hazardous, the MRT must give all containers, bottles and labels of poison agents to the transporting EMS unit.

- 1) Perform Initial Assessment
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2
- 4) Determine Glasgow Coma Scale (see Protocol #31)
- 5) Perform focused history and physical exam
- 6) Evaluate the mechanism of the poisoning/overdose:
  - a) If the patient has orally ingested poison and/or shows signs and symptoms of drug overdose:
    - i) Support ventilations as needed
  - b) If the patient injected drugs or poison:
    - i) Ensure the patient is removed from the substance source
    - ii) Administer oxygen according to protocol and support ventilations as needed
  - c) If the patient has been exposed to a poison that is absorbed:
    - i) Ensure the patient is removed from the substance source
    - ii) Carefully remove the patient's contaminated clothing to avoid further exposure to the patient and MRT
    - iii) Remove the contaminant as completely as possible prior to transport:
      - (1) If substance is powder or solid on the skin, brush off, irrigate with clean water or saline for at least 20 minutes. Begin irrigation immediately
      - (2) If substance is a *liquid* on the skin, irrigate with clean water or saline for at least 20 minutes. Begin irrigation immediately
      - (3) If substance is *in the eye*, irrigate with clean water or saline, flowing away from the midline, for at least 20 minutes. Begin irrigation immediately

## Protocol #15

### RESPIRATORY EMERGENCIES

Always be prepared to initiate basic cardiac life support measures, e.g., CPR, AED, treat for shock (hypoperfusion).

Acute respiratory distress with a history of Asthma and/or Chronic Obstructive Pulmonary Disease (COPD), including Emphysema and Chronic Bronchitis

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation.
- 3) Provide oxygen according to Protocol #2.
- 4) Perform focused history and physical exam.
- 5) Take and record baseline vital signs.
- 6) Determine if patient has received any medication in an attempt to relieve the current symptoms.
  - a) Determine if patient has a prescribed inhaler.
- 7) Place patient in a position of comfort.
- 8) Perform ongoing assessment every 5 minutes including airway, breathing, circulation, mental status and vital signs.

## Protocol #16

### SEIZURES

Always be prepared to initiate basic cardiac life support measures, e.g., CPR, AED, treat for shock (hypoperfusion).

- 1) Consider the following cause in adult patients:
  - a) Head injury
  - b) CVA/Stroke
  - c) Epilepsy
  - d) Hypoglycemia
  - e) Hypoxia
  - f) Poisonings/Overdose
- 2) Consider the following cause in children:
  - a) Febrile seizures (high fever)
  - b) Any of above adult causes
- 3) Perform initial assessment
- 4) Maintain airway, breathing and circulation
- 5) Provide oxygen according to Protocol #2
- 6) Protect the patient from injury. (Bite sticks are contraindicated)
- 7) Determine Glasgow Coma Scale (see Protocol #31)
- 8) Perform focused history and physical exam
- 9) Perform ongoing assessment every 5 minutes

## Protocol #17

### UNRESPONSIVE WITH UNKNOWN CAUSE

Always be prepared to initiate basic cardiac life support measures, e.g., CPR, AED, treat for shock (hypoperfusion). Prepare to treat respiratory and/or cardiac arrest or seizures. Prepare to handle combative, disoriented patient.

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2
- 4) With any evidence or suspicion of trauma, immobilize patient using the Spinal Cord Injury Protocol #20
- 5) Determine Glasgow Coma Scale (see Protocol #31)
- 6) Perform focused history and physical exam:
  - a) Do not administering any medications by mouth
  - b) Pay special attention to the presence of medical identification devices (such as necklace, wrist or ankle bracelet, and/or wallet cards)
- 7) Treat any injuries accordingly.
- 8) Take and record baseline vital signs.

## Protocol #18

### AMPUTATIONS

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2.
- 4) Perform focused history and physical exam.
- 5) Treatment of limb or digit amputations:
  - a) Control bleeding
    - i) Apply a with a sterile dressing
    - ii) If bleeding is not controlled, apply another sterile dressing over the first
    - iii) If bleeding is not controlled, elevate the extremity
    - iv) If bleeding is not controlled, apply pressure to the nearest pressure point
    - v) If bleeding is not controlled, apply a tourniquet
  - b) Amputated Part
    - i) Wrap the amputated part in a sterile dressing
    - ii) Wrap or bag the amputated part in plastic and keep cool
    - iii) The amputated part must be transported with the patient by the transporting EMS unit
  - c) Do not complete partial amputations
  - d) Immobilize the limb to prevent further injury

## Protocol #19

### BURNS

- 1) Stop the burning process and remove the patient from the source of injury
- 2) Perform initial assessment
- 3) Maintain airway, breathing and circulation
- 4) Provide oxygen according to Protocol #2
- 5) Perform focused history and physical exam
- 6) Obtain and record baseline vitals
- 7) Determine cause of burn
  - a) Thermal burn:
    - i) Remove involved clothing which is not adhering to the patient
    - ii) Remove jewelry and other constricting items
    - iii) Apply dry sterile burn dressings to the affected areas
  - b) Chemical burn:
    - i) Remove clothing which is not adhering to the patient
    - ii) Remove jewelry and other constricting items
    - iii) Remove the chemical in a manner appropriate to the substance:
      - (1) If the substance is a dry powder, brush it off
      - (2) If the substance is an alkali, irrigate the area with water or saline throughout the period of prehospital care
      - (3) If the substance is an acid, irrigate the area with water or saline for at least 10-15 minutes or until the patient's pain is relieved
      - (4) If the chemical is in the eye, remove any dry material and irrigate using an eye irrigation set throughout the period of prehospital care
      - (5) Apply dry sterile burn dressings to the affected areas. Cool water or saline is of value to reduce pain and the burning process if applied within 15 minutes of the burn. This should not be applied to more than 10 percent of the body surface area at one time.
  - c) Electrical burn:
    - (1) Remove the patient from the electrical source only if the MRT is trained to do so without incurring further risk to the rescuer and/or patient
    - (2) Monitor vitals and be prepared to use AED
    - (3) Remove the clothing which is not adhering to the patient and any other constricting items such as jewelry
    - (4) Examine patient for both entrance and exit wounds
    - (5) Apply only dry sterile burn dressings to the affected areas. Do not apply water or saline to electrical burns
- 8) Evaluate injuries:
  - a) Evaluate the patient for any major injuries and provide appropriate care
  - b) If there is evidence and/or suspicion of an inhalation injury (cyanosis and/or singed hairs and/or sooty sputum):
    - i) Support ventilations as needed
    - ii) Keep patient sitting up if tolerated
    - iii) Cover patient to prevent loss of body heat
  - c) Identify and document location and extent of exit burns.
- 9) Ongoing assessment every 5 minutes.

## Protocol #20

### HEAD INJURY

Always be prepared to initiate basic cardiac life support measures, e.g., CPR, AED, treat for shock (hypoperfusion).

- 1) Perform initial assessment
- 2) Manually stabilize head and neck
- 3) Maintain airway, breathing and circulation
- 4) Provide oxygen according to Protocol #2
- 5) Obtain baseline vital signs
- 6) Determine Glasgow Coma Scale (see Protocol #31)
- 7) Perform focused history and physical exam:
  - a) Take special note of ears, nose and mouth for CSF, eyes for pupillary reaction, and neck for JVD and/or tracheal deviation
- 8) Treat any open wounds. Avoid pressure on open head wounds.
- 9) Perform ongoing assessment including level of consciousness using Glasgow Coma Scale
- 10) Treat other injuries as indicated
- 11) Perform ongoing assessment every 5 minutes



## Protocol #21

### MULTI-SYSTEM TRAUMA

Always be prepared to initiate basic cardiac life support measures, e.g., CPR, AED, treat for shock (hypoperfusion).

- 1) Perform initial assessment
- 2) Manually stabilize head and neck
- 3) Maintain airway, breathing and circulation
- 4) Provide oxygen according to Protocol #2
- 5) Treat major bleeding. If signs and symptoms of hypoperfusion (shock) are present, treat patient accordingly.
- 6) Perform rapid trauma assessment
- 7) Obtain baseline vital signs
- 8) Perform focused history and physical exam.
- 9) Provide treatment for other injuries
- 10) Determine Glasgow Coma Score (see Protocol #31)

## Protocol #22

### MUSCULOSKELETAL INJURIES

If multiple trauma is suspected, treat the patient according to the Multi-System Trauma Protocol #20. If a fracture of the spine is suspected, treat the patient according to the Spinal Cord Injury Protocol #23.

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2
- 4) Perform focused history and physical exam:
  - a) Evaluate the neurovascular status of the distal portion of the affected extremity, including sensation, capillary refill, movement and distal pulse
  - b) Apply sterile dressing to any open wound(s)
  - c) If an extremity injury is present or suspected because of mechanism of injury (MOI), immobilize both the joint above and below the injury.
  - d) If there is severe angulation or neurovascular impairment, align with gentle traction and splint
  - e) If an injury to the femur is present, utilize traction splinting techniques
  - f) If an injury to the hip is present, utilize appropriate immobilization techniques, such as a long backboard
  - g) Evaluate and document neurovascular status before and after manipulation
- 5) Perform ongoing assessment according to the condition of the patient

## Protocol #23

### SEXUAL ASSAULT

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2
- 4) Perform focused history and physical exam
- 5) Reassure the patient and provide emotional support
- 6) Treat other injuries as indicated
- 7) Perform ongoing assessment during transport as needed.

*Note: Ensure scene safety and preserve evidence in cooperation with law enforcement. If law enforcement personnel are not at the scene, police are to be notified.*

*Ask the patient to delay bathing, douching or changing clothes prior to hospital evaluation.*

*This is a highly emotional and volatile situation. Be sure your findings and treatment are clearly documented on the written pre-hospital care report.*

*Crew members of the same sex may relate better with the patient in time of emotional crisis.*

## Protocol #24

### SPINAL CORD/NECK INJURY

If multi-system trauma is suspected, treat the patient according to the Multi-System Trauma Protocol #20.

- 1) Perform initial assessment
- 2) Manually stabilize head and neck
- 3) Maintain airway, breathing and circulation
- 4) Provide oxygen according to Protocol #2
- 5) Prevent aspiration by suctioning secretions as necessary. If the patient vomits, log roll on one side as a unit.
- 6) Perform focused history and physical exam
- 7) Be alert for onset of shock and treat accordingly
- 8) Evaluate patient's neurological status, including Glasgow Coma Scale (see Protocol #31)
- 9) Evaluate and treat any major injuries
- 10) Perform ongoing assessment every 5 minutes

## Protocol #25

### PEDIATRIC

#### Medical Pediatric Emergencies

Examples of medical pediatric emergencies may include poisoning, seizures, child abuse, fever/febrile seizures, anaphylactic reactions, near drowning, epiglottitis and croup.

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation
- 3) Provide oxygen according to Protocol #2
- 4) Perform focused history and physical exam
- 5) Take and record baseline vital signs:
  - i) If epiglottitis or croup are suspected, attempt to have child sit upright to assist with clearing of respiratory secretions. Do not attempt to examine the upper airway or otherwise agitate the patient
  - ii) If child abuse is suspected, note general appearance of the scene. Report all findings and suspicions to the emergency department upon arrival. Objectively document all observations on written prehospital care report.

#### Pediatric Trauma (including near-drowning)

- 1) Perform initial assessment
- 2) Manually stabilize head and neck
- 3) Maintain airway, breathing and circulation
- 4) Provide oxygen according to Protocol #2
- 5) Treat major bleeding
- 6) Perform focused history and physical exam
- 7) Obtain baseline vital signs
- 8) Provide treatment for other injuries

## Protocol #26

### SHOCK (HYPOPERFUSION)

- 1) Perform initial assessment
- 2) Maintain airway, breathing and circulation
- 6) Provide oxygen according to Protocol #2
- 3) Control major bleeding
- 4) Perform focused history and physical exam
- 5) Obtain and record baseline vital signs
- 6) Elevate lower extremities unless contraindicated
- 7) Treat all injuries accordingly
- 8) Perform ongoing assessment every 5 minutes

## Protocol #27

### DOCUMENTATION

A patient care report (PCR) must be completed for EVERY patient contact which occurs before the arrival of the transporting EMS crew, and either given to the transporting EMS crew while still on scene with the patient, or given to the receiving facility within 24 hours of the initial contact with the patient. A PCR completed by the MRTs on scene contains vital information regarding initial patient presentation and initial patient care, and must be approved by the State of Connecticut Department of Public Health, Office of Emergency Medical Services.

## Protocol #28

### TRIAGE / MULTIPLE CASUALTY INCIDENT (MCI)

An incident is considered a multiple casualty incident when there are more victims than rescue resources. Rescue resources include personnel, equipment and modes of transportation of the injured victims.

- 1) Perform initial scene size up:
  - a) Identify any scene hazards.
  - b) Make estimation of total number of patients (actual and potential).
  - c) Identify what resources will be needed (e.g., fire department, extra police, hazardous material cleanup, air ambulance).
  - d) Notify C-MED to initiate notification plan for surrounding hospitals and ambulance services.
- 2) Establish liaison with fire department officer who has the responsibility as Incident Commander.
- 3) Follow local multiple casualty incident plan as per local protocol.



## Protocol #29

### EXERPT CT DPH, OEMS REFERENCE #908 EFFECTIVE MARCH 27, 1996 GUIDELINES FOR WITHHOLDING RESUSCITATION

Note: This guideline does not contain the new 1994 U.S. DOT EMT-Basic National Standard Curriculum terminology.

Purpose: To provide specific instruction regarding the protocols used to withhold or withdraw resuscitation in the field.

Introduction: Local emergency responders and EMS personnel in Connecticut who are trained in any of the National Standard curricula are instructed to follow the most recent national guidelines of the American Heart Association (Ref. JAMA, 268:16, October 28, 1992) for initiating CPR. All clinically dead patients will receive all available resuscitative measures including cardiopulmonary resuscitation (CPR) unless contraindicated by one of the exceptions defined below. A clinically dead patient is defined as any unresponsive patient found without respirations and without a palpable carotid pulse.

The person who has the highest level of currently valid EMS certification, and who has direct voice communication for medical orders, and who is affiliated with an EMS organization present at the scene will be responsible for, and have the authority to direct, resuscitative activities. In the event there is a personal physician present at the scene, who has an ongoing relationship with the patient, that physician may decide if resuscitation is to be initiated. In the event there is a Registered Nurse from a home health care or hospice agency present at the scene, who has an ongoing relationship with the patient, and who is operating under orders from the patient's private physician, that nurse (authorized nurse) may decide if resuscitation is to be initiated. If the physician or nurse decides resuscitation is to be initiated, usual Medical Control procedures will be followed.

Procedure: The following conditions are the ONLY exceptions to initiating and maintaining resuscitative measures in the field on a clinically dead patient:

- 1) Traumatic injury or body condition clearly indicating biological death (irreversible brain death), limited to:
  - a) Decapitation: the complete severing of the head from the remainder of the patient's body.
  - b) Decomposition or putrefaction: the skin is bloated or ruptured, with or without soft tissue sloughed off, or there is the odor of decaying flesh. The presence of at least one of these signs indicated death occurred at least 24 hours previously.
  - c) Transection of the torso: the body is completely cut across below the shoulders and above the hips through all major organs and vessels. The spinal column may or may not be severed.
  - d) Incineration: ninety percent of body surface area 3° burn as exhibited by ash rather than clothing and complete absence of body hair with charred skin.
  - e) Dependent lividity with rigor: when clothing is removed, there is a clear demarcation of pooled blood within the body, and major joints are immovable. Requires additional confirmation as found under "General Procedures", III,2,a-f(pp3-4)
- 2) Pronouncement of death at the scene, of a patient age 17 or older, by a licensed Connecticut physician or authorized registered nurse by:

- a) Online Medical Oversight physician orders withholding resuscitative measures
  - b) Online Medical Oversight physician orders resuscitative measures to be stopped, or
  - c) Physician or authorized registered nurse at the scene in person, in consultation with the Online Medical Oversight.
- 3) A valid DNR bracelet is present, when it:
- a) Is on the wrist or ankle, and
  - b) Is intact; it has not been cut or broken, and
  - c) Has the correct logo; stylized hand in "stop" position and
  - d) words "EMS ALERT," and
  - e) Is the correct color--orange, and
  - f) Has an expiration date which has not elapsed.
- 4) At a mass casualty incident, if clinical death is determined prior to patient's arrival in the treatment area.

#### General Procedures:

- 1) In cases of decapitation, decomposition, transection of the torso, or incineration, the condition of clinical death must be determined by noting the nature and extent of the condition of the body as defined above. No CPR need be performed and Medical Control need not be notified.
- 2) In cases of dependent lividity with rigor, the condition of clinical death must be confirmed by observation of the following:
  - a) Reposition the airway and look, listen, and feel for at least 30 seconds for spontaneous respirations; respirations are absent.
  - b) Palpate the carotid pulse for at least 30 seconds; pulse is absent.
  - c) Auscultate with a stethoscope for lung sounds and visualize for chest movement for at least 30 seconds; lung sounds are absent.
  - d) Auscultate with a stethoscope for heart sounds for at least 30 seconds; heart sounds are absent.
  - e) Examine the pupils of both eyes with a light; both pupils are non-reactive.
  - f) Electrocardiographic monitoring by paramedic; finding of asystole OR a physician's order by radio to withhold resuscitation.
  - g) If any of the findings are different than those described above, clinical death is NOT confirmed and resuscitative measures must be immediately initiated.
- 3) In all other patients age 17 years or older, not described above, the following will take place:
  - a) If the field technician arrives at the scene of a clinically dead patient before a medical order not to start resuscitative measures had been given, resuscitation will be initiated while communication is established, assessment information is gathered, and a medical decision is being made, except in cases of decapitation, decomposition, transection of the torso, or incineration.
  - b) Medical control must be established early to reduce delay as resuscitative measures cannot be withheld until ordered by the physician. The Online Medical Oversight physician will be given information about early assessment, findings, and procedures initiated. The physician may then order withholding resuscitation before complete resuscitative efforts have been initiated.
  - c) The Online Medical Oversight physician may order that resuscitative measures underway by an EMT-Paramedic be stopped upon verification that no vital signs exist. Once an Advanced Cardiac Life Support resuscitative cycle has been completed, by an EMT-Paramedic on scene directing patient care, the patient will be assessed for absence of clinical response and the persistence of asystole. If these are present, contact may be made with an on-line Medical Control physician who may then order the MRT-Paramedic to stop resuscitative measures that are underway.

- 4) When a valid DNR bracelet is present, the Connecticut College of Emergency Physicians (CCEP) guidelines will be followed. Once a patient has been found not to be breathing, examination for a valid DNR bracelet will take place. If there is a valid bracelet, no mouth-to-mouth or other means of artificial respirations will be administered, and no external cardiac compressions will be initiated. If previously initiated, resuscitative measures will be DISCONTINUED.
- 5) A complete documentation of the initial examination, findings and resulting procedures (if any) will be entered on the EMS patient care record.
- 6) If EMS personnel are delayed or precluded from making an appropriate physical examination by law or fire officials protecting the integrity of the scene, they shall so note on their patient care form. If subsequent access to the patient is allowed, then EMS personnel shall proceed according to this protocol. EMS personnel are required to provide documentation of the patient's physical condition only to the extent of the physical examination they performed.

#### Special Procedures:

- 1) In all cases when there is any suspicion of an unnatural death, local police authorities will be notified. Removal of the body will be done only after the police officer authorizes this.
- 2) A private physician at the scene who has an on-going relationship with the patient must produce identification showing the physician's name and the Connecticut license number (MD or DO). That physician may pronounce death on a clinically dead patient even if EMS personnel are present. The physician's pronouncement relieves the emergency personnel of the responsibility to begin or continue resuscitative measures. If the patient is not pronounced and the physician wishes to assume care of the patient, the physician must agree to assume responsibility for the patient's care and accompany the patient to the hospital in the ambulance if the patient is to be transferred to the hospital. The Medical Control hospital will be notified and the information will be documented on the EMS patient care form.
- 3) A registered Nurse from a home health care or hospice agency at the scene, who has an ongoing relationship with the patient, and who is operating under orders from the patient's private physician and is authorized by law to pronounce death, may pronounce a clinically dead patient dead even if EMS personnel are present. The nurse's pronouncement relieves the emergency personnel of the responsibility to begin or continue resuscitative measures. The Medical Control hospital will be notified and the information will be documented on the EMS patient care form.

#### Disposition of Remains:

- 1) Disposition of dead bodies is not the responsibility of EMS personnel, but efforts must be taken to insure that there is a proper transfer of responsibility for scene security. However, to be helpful to family, police, and others, EMS personnel may assist those who are responsible.
- 2) When a decision has been made to withhold or withdraw resuscitation, the body may be removed in one of the following ways:
  - a) When the body is in a secure environment (where it is protected from view by the public, from being disturbed or moved by unauthorized people) and police are not or should not be involved, the body may be removed by a funeral hearse. The attending physician should be notified if available and EMS personnel may leave. Example: a DNR patient at home.
  - b) When the body is in a secure environment and police are or should be involved, notify the police and the attending physician. If the attending physician is not available, the police may contact the office of the Chief Medical Examiner (203-679-3980 or 1-800-842-8820) for

authorization to move the body by hearse, or the Medical Examiner may send a vehicle for the body. EMS personnel may leave. Example: an apparent overdose or injury at home.

- c) When the body is not in a secure environment and police are not or should not be involved, contact Medical Control for permission to transport the body to the hospital morgue. Example: on the street with an unruly crowd of people.
  - d) When the body is not in a secure environment and police are or should be involved, notify the police and the attending physician. If the attending physician is not available, the police may contact the Office of the Chief Medical Examiner (203-679-3980 or 1-800-842-8820) for authorization to move the body by hearse, or the medical Examiner may elect to send a vehicle for the body. EMS personnel may leave after turning the scene over to other appropriate authority. Example: on the street.
- 3) The Office of the Chief Medical Examiner (860-679-3980 or 1-800-842-8820) must be notified of any death which may be subject to investigation by the Chief Medical Examiner (CG 19a-407), which includes almost all deaths which occur outside health care institutions. EMS personnel should determine that such notification has been made by the police, otherwise EMS personnel should make the notification AND DOCUMENT ON THE PATIENT CARE RECORD.
  - 4) At other times the MRT feels the circumstances warrant, contact Medical Control for permission to transport the body to the hospital morgue.
  - 5) When Online Medical Oversight feels the circumstances warrant, Medical Control may request that the body be transported to the hospital morgue.

#### Documentation:

- 1) A patient care record will be completed for each clinically dead patient who has resuscitation performed and for whom resuscitation was discontinued or was withheld. All Medical Control orders will be noted on the patient care record.
- 2) In cases of decapitation, decomposition, transection of the torso, or incineration, when resuscitation was discontinued or not initiated, detailed findings consistent with these conditions will be entered on the patient care record.
- 3) In cases of dependent lividity with rigor, when resuscitation was discontinued or not initiated, the following detail will be documented on the patient care record:
  - a) Breathing absent when airway was repositioned and assessed for at least 30 seconds.
  - b) Carotid pulse was absent upon palpation for at least 30 seconds.
  - c) There were no audible lung sounds after examining the patient's chest with a stethoscope for at least 30 seconds.
  - d) There were no audible heart sounds after examining the patient's chest with a stethoscope for at least 30 seconds.
  - e) The pupils of both eyes are non-reactive.
  - f) A view of an EKG in at least two (2) leads, for at least 12 seconds, which shows asystole.

## Protocol #30

### DO NOT RESUSCITATE (DNR)

#### DNR Bracelet

A DNR bracelet shall be the only valid indication recognized by EMS providers that a DNR order exists for patients outside a healthcare institution, other than those patients received by an EMS provider directly from a healthcare institution.

A valid DNR bracelet shall:

- 1) Be the correct color - orange
- 2) Have the correct logo
- 3) Be affixed to the patient's wrist or ankle
- 4) Display the patient's name and attending physician's name
- 5) Not have been cut or broken at any time

#### DNR Transfer Form

- 1) To transmit a DNR order during transport by an EMS provider between healthcare institutions, the DNR order shall be documented on the DNR transfer form
- 2) The DNR transfer form shall be signed by a licensed physician or a registered nurse and shall be recognized as such and followed by EMS providers
- 3) The DNR remains in place during transport as well as to the point of admission to the receiving facility

#### Revocation of the DNR

- 1) The patient or "authorized representative" may verbally tell a certified MRT they wish to alter their DNR status
- 2) This statement must be entered on the prehospital care report
- 3) This statement should be supported by any witnesses present

Protocol #31

GLASGOW COMA SCALE

The Glasgow Coma Scale will result in a total score from 3 to 15:

ADULT/CHILD

Eye opening:

- 4 Spontaneous
- 3 To voice
- 2 To pain
- 1 None

Best Verbal Response:

- 5 Oriented
- 4 Confused
- 3 Inappropriate words
- 2 Incomprehensible
- 1 No response

Motor Response:

- 6 Obeys commands
- 5 Localizes pain
- 4 Withdraws from pain
- 3 Flexion (decorticate)
- 2 Extension (decerebrate)
- 1 No response

CHILD/ADULT INFANT

Eye opening:

- 4 Spontaneous
- 3 To speech
- 2 To pain
- 1 No response

Best Verbal Response:

- 5 Coos, babbles
- 4 Irritable cries
- 3 Cries to pain
- 2 Moans, grunts
- 1 No response

Motor Response:

- 6 Obeys commands
- 5 Localizes from pain
- 4 Withdraws from pain
- 3 Flexion (decorticate)
- 2 Extension (decerebrate)
- 1 No response