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Background

These protocols have been written to follow the most basic concept in medicine is to “first do no harm.” These protocols are intended guide and direct care patient care by EMS providers across New York State and to follow that principle. They reflect the current evidence-based practice and consensus of content experts. These protocols are not intended to be absolute treatment documents, rather as principals and directives which are sufficiently flexible to accommodate the complexity of patient management.

No protocol can be written to cover every situation that a provider may encounter, nor are protocols a substitute for the judgment, and experience of the provider. Providers are expected to utilize their best clinical judgment and deliver care and procedures according to what is reasonable and prudent for specific situations. However, it will be expected that any deviations from protocol shall be documented and reviewed, according to regional procedure.

THESE PROTOCOLS ARE NOT A SUBSTITUTE FOR GOOD CLINICAL JUDGEMENT
Introduction

The Statewide Basic Life Support Adult and Pediatric Treatment Protocols reflect the current acceptable standards for basic life support (BLS) delivered by certified first responders (CFR), and emergency medical technicians (EMT) in New York State. Advanced life support (ALS) protocols are developed separately and subject to regional variation.

Advanced providers are also responsible for, and may implement, the standing orders indicated for BLS care. Protocols are listed for each provider level and STOP lines indicate the end of standing orders. Generally, BLS interventions should be completed before ALS interventions.

Regional protocols and policies may accompany these BLS protocols.

The color-coded format of the protocols allows each BLS professional to easily follow the potential interventions that could be performed by level of certification.

Criteria

- Any specific information regarding the protocol in general

CFR

- CFR and EMT standing orders. These are also standing orders for all levels of credential above EMT

EMT

- EMT standing orders

MEDICAL CONTROL CONSIDERATIONS

- Medical control may give any order within the scope of practice of the provider
- Options listed in this section are common considerations that medical control may choose to order as the situation warrants

Key Points/Considerations

- Additional points specific to patients that fall within the protocol
- These protocols do not supplant regionally required equipment specifications or the items required under Public Health Law and Regulations
- There are many protocols that indicate interventions that may be performed “*if equipped and trained;” these protocols should not serve as a demonstration of required equipment or training, as regional and agency variations will exist.
Pediatric Definition and Discussion

For these protocols, pediatric patients are as defined by the AHA as 'children without secondary signs of puberty.' Use appropriate judgment to determine the presence or absence of these signs in the field. These patients are anticipated to usually be under the age of 12 years. In several specific protocols, weight based guidelines are introduced with the weight of 30 kg (66 lbs) requiring a pediatric intervention.

Pediatric specific interventions or considerations are highlighted throughout these protocols with a specific “teddy-bear” icon.
Patient Care Responsibilities

The provision of patient care is a responsibility given to certified individuals who have completed a medical training and evaluation program specified by the NYS Public Health or Education Laws and subject to regional and State regulations or policy. Prehospital providers are required to practice to the standards of the certifying agency (DOH) and the medical protocols authorized by the local REMAC.

Patient care takes place in many settings, some of which are hazardous or dangerous. The equipment and techniques used in these situations 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 medical care providers. These individuals are generally responsible for scene administration, safe entry to a scene, or decontamination of patients or responders.

Pursuant to the provisions of Public Health Law, the individual having the highest level of prehospital medical certification, and who is responding with authority (duty to act) is responsible for providing and/or directing the 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 medical control.
Transfer of Patient Care Responsibilities

Criteria

- Providers are responsible for the patient while in their care. Transferring or receiving providers will not be responsible for his or her counterpart’s actions.
- Patients may be transferred to a provider with the same or higher level of certification.
- Patients may be transferred to a provider with a lower level of certification provided the patient is not anticipated to require advanced care and the lower level provider has formally accepted the transfer of care.

CFR

EMT and ALL HIGHER LEVELS OF CERTIFICATION

When transferring patients, both the receiving and transferring providers should:

- Ensure that all patient information is transferred to the receiving provider, such as chief complaint, past medical history, current history, vital signs, and care given prior to the transfer of care.
- Assist the receiving provider until they are ready to assume patient care.
- Be willing to accompany the receiving provider to the hospital, if the patient’s condition warrants or if the receiving provider requests it, as resources allow.

All personnel and agencies must comply with NYSDOH BEMS policy statement 12-02 (or updated version) regarding documentation:

- Both providers will complete a Patient Care Report (PCR), as appropriate, detailing the care given to the patient while in their care.
- The receiving provider must briefly document patient care given prior to receiving the patient.
- Providers within the same agency may utilize the same PCR (as technology and agency/regional/state policy allow).

MEDICAL CONTROL CONSIDERATIONS

- Resolution of any disagreements between transferring and transporting providers.

Key Points/Considerations

- Any disparity between the providers must be resolved by on-line medical control or the provider of higher certification must transport with the patient.
- In situations involving multiple patients or mass casualty incidents, EMS providers may field-triage patients to care and transportation by EMS providers of lower level of certification as resources allow.
Incident Command

The Governor’s Executive Order No. 26 of March 5, 1996, establishes the National Incident Management System (NIMS) as the standard system of command and control for emergency operations in New York State. The Incident Command System (ICS) does not define who is in charge, but rather 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 situations. The specific issues of direction, provision of patient care, and the associated communication among responders must be integrated into each single or unified command structure and assigned to the appropriately trained personnel to carry out.
Acknowledgements

The State and Regional Emergency Medical Services Councils, State and Regional Emergency Medical Advisory Committees, and Regional Program Agency staff of all that contributed to this and previous versions of these protocols.

The BLS Protocols Advisory and Writing Group

NYS DOH Bureau of EMS staff

Special thanks to Robin Snyder-Dailey for the protocol design.
General Approach to the EMS Call

CRITERIA

This general approach guidance document is designed to provide EMS providers with a standardized framework for approaching the scene. Follow common sense, apply good clinical judgment, and follow regionally approved polices and protocols.

CFR

EMT

Consider dispatch information while responding:
- Type of response (emergency/non-emergency/stand-by, transport)
- Prevailing weather
- Road conditions
- Time of day
- Location of call
- EMD Determinant / Mechanism of Illness / Injury
- Number of anticipated patients
- Need for additional resources

Survey the scene – do not approach the scene unless acceptably safe to do so. Stage proximate to the scene until scene is rendered acceptably safe:
- Environmental hazards
- CBRNE hazards
- Evidence of unknown powders/other unknown substances/sharps
- Indicators of a chemical suicide
- Mechanical hazards
- Violence / threat of violence
- Traffic hazards
- Number of actual patients
- Activate local MCI plan as necessary

Consider shelter-in-place or evacuation based on hazards; consider additional support resources:
- ALS intercept
- Additional ambulance
- Air medical services
- EMS physician
- Fire department / Heavy rescue
- Law enforcement
- Utilities

Ensure universal precautions / personal protective equipment appropriate to the task
For situations in which EMS PPE would not sufficiently protect the provider, the provider should assist the other emergency responders in determining response objectives based on life safety, property preservation, and environmental protection.

Establish or participate in unified command or ICS structure, as appropriate
For MCIs, establish a command structure as soon as possible
General Approach to the Patient

CRITERIA
This general approach guidance document is intended to provide EMS providers with a standardized framework for approaching the patient. Always follow common sense, apply good clinical judgment, and follow regionally approved policies and protocols.

CFR
EMT
Perform primary patient assessment
Airway
Identify and correct any existing or potential airway obstruction while protecting the cervical spine
Is the airway patent?
Will it stay open on its own?
Is intervention necessary (OPA, NPA, Suction)

Breathing
Apply oxygen and/or positive pressure ventilations, as indicated
Is breathing present?
If breathing too fast or too slow to sustain life?
Is the patient speaking effectively?

Circulation
Control serious life-threatening hemorrhage
Refer to the bleeding control protocol
Is a pulse present?
Is the pulse too fast or too slow to sustain life?
Is the pulse regular or irregular?
What is the skin color, condition, and temperature?
Is there serious external hemorrhage?
Is there evidence of internal hemorrhage or signs of shock?

Continually reassess and correct any existing or potentially compromising threats to the ABCs

Disability
Determine level of consciousness
Alert
Voice
Pain
Unresponsive
GCS
Pupils
Cincinnati Pre-Hospital Stroke Screen (or other regionally approved stroke scale)
Blood glucose determination, if approved

Exposure
Appropriately expose patient as needed to perform complete physical exam and perform necessary interventions
Are exposed patients sufficiently protected from public view?

Transport Decision
Immediate transport to closest appropriate facility if serious threats to life exist / cannot be corrected unless otherwise directed by circumstances, protocol, or medical direction

Delayed transport, if conditions allow for additional time to stabilize
In all cases, ensure that patients are properly secured.

Minimize EMS provider movement in the patient compartment while unrestrained

Consideration for ALS intercept and air medical services should be made based on agency and regional policy, patient needs, regional capabilities, and travel times. Do not delay transport waiting for ALS to arrive. The closest ALS may be at a hospital.

Secondary Patient Assessment
Vital Signs
- Pulse rate and quality.
- Respirations rate and quality.
- Blood pressure.
- Obtain BP by palpation only if necessary
- Skin color, condition, and temperature

History of present illness (eg: SAMPLE, OPQRST),
  Pertinent past medical history/medications/allergies
  Obtain additional pertinent medical information from the family and bystanders

Physical Exam
  Focused or complete exam directed by patient presentation, chief complaint, and mechanism of injury or illness
  Check for medical alert tags

Locate MOLST, eMOLST, DNR as appropriate

**MEDICAL CONTROL CONSIDERATIONS**
- Medical control may give any order within the scope of practice of the provider
- Options listed in this section are common considerations that medical control may choose to order as the situation warrants
**Key Points/Considerations**

- If a patient chooses to refuse care or transportation, please refer to RMA protocol and regional policy for high risk patient interactions.
- Develop prehospital impression by combining all information available in the history of present illness, past medical history, and physical exam.
- Submit a verbal report to the responsible medical personnel upon arrival at the emergency department.
- Label any items that were transported with the patient such as EKGs, paperwork from facilities, medications, or belongings.
General Approach to Transportation

CRITERIA

This general approach guidance document is intended to provide EMS providers with a standardized framework for approaching the patient transport. Follow common sense, apply good clinical judgment, and follow regionally approved polices and protocols.

CFR

EMT

Ongoing scene and patient assessment
  Scene safety is not just a yes/no question; it is continual situational awareness
  Take note of the affect of patients and bystanders
  Don’t get pinned into area
  Be aware of your egress routes

Transport to the closest appropriate receiving hospital in accordance with regional hospital destination policies for travel time and NY State designation

Ensure ongoing patient assessment, check for improving/deteriorating patient condition, and respond accordingly. Check to ensure that previously initiated therapies remain functional

Carefully consider use of appropriate emergency warning devices for transport: Lights and siren use is a medical intervention – does the patient condition warrant the use

Wear seatbelts/restraints when possible

Brief report to receiving hospital if appropriate in accordance with regional policy. Ensure early notification for serious trauma, STEMI, stroke

Consider contact with medical control if questions arise, or there are complex medical conditions

MEDICAL CONTROL CONSIDERATIONS

- Medical control may assist with the determining the most appropriate receiving facility

Key Points/Considerations

If a patient chooses to refuse care or transportation, please refer to RMA protocol and regional policy for high risk patient interactions.
# General Approach to the Completion of the Call

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<td>This general approach guidance document is intended to provide EMS providers with a standardized framework for closure following an EMS call. Follow common sense, apply good clinical judgment, and follow regionally approved polices and protocols.</td>
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Complete PCR / ePCR and provide hard copy to the responsible emergency department (ED) personnel after all patient care providers have had the opportunity to review it. A brief written copy of the patient demographics, history, medication, allergies, vital signs and summary of treatment may be left if it is necessary for EMS to leave the ED prior to PCR/ePCR completion.

Decontaminate the ambulance and durable equipment as necessary

Dispose of medical waste

Restock and return to service

NOTE: If you believe that you have been exposed to a blood or other potentially infectious materials, present yourself to the same receiving hospital as the source patient. Follow medical advice and your agency’s occupational exposure to blood borne pathogen plan.
**Medical: Cardiac Arrest**

**CRITERIA**

- Unresponsive patients without signs of life
- Patients do not meet the criteria within the “Determination of Obvious Death” protocol
- Patients who do not have medical orders to not perform CPR such as a DNR, MOLST, or eMOLST

**CFR**

- CPR should be initiated prior to defibrillation unless the cardiac arrest is witnessed by the responding EMS provider
  - Perform compressions while awaiting the application of defibrillation pads
- Push hard and fast (100-120 compressions/min)
  - Metronome or feedback devices may be used as an adjunct to maintain recommended rate
- Ensure full chest recoil
- Minimize interruptions in chest compressions
- Cycle of CPR = 30 compressions then 2 breaths
  - Perform compressions while awaiting the application of defibrillation pads
  - Rotate compressors every two minutes with rhythm checks, as staffing allows
  - Minimize interruptions in chest compressions
- Continuous compressions with asynchronous ventilation (not stopping compressions while ventilating) is permitted to substitute for cycles of CPR that have pauses for ventilation even in non-intubated patients
- Avoid hyperventilation
- Use of airway adjuncts and bag-valve mask device, as indicated, with BLS airway management, including suction (as needed), as available
  - Bag-valve mask should be connected to supplemental oxygen, if available
- Rhythm check or AED “check patient” every 5 cycles or two minutes of CPR
- Defibrillate as appropriate
  - Resume CPR immediately after defibrillation (do not check a pulse at this time)
  - Continue CPR for approximately 2 minutes or until the patient no longer appears to be in cardiac arrest

**EMT**

- Although transport may be necessary, make every effort to *not* do manual chest compressions in moving ambulances, because it poses a significant danger to providers and may be less effective
  - Consider mechanical CPR adjuncts when available for provider safety in moving ambulances (e.g. AutoPulse®, LUCAS®, LifeStat®, Thumper®, or other FDA approved device)
**MEDICAL CONTROL CONSIDERATIONS**

- Termination of resuscitation in instances that are not covered by standing order criteria may be authorized by medical control

**Key Points/Considerations**

- Do not interrupt compressions for placement of an advanced airway or placement of a mechanical CPR device
- Do not delay beginning compressions to begin ventilations
- Do not delay ventilations to connect supplemental oxygen
- Adequate ventilation *may* require disabling the pop-off valve if the bag-valve mask unit is so equipped
- AED should be placed as soon as possible without interrupting compressions to do so
- If a patient has a medication patch, it may be removed (use appropriate PPE)
- **Initiate transport after 3 cycles of CPR if advanced life support is not readily available**
CPR, ALS treatment, and transport to an emergency department may be withheld in an apneic and pulseless patient that meets ANY one of the following:

- Presence of a valid MOLST, eMOLST, or DNR indicating that no resuscitative efforts are desired by the patient
- Patient exhibiting signs of obvious death as defined by ANY of the following:
  - Body decomposition
  - Rigor mortis
  - Dependent lividity
  - Injury not compatible with life (e.g. decapitation, burned beyond recognition, massive open or penetrating trauma to the head or chest with obvious organ destruction, etc.)
- Patient who is pulseless and apneic with no organized cardiac activity on ECG following significant blunt or penetrating traumatic injury*
  - Cardiopulmonary arrest patients in whom the mechanism of injury does not correlate with clinical condition, suggesting a nontraumatic cause of the arrest, are excluded from this criterion
- Patient who has been submerged for greater than one hour in any water temperature

If a patient meets any of the aforementioned criteria, resuscitation efforts may be withheld, even if they have already been initiated. If any pads, patches, or other medical equipment have been applied, they should be left in place

Notify law enforcement. The patient may be covered and, if allowed by law enforcement, may be moved to an adjacent private location. If there is any concern for suspicious activity, the patient should not be disturbed

Key Points/Considerations
- *Significant blunt or penetrating trauma includes meeting criteria set forth in step one, two, or three of the trauma triage criteria, see “Major Trauma” protocol
- See also “Advance Directives” protocol, as indicated
- If the above criteria can be met by BLS, ALS is not required for the determination of obvious death
- Copies of the MOLST form should be honored
- A copy of the DNR, MOLST, or eMOLST form should be attached to the PCR and retained by the agency whenever practical
- The eMOLST form may be printed and affixed with electronic signatures. Electronic signatures on the eMOLST form are considered valid signatures
Medical: Advance Directives

Criteria

The following procedure is to be used in determining course of action for all patients

CFR

EMT

- For conscious and alert patients, their wishes are to be followed in accordance with standard consent procedures
- For patients unable to consent, including the unconscious, determine the presence of valid MOLST, eMOLST or DNR forms at the scene:
  - Signed “Medical Orders for Life Sustaining Treatment” (MOLST) form
  - Electronically signed eMOLST form
  - Signed New York State approved document, bracelet, or necklace
  - Properly documented nursing home or nonhospital DNR form
- If MOLST, eMOLST, or DNR (document, bracelet, or necklace) is not present – begin standard treatment, per protocol
- If MOLST, eMOLST, or DNR (document, bracelet, or necklace) is present, and is valid for the patient’s clinical state (e.g. cardiac arrest), follow the orders as written, inclusive of either terminating or not beginning resuscitation
- If advanced directives not mentioned above are present (living will or health care proxy), contact medical control for direction

MEDICAL CONTROL CONSIDERATIONS

- Direction regarding wishes expressed via other forms of advanced directives including living wills, health care proxies, and in-hospital do not resuscitate orders

Key Points/Considerations

- Any appropriate directive indicated on the MOLST or eMOLST should be honored, including the directive for the patient not to be transported to the hospital
- A copy of the DNR, MOLST, or eMOLST form should be attached to the PCR and retained by the agency whenever possible
Medical: Respiratory Arrest/Failure

**CRITERIA**

- Patients with absent or ineffective breathing
  - Signs of ineffective breathing include cyanosis, visible retractions, severe use of accessory muscles, altered mental status, respiratory rate less than 10 breaths per minute, signs of poor perfusion
- Patients are not excluded from resuscitation on the basis of the “Advance Directive” protocol

**CFR**

**EMT**

- Open the airway using the head-tilt/chin-lift or modified jaw-thrust maneuver
- Remove any visible airway obstruction by hand
- Clear the airway of any accumulated secretions or fluids by suctioning
- Provide positive pressure ventilation using a bag-valve mask
  - If ventilations are not successful, refer immediately to the “Foreign Body Obstructed Airway” protocol
- Use of airway adjuncts and bag-valve mask device, as indicated, with BLS airway management, including suction (as needed), as available
  - Bag-valve mask should be connected to supplemental oxygen, if available
- Ventilate every 5-6 seconds if an advanced airway is not in place

- Ventilate the pediatric patient every 3-5 seconds if an advanced airway is not in place
- Each breath is given over 1 second and should cause visible chest rise

**Key Points/Considerations**

- Do not delay ventilations to connect supplemental oxygen
- Ongoing assessment is required to assess:
  - The effectiveness of ventilations
  - The need for compressions should the patient lose his or her pulse (refer immediately to the “Cardiac Arrest” protocol)
- Adequate ventilation *may* require disabling the pop-off valve is the bag-valve mask unit is so equipped
- Do not delay transport
Medical: Foreign Body Obstructed Airway

**CRITERIA**
- Adult patients with a partial or complete foreign body airway obstruction

**CFR**
- If the patient is **conscious** and can breathe, cough, or speak
  - Encourage the patient to cough
  - Transport in a sitting position or other position of comfort
  - Administer supplemental oxygen; refer to the “Oxygen Administration” protocol
  - Perform ongoing assessment and watch for progression to complete obstruction
  - Consider allowing parent to hold face mask 6-8 inches from the child’s face
- Facilitate transportation, ongoing assessment, and supportive care
  - Perform ongoing assessment and watch for progression to complete obstruction

**EMT**
- If the patient is **conscious** and cannot breathe, cough, or speak
  - Perform airway maneuvers according to current AHA/ARC/NSSC guidelines
- If the patient is **unconscious**
  - Remove any visible airway obstruction by hand
  - Perform CPR

**Key Points/Considerations**
- Do not delay transport
- Agitating a child with a partial airway obstruction could cause a complete airway obstruction.
  - Limit interventions that may cause unnecessary agitation such as assessment of blood pressure in a child who can still breathe, cough, cry, or speak
Medical: Asthma / Wheezing

CRITERIA

- Patients with effective but increased work of breathing
  - Excludes traumatic causes of dyspnea
  - Excludes pneumothorax

CFR

- Assess for foreign body airway obstruction
  - Refer immediately to the “Foreign Body Obstructed Airway” protocol, if indicated
- Ongoing assessment of the effectiveness of breathing
  - Refer to the “Respiratory Arrest / Failure” protocol, if necessary
- Administer supplemental oxygen; refer to the “Oxygen Administration” protocol
- Facilitate transportation, ongoing assessment, and supportive care

EMT

- Assist patient with his or her own medications (see “Prescribed Medication Assistance” protocol), as appropriate
- If patient has a known diagnosis of asthma:
  - Administer albuterol 2.5 mg in 3 mL (unit dose) via nebulizer*
  - May repeat to a total of three doses if symptoms persist
- Continuous Positive Airway Pressure (CPAP) 5-10 cm H2O as needed, if equipped and trained (in adult patients only)*
- See medical control considerations for use of epinephrine

MEDICAL CONTROL CONSIDERATIONS

- Use of albuterol via nebulizer by EMT for indications other than asthma
- Use of epinephrine by EMT for critical asthma attack (EMT epinephrine kits or autoinjector [e.g. EpiPen®])
- Consider CPAP for EMT, if available and trained, for older children as equipment size allows

Key Points/Considerations

- Wheezing does not always indicate asthma. Consider allergic reaction, airway obstruction, pulmonary edema, or COPD exacerbation
- Allow the patient to maintain position of comfort when safe to do so
  - Do not force the patient to lie down
  - Do not agitate the patient
- Observe airborne and/or droplet precautions in appropriate patients, such as those with suspected tuberculosis
- Do not delay transport to complete medication administration
*If equipped and trained

**PEDIATRIC Key Points/Considerations**

- Croup should be considered in children presenting with low grade fever, barking cough, stridor, and/or sternal retractions.
- Epiglottitis should be considered in children with a high fever, muffled voice, tripod position, and/or drooling. A vaccination history should be obtained because unvaccinated children are at higher risk of epiglottitis.
- Agitating a child with croup or epiglottitis could cause a complete airway obstruction.
  - Limit interventions that may cause unnecessary agitation such as assessment of blood pressure in a child who can still breathe, cough, cry, or speak.
Medical: Altered Mental Status

**Criteria**
- Including, but not limited to, hypoglycemia and opioid overdose

**CFR**
- Airway management and appropriate oxygen therapy
- Check blood glucose level, if equipped and safe to do so
- If blood glucose is known or suspected to be below 60 mg/dL and patient can self-administer and swallow on command:
  - Give one unit dose (15-24 grams) of oral glucose, or another available carbohydrate source (such as fruit juice or non-diet soda)
- If the patient is unable to swallow on command, or mental status remains altered following administration of oral glucose:
  - Do not delay transport
- Ongoing assessment of the effectiveness of breathing
  - Refer to the appropriate “Respiratory Arrest / Failure” protocol, if necessary

**EMT**
- For suspected opioid overdose and hypoventilation or respiratory arrest, administer naloxone (Narcan) 2 mg IN; may repeat once in 5 minutes, if no significant improvement occurs
  - For the pediatric patient, administer 1 mg IN

**Key Points/Considerations**
- Assess the scene for safety and, if it is not, retreat to a safe location and obtain police assistance
- May substitute alternative FDA approved, commercially prepared 4mg/0.1mL nasal spray metered dose device and is approved for the full 4 mg dose in the adult or pediatric patient
- See also behavioral emergencies protocol, if indicated
**Medical: Anaphylactic Reaction**

**CRITERIA**

- Anaphylaxis is a rapidly progressing, life threatening allergic reaction, occurring within minutes to hours of exposure to an allergen.
- Though a previous history of anaphylaxis is an important indicator for treatment, providers should be aware that anaphylaxis may develop in patients with no prior history.
- This is not for a patient with isolated rash.
- DO NOT hesitate to contact medical control for discussion of administration of epinephrine.

**CFR**

- Allow the patient to maintain position of comfort
  - For pediatric patients:
    - Do not force the child to lie down
    - Do not agitate the child
- Ongoing assessment of the effectiveness of breathing
  - Refer to the appropriate “Respiratory Arrest / Failure” protocol, if necessary
- Airway management and appropriate oxygen therapy

**EMT**

If the patient has been exposed to an allergen and has signs of:

- respiratory distress AND/OR
- altered mental status AND/OR
- hypoperfusion/hypotension

  - You MAY administer epinephrine (as available and as trained)
    - Adult 0.3 mg IM if ≥ 30 kg
    - Pediatric 0.15 mg IM if <30 kg
  - If the patient does not improve within 5 minutes, you MAY repeat epinephrine once.

**MEDICAL CONTROL CONSIDERATIONS**

- Albuterol 2.5 mg in 3 mL (unit dose) via nebulizer
- Administer epinephrine (as available and as trained)
  - Adult 0.3 mg IM if ≥ 30 kg
  - Pediatric 0.15 mg IM if <30 kg

**Key Points/Considerations**
Contact MEDICAL CONTROL if the patient has a recent exposure to a likely allergen (minutes to hours), and presents with the following:

- Involvement of skin/mucosa
- Persistent GI Symptoms

- Low systolic blood pressure is considered:
  - Infants/Children:
    - 2-10 years of age: < 70 mmHg + (2 x age)
    - 11-14 years of age: < 90 mmHg
  - Adults:
    - < 90 mmHg or > 30% decrease from person’s baseline

- Respiratory distress includes the following:
  - Dyspnea
  - Wheezes/Bronchospasm
  - Stridor
  - Hypoxia
  - Tachypnea
  - Voice change/Throat tightness

- Hypoperfusion includes the following:
  - Altered mental status
  - Hypotension
  - Dizziness
  - Near syncope/syncope
  - Incontinence

- Skin/Mucosal involvement includes:
  - Generalized hives/Rash
  - Pruritis
  - Flushing
  - Swollen lips-tongue-uvula
Medical: Behavioral Emergencies

**Criteria**

- This protocol is intended to be used with patients who are deemed to pose a danger to themselves or others

**CFR**

- Call for law enforcement
- Airway management, vital signs, and appropriate oxygen therapy, if tolerated
- Verbal de-escalation (utilizing interpersonal communication skills)
- If verbal de-escalation is not successful or not possible, apply soft restraints, such as towels, triangular bandages, or commercially available soft medical restraints, only if necessary to protect the patient and others from harm

**EMT**

- Check blood glucose level, if equipped, as soon as you are able to safely do so. If abnormal, refer to the “Altered Mental Status” protocol, as indicated

**Key Points/Considerations**

- Assess the scene for safety and, if it is not, retreat to a safe location and obtain police assistance
- **Patient must NOT be transported in a face-down position**
- Consider hypoxia, hypoperfusion, hypoglycemia, and other medical causes of abnormal behavior
- A team approach should be attempted for the safety of the patient and the providers
- If the patient is in police custody and/or has handcuffs on, a police officer should accompany the patient in the ambulance to the hospital. The provider must have the ability to immediately remove any mechanical restraints that hinder patient care at all times
Medical: Cardiac Related Problem

CRITERIA

- For patients presenting with angina or their anginal equivalent

CFR

- Airway management and appropriate oxygen therapy

   CFR STOP

EMT

- Acquire and transmit 12-lead ECG*
- Aspirin 324 mg (4 x 81 mg tabs) chewed, only if able to chew
- If the patient requests, assist patient with his or her prescribed nitroglycerin, up to 3 doses, 5 minutes apart, provided the patient’s systolic BP is > 120 mmHg

   EMT STOP

MEDICAL CONTROL CONSIDERATIONS

- Additional nitroglycerin 0.4 mg SL, or equivalent, every 5 minutes for EMT
- Consider medical control consultation, as needed, for determination of most appropriate destination facility

Key Points/Considerations

- Focus on maintaining ABCs, rapid identification, rapid notification, and rapid transport to an appropriate facility
- Vitals, as well as 12-lead ECG (if equipped and regionally approved), should be assessed frequently during transport
- If the patient becomes hypotensive after nitroglycerin administration, place the patient in a supine position, if there is no contraindication to doing so (such as severe pulmonary edema)
- Aspirin should not be enteric coated
- The patient may have been advised to take aspirin prior to arrival by emergency medical dispatch. You may give an additional dose of aspirin (324 mg chewed) if there is any concern about the patient having received an effective dose prior to your arrival
- Consider 12-lead ECG for adults, with any one of the following: dyspnea, syncope, dizziness, fatigue, weakness, nausea, or vomiting
- *If equipped and regionally approved
Medical: Carbon Monoxide Exposure – Suspected

**Criteria**

- For patients with smoke inhalation, patients for whom a CO alarm has gone off in the residence, or any other potential exposure to CO

**CFR**

- Any patient with suspected carbon monoxide poisoning should receive high flow oxygen via non-rebreather mask (NRB)

**EMT**

- Consider CPAP 5-10 cm H2O (if the device delivers 100% oxygen) if equipped and trained
- An objective carbon-monoxide evaluation tool may be used to guide therapy, if available

**ASYMPTOMATIC** potentially exposed people:

- Any asymptomatic patient with a CO level 12-25% should receive high flow oxygen for 30 minutes and then be reassessed
  - Consider transport if CO levels are not decreasing
- Any asymptomatic patient with a CO level >25% should receive high flow oxygen and be transported to the hospital

**SYMPTOMATIC** patients:

- Carbon monoxide poisoning does not have specific, clear cut symptoms; other medical conditions may present with dizziness, nausea, or confusion
- All symptomatic patients should be transported, regardless of CO level

**MULTIPLE** patients:

- Consult medical control for guidance regarding transport location decisions and on-scene treatment and release when multiple patients are involved
- If there is potential for greater than 5 patients, consider requesting an EMS physician to the scene

**Key Points/Considerations**

- The Masimo RAD 57® is an example of an objective carbon-monoxide evaluation tool
  - CONSIDER direct transport to a hyperbaric center if patient’s SpCO reading is >25% AND/OR the patient had any loss of consciousness, has significant altered mental status / abnormal neurologic exam, or the patient is pregnant
  - Pediatrics – Assure your device is approved for pediatric use and, if so, that pediatric appropriate sensors are utilized
  - Pregnant women – The fetal SpCO may be 10-15% higher than the maternal reading
  - Smokers – Heavy smokers may have baseline SpCO levels up to 10%
  - A misapplied or dislodged sensor may cause inaccurate readings
  - Never use tape to secure the sensor
  - Do not place the sensor on the thumb or 5th digit
- There is no commercial endorsement implied by this protocol
Medical: Cold Emergencies

**CRITERIA**

- For patients presenting with localized cold injury or hypothermia

**CFR**

- ABCs, vital signs
- Remove the patient from the cold environment
- For local cold injury:
  - Protect areas from pressure, trauma, and friction
  - Do not break blisters
  - Do not rub the injured area
  - Remove clothing and jewelry
- For generalized hypothermia:
  - Handle patient carefully to prevent cardiac dysrhythmias
  - Gently remove wet clothing and dry the patient
  - If oxygen is required, provide warm, humidified oxygen, if available
  - Place heat packs, if available, in the patient’s groin area, lateral chest, and neck
  - Wrap the patient in dry blankets and maintain a warm environment

**CFR STOP**

**EMT**

- Rewarm the extremity only if anticipated time to the hospital exceeds 30 minutes, and the patient presents with early or superficial local cold injury only, and there is no concern that the extremity will freeze again:
  - Immerse the affected part in a warm water bath ≤ 105 °F; water should feel warm, but not hot
  - Frequently stir the water and assure it remains warm
  - Continue the immersion in warm water until the extremity is soft, and color and sensation return
  - Dress the area with dry, sterile dressings
    - If a hand or foot is involved, place sterile dressings between the fingers or toes
- Prevent the warmed part from freezing again

**EMT STOP**

**Key Points/Considerations**

- Patients with severe hypothermia may have very slow heart rates
- If defibrillation is required, provide no more than three shocks
- Pulse oxygenation measurement may be inaccurate if the patient is hypothermic, if cyanotic and in apparent respiratory distress, administer oxygen
Medical: Heat Emergencies

CFR

EMT

- ABCs, vital signs
- Loosen or remove outer clothing
- For patients presenting with moist, pale, and normal to cool skin temperature:
  - If the patient is not nauseated and able to drink water without assistance, have the patient drink water
- For patients presenting with hot, flushed, and dry skin:
  - Apply cold packs to patient’s neck, groin, and armpits
  - Keep the patient’s skin wet by applying wet sponges or towels

CFR AND EMT STOP

Key Points/Considerations

- Stable patients with normal mental status and no signs of hot, dry skin may only require oral rehydration and cooling
- Do not delay transport to treat the patient on the scene; transport is suggested for all patients who present with a heat emergency
- Water intoxication occurs when patients ingest excessive water which causes potentially life threatening electrolyte abnormalities
  - Suspect in long distance runners who consume large amounts of water and present with collapse or confusion
  - Cool the patient, as indicated, and contact medical control before administering any oral fluid to a patient with suspected water intoxication
CRITERIA

- This protocol is intended for the undifferentiated toxic exposure
  - For altered mental status, including patients thought to be hypoglycemia or after opioid use, see the “Altered Mental Status” protocol
  - For carbon monoxide exposure see “Carbon Monoxide – Suspected” protocol

EMT

- Decontamination, as needed
- ABCs and vital signs
- Airway management and appropriate oxygen therapy
- Determine what and how much was taken, along with the time and duration of the exposure
- If possible check a blood glucose level, if equipped
- For contamination of the skin or eyes, refer to the “Burns” protocol, chemicals section

Key Points/Considerations

- Take precautions to assure providers do not get exposed
- For inhalation exposures, assure patient is moved to fresh air
Medical: Seizures

 CFR

- Airway management and appropriate oxygen therapy
  - Suction the airway as needed
  - Position the patient on the side if vomiting
  - Do not put anything in the patient’s mouth
    - Utilize an appropriate airway adjunct, if needed
- Protect the patient from harm
  - Remove hazards from the patient’s immediate area
  - Avoid unnecessary restraint
- Check a blood glucose level, if equipped.
  - If abnormal, refer to the “Altered Mental Status” protocol
- Ongoing assessment of the effectiveness of breathing
  - Refer to the appropriate “Respiratory Arrest / Failure” protocol, if necessary

 CFR AND EMT STOP

 Key Points/Considerations

- Patients may become confused and combative after a seizure in their postictal state
  - Protect yourself and the patient
  - Obtain law enforcement assistance, if needed
Medical: Stroke

CRITERIA

- For patients presenting with acute focal neurologic deficits including, but not limited to, slurred speech, facial droop, and/or unilateral (one-sided) weakness or paralysis

CFR

- ABCs and vital signs
- Airway management and appropriate oxygen therapy
- Check a blood glucose level, if equipped.
  - If abnormal, refer to the “Altered Mental Status” protocol
- Determine the “Last Known Well;” the exact time the patient was last in his or her usual state of health and/or seen without symptoms by interviewing the patient, family, and bystanders

EMT

- Perform a neurological exam, including Cincinnati Stroke Scale or other regionally approved stroke scale
- If time from symptom onset to estimated arrival in the ED will be less than 5 hours, transport the patient to a NYS DOH Designated Stroke Center, or consult medical control to discuss an appropriate destination facility
- Notify the destination hospital ASAP
- Do not delay transport

Key Points/Considerations

- Make sure to record Last Known Well and who reported that information as part of your verbal report at the hospital and in your written documentation

Cincinnati Prehospital Stroke Scale:
- Have the patient repeat, “You can’t teach an old dog new tricks”
  - Assess for correct use of words and lack of slurring
- Have the patient smile
  - Assess for facial droop
- Have the patient close eyes and hold arms straight out for 10 seconds
  - Assess for arm drift or unequal movement of one side
Trauma: Amputation

**CFR**

- ABCs and vital signs
- Consider spinal motion restriction, refer to the suspected spinal injury protocol
- Refer immediately to the “Hypoperfusion” and/or “Bleeding” protocol, as indicated
- Elevate and wrap the stump with moist sterile dressings and cover with dry bandage
- Provide or direct care for amputated part:
  - Moisten sterile dressing with sterile saline solution and wrap amputated part
  - Place the severed part in a water-tight container, such as a sealed plastic bag
  - Place this container on ice or cold packs, using caution to avoid freezing the limb

**CFR AND EMT STOP**

**Key Points/Considerations**

- Distal amputations (those distal to wrist or ankle) do not typically require a trauma center
- Transport the amputated part with the patient, if possible, but do not delay transport to search for amputated part
- Consider medical control consultation if there is uncertainty regarding appropriate destination facility
**Trauma: Avulsed Tooth**

<table>
<thead>
<tr>
<th>CFR</th>
<th>EMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCs and vital signs</td>
<td>Hold the tooth by the crown (not the root)</td>
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<tr>
<td></td>
<td>Quickly rinse the tooth with saline before reimplantation, but do not brush off or clean the tooth of tissue</td>
</tr>
<tr>
<td></td>
<td>Remove the clot from the socket; suction the clot, if needed</td>
</tr>
<tr>
<td></td>
<td>Reimplant the tooth firmly into its socket with digital pressure</td>
</tr>
<tr>
<td></td>
<td>Have the patient hold the tooth in place using gauze and bite pressure</td>
</tr>
<tr>
<td></td>
<td>Report to hospital staff that a tooth has been reimplanted</td>
</tr>
</tbody>
</table>

**Key Points/Considerations**

- The best transport medium for an avulsed tooth is in the socket, in the appropriate situation
  - The best chance for success is when reimplantation occurs within five minutes of the injury
  - If the patient has altered mental status, do not reimplant
  - If the patient must be transported in a supine position, do not reimplant
  - Do not reimplant if the alveolar bone / gingiva are missing, or if the root is fractured
  - Do not reimplant if the patient is immunosuppressed, or reports having cardiac issues that require antibiotics prior to procedures
- If the patient is not a candidate for reimplantation and avulsed a permanent tooth, place the avulsed tooth in interim storage media (lowfat milk, patient’s saliva, or saline) and keep cool. Avoid tap water storage, if possible, but do not allow the permanent tooth to dry
# Trauma: Bleeding

## Criteria

- This protocol authorizes the use of hemostatic dressings, compressive devices, and commercially manufactured tourniquets
- These devices are not mandatory for any agency to stock or carry
- Junctional tourniquets, wound closure devices, and other hemostatic devices may be used in accordance with manufacturer instructions, if regionally approved
- Specific tactical application of these devices beyond this protocol may be regionally authorized for specific agencies

## Immediate intervention for severe arterial bleeding:

- Apply pressure directly on the wound with a sterile dressing
  - Hemostatic gauze* may be applied with initial direct pressure for severe bleeding
  - Rolled gauze may be used if hemostatic gauze is not available
  - Pack wound and hold pressure for at least 3 minutes
- If bleeding soaks through the dressing, apply additional dressings and reapply pressure
- Apply a pressure dressing to the wound, if bleeding is controlled
- If severe bleeding persists, remove all conventional dressings, expose site of bleeding, and apply hemostatic dressing, according to manufacturer’s instructions and training
- Cover the dressed site with a pressure bandage
- Conventional and pressure splints may also be used to control bleeding
- Use a tourniquet for uncontrollable bleeding from an extremity
  - Place tourniquet 2-3 inches proximal to the wound
  - If bleeding continues, you may place a second tourniquet proximal to the first, or above the knee or elbow, if wound is distal to these joints
  - Note the time of tourniquet application and location of tourniquet(s)
- Refer to the “Hypoperfusion” and/or appropriate “Major Trauma” protocol, as indicated

## Key Points/Considerations

- Hemodialysis access sites may result in life threatening hemorrhage. Direct digital pressure should be used first followed by tourniquet ONLY in the setting of life threatening hemorrhage when other means of hemorrhage control have been unsuccessful.
- In tactical environments where extremity bleeding sites cannot be rapidly determined, tourniquets may be placed high and tight in accordance with training
- *If equipped and trained
Trauma: Burns

CFR

- Stop the burning
- ABCs and vital signs
- Airway management and appropriate oxygen therapy
- Remove smoldering clothing that is not adhering to the patient’s skin
- Remove rings, bracelets, and other constricting objects at or distal to burned area, if possible
- Cover the burn with a dry sterile dressings
- Burns to the eye require copious irrigation with normal saline — do not delay irrigation
  - Other neutral fluid may be used, if needed, such as tap water

EMT

- Burns should be covered with dry, sterile dressings
  - Moist sterile dressings may be used to augment pain management only if the burn is ≤ 10 % BSA (body surface area)

Key Points/Considerations

- Assure scene safety and patient decontamination for chemical burns/HAZMAT exposure
  - For liquid chemical burns, flush with copious amount of water or saline, ideally for a minimum of 20 minutes
  - For dry powder burns, brush powder off before flushing
  - Use caution to avoid the spread of the contaminant to unaffected areas
- Be alert for other injuries, including cardiac dysrhythmias
- Be alert for smoke inhalation and airway burns
  - Administer high flow oxygen
  - Oxygen saturation readings may be falsely elevated
- If hazardous material involvement is suspected, immediately notify the destination hospital to allow for decontamination
- The palm of the patient’s hand is ~1% BSA (body surface area)
  - When considering the total area of a burn, DO NOT count first degree burns
- Burns > 10% are only to be dressed with simple sterile dressings once the burning process has stopped

Transportation Considerations

- Burns associated with trauma should go to the closest appropriate trauma center
- Consider direct transport to a burn center in discussion with medical control
Trauma: Musculoskeletal Trauma

**CFR**

- ABCs and vital signs
- Consider spinal motion restriction
- Refer immediately to the “Hypoperfusion” and/or “Bleeding” protocol, as indicated
- Manually stabilize the extremity above and below the injury
- Evaluate distal pulse, motor, and sensory function
- Expose injured area
- Apply cold packs or ice, as available

**EMT**

- If the distal extremity is cyanotic, or lacks a pulse, or if a long bone is severely deformed, align the extremity by applying gentle manual traction prior to splinting
- Apply a splint, and reassess the distal pulse, motor, and sensory function
  - Traction splinting may be indicated if there is a mid-thigh injury, and no suspected injury to the pelvis, knee, lower leg, or ankle on the same side (depending on particular device).
  - Traction splint may be used for suspected proximal femur fracture only if manufacturer approved
  - The traction splint may not be applied if the injury is close to the knee, associated with amputation, or near an avulsion with bone separation
- Stabilize the pelvis if the patient has a potential unstable pelvic fracture
- Continue ongoing assessment of vital signs and distal pulse, motor, and sensory function

**Key Points/Considerations**

- Consider any open wound near a suspected bone injury site to be the result of bone protrusion
- Physical examination for unstable pelvis fractures is unreliable and stabilization of the pelvis is indicated based on the mechanism of injury
- Patella reduction may be performed by the EMT, as training allows and if regionally approved.
Trauma: Eye Injuries

CFR

- ABCs and vital signs
- Airway management and appropriate oxygen therapy
- Stabilize (or limit movement of) any object lodged in the eye, and cover both eyes to prevent consensual movement
- If the eye is contaminated, refer to the “Burns” protocol

EMT

CFR AND EMT STOP

Key Points/Considerations

- Do not put any pressure on the eye when covering with a shield or patch
Suspected Spinal Injuries

Does the patient meet Adult/Pediatric Major Trauma Criteria with a BLUNT mechanism of injury? (T-6, T-7)

Yes

If the patient does not meet Major Trauma Criteria for Blunt Mechanism and/or does for Penetrating Mechanism, does the patient have any of the following:

1. Altered mental status - Associated with trauma - for any reason including possible intoxication from alcohol or drugs (GCS<15)
2. Complaint of neck and/or spine pain or tenderness
3. Weakness, tingling or numbness of the trunk or extremities at any time since the injury
4. Deformity of the spine not present prior to the incident
5. Painful distracting injury or circumstances (i.e. anything producing an unreliable physical exam)
6. High Risk mechanism of injury associated with unstable spinal injuries that include, but are not limited to:
   - Axial Load (i.e. diving injury, spearing tackle)
   - High Speed motorized vehicle crashes or roll over
   - Pedestrian or bicyclist struck/collision
   - Falls >3 feet/5 steps or patient’s height

Yes

Spine injury should be suspected and the patient should be placed in a properly fitted cervical collar and spinal movement minimized.

No

Patients without any of the above findings may be transported without the use of a cervical collar or any other means to restrict spinal motion.

Notes:

- Spinal movement can be minimized by application of a properly fitting rigid cervical collar and securing the patient to the EMS stretcher.
- When spinal motion restriction has been initiated and a higher level of care arrives, patients should be reassessed for spinal injury (per this protocol).
- When possible, the higher level of care on scene will determine if spinal motion restriction is to be used or discontinued (collar removed, etc.).
- Along spine board is one of multiple modalities that can be used to minimize spinal movement. Electing not to use a long spine board will not constitute a deviation from the standard of care.
- Long spine boards do not have a role in transporting patients between facilities.
2011 Guidelines for Field Triage of Injured Patients

1. Measure vital signs and level of consciousness
   - Glasgow Coma Scale
   - Systolic Blood Pressure (mmHg)
   - Respiratory Rate
   - Transport to a trauma center. Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of care within the defined trauma system.

2. Assess anatomy of injury
   - All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee
   - Chest wall instability or deformity (e.g., flail chest)
   - Two or more proximal long-bone fractures
   - Crushed, depressed, mangled, or pulseless extremity
   - Amputation proximal to wrist or ankle
   - Pelvic fractures
   - Open or depressed skull fracture
   - Paralysis
   - If NO, Proceed to Step 3.

3. Assess mechanism of injury and evidence of high-energy impact
   - Falls
     - Adults: >20 feet (one story is equal to 10 feet)
     - Children: >10 feet or two or three times the height of the child
   - High-risk auto crash
     - Intentional, including roof: >12 inches occupant site; >18 inches any site
     - Ejection (partial or complete) from automobile
     - Death to same passenger compartment
     - Vehicle biomechanical data consistent with a high risk of injury
   - Auto vs. pedestrian/bicyclist thrown, run over, or with significant (>20 mph) impact
   - Motorcycle crash >20 mph
   - If NO, Proceed to Step 4.

4. Assess special patient or system considerations
   - Older Adults
     - Risk of injury/death increases after age 55 years
     - SBP <110 may represent shock after age 65
     - Low impact mechanisms (e.g., ground level falls) may result in severe injury
   - Children
     - Should be triaged preferentially to pediatric capable trauma centers
     - Anticoagulants and bleeding disorders
     - Patients with head injury are at risk for rapid deterioration
     - Burns
     - Without other trauma mechanism: triage to burn facility
     - With trauma mechanism: triage to trauma center
   - Pregnancy >20 weeks
   - EMS provider judgment
   - If NO, Transport according to protocol.

When in doubt, transport to a trauma center.

Find the plan to save lives at www.cdc.gov/fieldtriage

National Center for Injury Prevention and Control
Division of Injury Response

NYS BLS Protocols
DRAFT 2016 - 42
Resource: Oxygen Administration

**CFR**

- Ongoing assessment of the effectiveness of breathing
  - Refer to the appropriate “Respiratory Arrest / Failure” protocol, if necessary
- Oxygen therapy via non-rebreather mask (NRB) 10-15 LPM, or nasal cannula (NC) 2-6 LPM, to maintain oxygen saturation ≥ 94% or to effectively manage other signs of dyspnea
- Any patient with suspected carbon monoxide poisoning should receive high flow oxygen via non-rebreather mask (NRB), see also “Carbon Monoxide Exposure – Suspected” protocol
- Oxygen therapy using bag-valve mask (BVM) 15-25 LPM
- Appropriate airway adjuncts
- BVM-assisted ventilation

**EMT**

- Oxygen powered nebulizer devices for use in accordance with manufacturer specifications (typically ~6-8 LPM)
- Continuous positive airway pressure (CPAP) 5-10 cm H₂O*
- Portable automated transport ventilators (ATV)*

**Key Points/Considerations**

- *If equipped and trained
**Resource: Emergency Childbirth**

### CRITERIA

- Childbirth is a natural phenomenon and the type of delivery cannot be regulated by your level of certification – if an CFR is faced with anything but a normal delivery, please feel comfortable calling medical control for assistance

### CFR

- **Management of a normal delivery**
  - Support the baby’s head over the perineum with gentle pressure to prevent precipitous delivery
  - If the membranes cover the head after it emerges, tear the sac with your fingers or forceps to permit escape of the amniotic fluid
  - Gently guide the head downward until the shoulder appears
  - The other shoulder is delivered by gentle upward traction
  - The infant’s face should be upward at this point

### EMT

- **Management of Umbilical Cord Around Neck**
  - Umbilical cord around the neck is an emergency, as the baby is no longer getting any oxygen either through the cord or by breathing
  - If the cord is around the neck:
    - Unwrap the cord from around the neck, if possible
    - Clamp the umbilical cord with two clamps
    - Cut the cord between them

- **Management of a Breech Delivery**
  - Support the buttocks or extremities until the back appears
  - Grasp the baby’s ILIAC WINGS and apply gentle downward traction. DO NOT pull on the legs or back, as this may cause spine dislocation or adrenal hemorrhage
  - Gently swing the infant’s body in the direction of least resistance
  - By swinging anteriorly and posteriorly, both shoulders should deliver posteriorly
  - Splint the humerus bones with your two fingers; apply gentle traction with your fingers
  - Gentle downward compression of the uterus will assist in head delivery
  - Swing the legs upward until the body is in a vertical position. This will permit delivery of the head

- **Management of Prolapsed Cord or Limb Presentation**
  - Place the mother in a face-up position with hips elevated
  - Place a gloved hand in the vagina; attempt to hold baby’s head away from the cord and maintain an airway for the baby
  - Keep the cord moist using a sterile dressing and sterile water
  - Transport as soon as possible to closest appropriate facility
Key Points/Considerations

- Obtain additional help for multiple births, as needed
- See “Neonatal Resuscitation” protocol for subsequent instructions
- Determine the estimated date of expected birth, the number of previous pregnancies and number of live births
- Determine if the amniotic sac (bag of waters) has broken, if there is vaginal bleeding, mucous discharge, or the urge to bear down
- Determine the duration and frequency of uterine contractions
- Examine the patient for crowning:
  - If delivery is not imminent, transport as soon as possible
  - If delivery is imminent, prepare for an on-scene delivery
- If multiple births are anticipated, but the subsequent births do not occur within 10 minutes of the previous delivery, transport immediately
- After delivery of the placenta, massage the lower abdomen
- Take the placenta and any other tissue to the hospital for inspection
- Do not await the delivery of the placenta for transport
- If uterine inversion occurs (uterus turns inside out after delivery and extends through the cervix), treat for shock and transport immediately. If a single attempt to replace the uterus fails, cover the exposed uterus with moistened sterile towels
Resource: Neonatal Resuscitation

**CRITERIA**

- For the evaluation and resuscitation of babies just delivered by the CFR or EMT

**CFR**

**EMT**

Assess the infant’s respiratory status, pulse, responsiveness, and general condition

- **If the infant is breathing spontaneously and crying vigorously, and has a pulse > 100/min:**
  - Clamp the umbilical cord with two clamps, three inches apart, and cut the cord between them at least 1 min after delivery. The first clamp should be 8 – 10 inches from the baby. Place the second clamp 3 inches from the first clamp toward the mother.
  - Cover the infant’s scalp with an appropriate warm covering.
  - Wrap the infant in a dry, warm blanket or towels and a layer of foil or plastic wrap 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.
  - Keep the infant warm and free from drafts. Continuously monitor the infant’s respirations.

- **If the infant is not breathing spontaneously or not crying vigorously:**
  - Gently rub the infant’s lower back.
  - Gently tap the bottom of the infant’s feet.

- **If the respirations remain absent, gasping, or become depressed (< 30/min) despite stimulation, if the airway is obstructed, or if the heart rate is < 100/min:**
  - Clear the infant’s airway by suctioning the mouth and nose gently with a bulb syringe, and then ventilate the infant at a rate of 40 – 60 breaths/minute with an appropriate BVM as soon as possible. Start with room air. If no response after 90 seconds, add oxygen.
  - Each ventilation should be given gently, over one second per respiratory cycle, assuring that the chest rises with each ventilation.
  - Monitor the infant’s pulse rate (by palpation at the base of the umbilical cord or by auscultation over the heart), and apply continuous pulse oximetry using (ideally the right) wrist or palm, *if available and trained.

- **If the pulse rate drops < 60 beats per minute at any time:**
  - Perform chest compressions with assisted ventilations at a 3:1 compression to ventilation ratio.

** CFR AND EMT STOP**

**Key Points/Considerations**

- Begin transport to the closest appropriate hospital as soon as possible.
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<thead>
<tr>
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<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
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<td>flexion</td>
<td>active</td>
</tr>
<tr>
<td>Pulse</td>
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<td>&lt;100</td>
<td>&gt;100</td>
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<tr>
<td>Grimace (during suctioning)</td>
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<td>grimace</td>
<td>pulling away</td>
</tr>
<tr>
<td>Appearance</td>
<td>blue-gray</td>
<td>gray hands/feet</td>
<td>normal</td>
</tr>
<tr>
<td>Respirations</td>
<td>0</td>
<td>weak cry</td>
<td>vigorous cry</td>
</tr>
</tbody>
</table>
Resource: Automatic Transport Ventilator

**General Parameters**

- **FiO2**: Maintain SaO₂ >=94%
- **PEEP**: 5 cm H₂O (increase up to 10 cm H₂O as needed to improve oxygenation).
- **Mode**: A/C or SIMV
- **Pressure Support**: 5 – 10 cmH₂O, if in SIMV (if available)
- **Volume Control**: Tidal volume (Vt) 6 – 8 mL/kg ideal body weight (maintain plateau pressure [Pplat]< 30 cm H₂O or PIP < 35 cm H₂O)
- **Rate**: Child: 16 – 20 breaths/min; Adult: 12 – 14 breaths/min
- **I-Time**: Child:0.7 – 0.8 seconds; Adult:0.8 – 1.2 seconds

Please refer to the manufacturer’s ventilator operation manual for specific directions on how to operate your ventilator.

**Recommended Minimum Requirements for Automated Ventilator**

- Pressure limit / safety relief at a maximum of 40 cmH₂O
- Ability to adjust volume to 4-8 mL/kg ideal body weight
- Ability to adjust rate in the minimum range of 10-30 breaths/min
- Ability to add PEEP or PEEP valve in the minimum range of 5 - 10 cmH₂O
- Ability for patient triggered breaths (complete control ventilation is prohibited)

**Initiating Mechanical Volume Ventilation**

- Use EtCO₂ detection and pulse oximetry to evaluate the effectiveness of the ventilation technique and to verify artificial airway patency and position
- Prepare the BVM device for emergent use in case of a ventilator failure
- Assure a secondary oxygen source with a minimum of 1000psi in a D tank
- Attach a ventilator to appropriate oxygen/air source
- Attach a disposable ventilator circuit to ventilator
- Attach a gas outlet, pressure transducer, and exhalation valve tubes to corresponding connectors
- Select the appropriate mode, if applicable
- Select the appropriate respiratory rate (RR). Titrate to appropriate EtCO₂
  - Adult: 12 – 14 breaths/min
  - Child: 16 – 20 breaths/min
- Select the appropriate tidal volume (Vt) of 6 – 8 mL/kg ideal body weight
- Select the appropriate inspiratory time (It), if applicable
- Select the desired FiO₂ if applicable. An FiO₂ of 1.0 (100% O₂) is a standard start and then should be titrated down to maintain SpO₂ >=94%
- Verify a high pressure alarm no higher than 40 cm H₂O
- Set PEEP to 5 cmH₂O
- Observe the delivery of several breaths
  - Evaluate the patient for adequate chest rise, ETCO₂ and SpO₂
  - Adjust the ventilator settings, as necessary, to improve clinical parameters
- Record all set parameters on the patient transport record
Monitor and record PIP, if applicable

**Key Points**

- If at any time the ventilator should fail, or an alarm is received that cannot be corrected, the patient should be immediately ventilated with a BVM device attached to a 100% oxygen source.
- This is a general resource document on the use of automatic transport ventilators, not a protocol. This does not supersede device-specific practice guidelines provided through agency education.
### Resource: Needlestick / Infectious Exposure

**Criteria**

- This resource outlines the immediate actions to be taken following any percutaneous, non-intact skin, or mucous membrane contact with blood or body secretions

**Cleansing for a Puncture Wound**

- Immediately cleanse with Betadine or chlorhexidine
- Follow-up by soaking the site for five minutes in a solution of Betadine and sterile water

**Cleansing for Skin Contact**

- Wash the area with soap and water then clean the area with Betadine or chlorhexidine

**Cleansing for Mucous Membranes**

- If in the mouth, rinse mouth out with a large volume of tap water
- If in the eyes, flush with water from an eyewash station. If an eyewash station is not available, use tap water

**Key Points/Considerations**

- Thoroughly cleanse the area of exposure
- Decontamination may be limited because of the lack of available resources
- Report the exposure to a supervisor, immediately
- Seek immediate medical attention and post-exposure evaluation at the hospital the source patient was transported to, if possible
## Resource: Normal Vital Signs for Infants / Children

<table>
<thead>
<tr>
<th>Age</th>
<th>Respirations</th>
<th>Pulse</th>
<th>Systolic BP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newborn (&lt;28 days)</td>
<td>30 – 60</td>
<td>100 – 180</td>
<td>&gt;60</td>
</tr>
<tr>
<td>Infant (&lt; 1 year)</td>
<td>30 – 60</td>
<td>100 – 160</td>
<td>&gt;60</td>
</tr>
<tr>
<td>Toddler (1 – 3 years)</td>
<td>24 – 40</td>
<td>90 – 150</td>
<td>&gt;70</td>
</tr>
<tr>
<td>Preschooler (3 – 5 yrs)</td>
<td>22 – 34</td>
<td>80 – 140</td>
<td>&gt;75</td>
</tr>
<tr>
<td>School-aged (6 – 8 yrs)</td>
<td>18 – 30</td>
<td>70 – 120</td>
<td>&gt;80</td>
</tr>
</tbody>
</table>

From: American Academy of Pediatrics, Pediatric Education for Prehospital Professionals
Resource: Child Abuse Reporting

Criteria

- Emergency Medical Technicians (all levels) are required to report cases of suspected child abuse they come across while performing their jobs
- Document observations, thoroughly and objectively on the patient care report (PCR)
- Notify the emergency department staff of concerns and your intent to report
- An immediate oral report shall be made to:
  - NYS Child Abuse and Maltreatment Register: 1-800-635-1522
  - This is a number for mandated reporters only and should not be provided to the 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”, and sent to the local child protective services office for where the child resides

Key Points/Considerations

- Notifying hospital staff of concern for child abuse or maltreatment is not sufficient to meet the obligation of reporting. All of these steps are required:
  - PCR completion
  - Notification of emergency department staff
  - Oral report to NYS Child Abuse and Maltreatment Register
  - Written report submitted within 48 hours
- If multiple EMTs are on scene from the same agency, it is only necessary for one EMT (the EMT of record and in charge of patient care) to complete the reporting process
  - If EMTs from multiple agencies are involved in the response, treatment, and transport of the same patient, the EMT of record from each agency must complete the reporting process.
- EMTs are not expected to complete form DSS-2221-A in its entirety, although they should fill out as much as possible, in accordance with available information
- Mandated reporters who file a report of suspected child abuse or maltreatment in good faith are immune from liability for reporting such a case (§ 419 of the Social Services Law)
# Resource: Prescribed Medication Assistance

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>• For patients or caregivers of patients who require assistance with medication that they, or people in their care, are prescribed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No standing orders – medical control considerations only</td>
</tr>
</tbody>
</table>

| CFR STOP |

<table>
<thead>
<tr>
<th>EMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sublingual nitroglycerin for patients with chest pain</td>
</tr>
<tr>
<td>• Inhalers (albuterol* or other beta-agonists) for patients with asthma or COPD</td>
</tr>
<tr>
<td>• Rectal diazepam (Diastat) for children or adults with special needs</td>
</tr>
<tr>
<td>• Epinephrine autoinjectors for treatment of anaphylaxis</td>
</tr>
<tr>
<td>• Naloxone (Narcan) via autoinjector or intranasal device</td>
</tr>
</tbody>
</table>

| EMT STOP |

<table>
<thead>
<tr>
<th>Medical Control Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Approval of assisted medication administration within the scope of practice for administration route of an CFR or EMT as needed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Points/Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• This protocol is designed to assure that the EMS provider and medical control provider are best prepared to assist patients with ongoing disease processes that are not covered by these protocols, and who have already been given therapy by their prescribers.</td>
</tr>
<tr>
<td>• *Common brand names for albuterol include Ventolin®, Proventil®, and ProAir®</td>
</tr>
<tr>
<td>o Levalbuterol (Xopenex) is a beta agonist and, therefore, a levalbuterol inhaler may be utilized in this protocol</td>
</tr>
<tr>
<td>o A combination inhaler that contains albuterol &amp; ipratropium (Atrovent®), such as Combivent®, that is prescribed to the patient may be substituted for an albuterol inhaler in this protocol</td>
</tr>
</tbody>
</table>
Resource: Refusal of Medical Attention

Criteria

- In the absence of a demonstrated and documented impairment, adults and parents of children have a right to refuse treatment for themselves and their minor children
- Providers have the responsibility to provide informed consent for the refusal
- Agency and regional policies and procedures supersede these minimum protocols
- Patients with the following should be considered “high risk” – consider calling medical control:
  - Age greater than 65 years or less than 2 months
  - Pulse >120 or <50
  - Systolic blood pressure >200 or <90
  - Respirations >29 or <10
  - Serious chief complaint (including, but not limited to chest pain, SOB, syncope, and focal neurologic deficit)
  - Significant mechanism of injury or high index of suspicion
  - Fever in a newborn or infant under 8 weeks old

CFR

- May cancel an ambulance when there is no indication of a potential illness or injury
- May not initiate a refusal of care when there is a person who appears to have an injury or illness

EMT

- Patients who have the medical decision-making capacity (ability to understand the nature and consequences of their medical care decision) and wish to refuse care/transport may do so after the provider has:
  - Determined the patient exhibits the ability to understand the nature and consequences of refusing care/transport (See below)
  - Offered transport to a hospital
  - Explained the risks of refusing care/transport
  - Explained that by refusing care/transport, the possibility of serious illness, permanent disability, and death may increase
  - Advised the patient to seek medical attention and gave instructions for follow-up care
  - Confirmed that the patient understood these directions
  - Left the patient in the care of a responsible adult (when possible)
  - Advised the patient to call again with any return of symptoms or if he or she wishes to be transported

MEDICAL CONTROL CONSIDERATIONS

- Assistance with high risk, difficult, or unclear situations

Key Points/Considerations
The evaluation of any patient refusing medical treatment or transport should include the following:

- Visual Assessment – To include responsiveness, level of consciousness, orientation, obvious injuries, respiratory status, and gait
- Initial Assessment – Airway, breathing, circulation, and disability
- Vital Signs – (If patient allows) pulse, blood pressure, and respiratory rate and effort; pulse oximetry and/or blood glucose, when clinically indicated
- Focused Exam – As dictated by the patient’s complaint (if any)

Medical decision making capacity determination – As defined below

- Patients at the scene of an emergency who demonstrate the ability to understand the nature and consequences of their medical care decisions shall be allowed to make decisions regarding their medical care, including refusal of evaluation, treatment, or transport
- A patient, who is evaluated and found to have any one of the following conditions shall be considered incapable of making medical decisions regarding care and/or transport and should be transported to the closest appropriate medical facility under implied consent:
  - Altered mental status from any cause
  - Age less than 18 unless an emancipated minor or with legal guardian consent
  - Attempted suicide, danger to self or other, or verbalizing suicidal intent
  - Acting in an irrational manner, to the extent that a reasonable person would believe that the capacity to make medical decisions is impaired
  - Unable to verbalize (or otherwise adequately demonstrate) an understanding of the illness and/or risks of refusing care
  - Unable to verbalize (or otherwise adequately demonstrate) rational reasons for refusing care despite the risks
  - No legal guardian available (in person or by telephone) to determine transport decisions
- Patient consent in these circumstances is implied, meaning that a reasonable and medically capable adult would allow appropriate medical treatment and transport under similar conditions