PREHOSPITAL TREATMENT PROTOCOLS

GENERAL OPERATING PROCEDURES

Effective January 1, 2022
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Purpose

- The Regional Emergency Medical Advisory Committee (REMAC) of New York City Unified Protocols include the statewide Basic Life Support Adult and Pediatric Treatment Protocols as the current minimum standards for basic life support (BLS) delivered by Certified First Responders (CFR), and Emergency Medical Technicians (EMT) in New York State. Paramedic (advanced life support [ALS]) protocols have been included in the unified format to ensure a continuous transition of care from CFR through ALS
- These protocols reflect both the curriculum and certification requirements of the New York State Department of Health (NYSDOH) Bureau of Emergency Medical Services and the New York City REMAC; and, have been endorsed by the Regional Emergency Medical Services Council of New York City (REMSCO)

Scope

- These protocols apply to all prehospital providers (i.e. CFRe s, EMTs and Paramedics) who are certified by NYSDOH and New York City REMAC who operate within the New York City region. These protocols also include those providers in supervisory and/or administrative roles

Responsibilities

- CFRe s, EMTs and Paramedics shall provide appropriate care in accordance with these Prehospital Treatment Protocols as indicated by the patient’s complaint and/or condition without exceeding their respective scope of practice

Definitions

- **Alternative Destination**: A regionally-approved 911 system receiving facility that may have limited and/or specialized capabilities but is NOT a 911 system ambulance destination emergency department

- **Continuous Quantitative Waveform Capnography**: Continuous quantitative measurement of the partial pressure of carbon dioxide during respiration. This monitoring is required for all patients who have received advanced airway management (i.e. endotracheal intubation or use of a supraglottic airway) EXCEPT for the use of a supraglottic airway device in cases of insufficient resources (GOP: Airway Monitoring)

- **Discretionary Orders**: Medications, treatments, or procedures that are within the scope of practice of a provider’s certification level that differ from its use in a specific protocol. This includes medications that are within the REMAC formulary at doses other than what is delineated in the protocols or used for purposes other than that described in the protocols

- **Excited Delirium**: Behavioral syndrome comprised of a combination of delirium, psychomotor agitation, anxiety, hallucinations, speech disturbances, disorientation, violent or bizarre behavior, insensitivity to pain, elevated body temperature and abnormal strength that is often associated with stimulant use
• **High Index of Suspicion**: The concern that a patient may have an acute medical, traumatic, psychiatric, behavioral, or other condition that could result in a life-threatening or life-altering outcome. Indications for a high index of suspicion may include, but are not limited to:
  - Mechanism of injury (i.e. the manner in which traumatic injuries likely occurred)
  - Injury/illness severity
  - Abnormal vital signs
  - Concerns regarding the patient’s health based on a change in the patient’s condition from a patient’s acquaintances or family members who have frequent contact with the patient
  - Concerns from a caller to 911 who reports expressed or actual suicidal or homicidal behavior by the patient (regardless of whether the caller is with the patient)
  - Requests for assistance originating from a health care provider (regardless of whether the health care provider is with the patient) who indicates that there has been a significant change in the patient’s medical condition

• **Low Index of Suspicion**: Any condition that does not meet the criteria for a high index of suspicion

• **Medication Administration**: Administration of ANY medication to a patient by prehospital providers, other healthcare providers, bystanders, or the patient themselves during or just preceding the event for which the request for emergency medical aid was made
  - Oxygen is only considered a medication if it is used for the treatment of a patient condition that would be considered a high index of suspicion (e.g. congestive heart failure, major trauma)
  - Bandages, gauze, ice packs, splints, immobilizers, cardiac monitors and oxygen are NOT considered as medication/treatment ONLY when used for a case of low index of suspicion

• **Medical Control Options**: Treatments and procedures that may only be administered or performed after contacting OLMC. Aside from a few exceptions which are explicitly listed, these treatments and procedures are only within the Paramedic scope of practice

• **Online Medical Control (OLMC)**: Real-time communication between a REMAC OLMC certified physician and prehospital providers via radio, telephone, telemetry, video, or face-to-face. The purpose is to provide medical control options, assist in the refusal for medical aid (RMA) process or assist in determining appropriate transportation decisions
  - For instances when prehospital providers are unable to contact OLMC, the providers may only administer standing order medications and treatments
  - OLMC approval is NOT required for the decision to begin Telehealth for treat-in-place with patient release or for transport to an alternative destination if patients meet criteria (Appendix P: Alternate Destination/Treat-in-Place Patient Selection Criteria); but, OLMC may be contacted if guidance is needed
OLMC shall be contacted for approval for the following:

- Telehealth contact for patients who prehospital providers feel are appropriate for treat-in-place with patient release or transport to an alternative destination despite the patient not fulfilling criteria according to GOP: Alternative Treatment/Alternative Transport Destination Decisions
- High index RMA

**Procedural Sedation**: Procedure for the administration of medications for patients who are conscious and require either short-term analgesic and/or anxiolysis for procedures such as synchronized cardioversion, transcutaneous pacing, CPAP, or sedation for advanced airway management

**REMAC Telemedicine Certified Physicians**: Physicians that are affiliated with a hospital or health care system who may direct their affiliated prehospital providers operating on non-NYC 911 EMS ambulance units in the treatment of their known and established patients

**REMAC OLMC Certified Physicians**: Physicians who have knowledge of the REMAC GOP and REMAC Prehospital Treatment Protocols and are credentialed by REMAC to provide online medical control to prehospital providers in the New York City region

**Spinal Motion Restriction**: Procedures used to minimize potential or further injury in patients with suspected spinal injury

**Standing Orders**: Medications and treatments that may be performed without contacting OLMC; however, OLMC may be contacted at any time for additional guidance

**Telehealth**: Real-time two-way interactive communication between a patient and a distant site high-level medical provider (e.g., physician, nurse practitioner, physician assistant). This interaction, which requires audio-visual communication, allows for a broad array of healthcare services that include treat-in-place with patient release and transport decisions to an alternative destination

**On Scene Medical Control-Operations**

- In accordance with Article 30 of the New York State Public Health Law, REMSCO is responsible for the coordination of emergency medical services within the region; and, REMAC is responsible for the medical oversight of the emergency medical service system within the region

- In accordance with the REMAC General Operating Procedures (GOP) on the Coordination of Prehospital Resources, the prehospital provider with the highest level of certification from the EMS agency which arrives first at the scene of a medical emergency is responsible for the coordination of patient care resources. In addition, when a NYC 911 participating EMS agency is not the first EMS agency on the scene, and is not acting in the role of the primary care provider, it shall act as an operational resource for information regarding hospital diversions, specialty referral center bed availability, and other specialized resources, in addition to mitigating potential incident scene safety risks (e.g., environmental conditions, crowd/traffic control)
• The Fire Department City of New York (FDNY) is responsible for the coordination of patient care resources and medical control at the scene of multiple casualty incidents (MCIs), unscheduled medevac transports, hazardous material (HAZMAT) situations which require decontamination, fires/crimes in progress, or other unusual public health/safety emergencies. Incident command procedures are in effect at the point that FDNY assumes operational control

On Scene Medical Control-Physicians

• Physicians providing on scene medical control are differentiated in their scope of direction to prehospital providers based on their REMAC certification level as described in the following sections

• Physicians providing direct medical control at the scene must have their names and New York State license number or REMAC physician number documented on the electronic patient care report (ePCR)

• Under no circumstances may CFRs, EMTs or Paramedics provide emergency care that exceeds their level of certification and scope of practice

• Prehospital providers shall contact OLMC and proceed as directed by OLMC for any conflicts that may occur with the on scene physician. For instances where the prehospital provider is unable to contact OLMC, the prehospital provider shall provide treatment under standing orders only

• Other non-physician health care providers (e.g. nurse practitioner, physician assistant) may NOT provide on scene medical control and prehospital providers are to maintain patient care responsibilities

REMAC OLMC CERTIFIED PHYSICIANS

• REMAC OLMC certified physicians are able to provide on scene medical control for prehospital providers to their respective level of training and scope of practice

• For procedures performed by the REMAC OLMC certified physician:
  • If the procedures are within the scope of practice of the transporting prehospital providers, the physician does not need to accompany the patient
  • If the procedures are not within the scope of practice of the transporting prehospital providers, the physician needs to accompany the patient

NON-REMAC OLMC CERTIFIED PHYSICIANS

• Basic Life Support Orders
  • Non-REMAC OLMC certified physicians who appropriately identify themselves on scene and who request to intervene in BLS care, may do so provided they do not conflict with BLS standing orders, policies and procedures
• Advanced Life Support Orders
  • Non-REMAC OLMC certified physicians who appropriately identify themselves on scene and who request to intervene in ALS care, MUST have prior approval from OLMC. After OLMC approval, the on scene physician may provide direction in ALS care so long as that care does not conflict with REMAC prehospital treatment protocol standing orders, policies and procedures
  • Non-REMAC OLMC physicians may NOT approve medical control options or discretionary orders
  • For any procedures performed by the non-REMAC OLMC certified physician, the physician is required to accompany the patient

REMAC TELEMEDICINE CERTIFIED PHYSICIANS
• REMAC Telemedicine certified physicians may ONLY provide on scene medical direction to their affiliated non-NYC 911 prehospital providers in the care of their known and established patients
• For the care of any other patients, on scene REMAC Telemedicine certified physicians shall be considered as a non-REMAC OLMC certified physician

PHYSICIANS REQUESTING ASSISTANCE OR EQUIPMENT
• Prehospital providers may ONLY assist a physician at a healthcare facility if the procedure is within their scope of practice and the procedure is within their respective standing orders. OLMC shall be contacted if there are any questions or issues
• Prehospital providers shall advise the physician that any intervention that requires monitoring or maintenance that is outside the providers’ scope of practice will require the physician to accompany the patient during transport
• Equipment or medication should not be given to the physician or the facility to carry out patient care if it is not authorized by your EMS agency Medical Director or OLMC. OLMC should be contacted for any further clarification as needed

Scene Safety
• It is the responsibility of the CFRs, EMTs, and Paramedics to assess the scene for safety. Safety factors include, but are not limited to, environmental conditions; crowd and/or traffic control; potentially dangerous patient(s) or family member(s) to themselves or others; HAZMAT situations; fires or criminal acts in progress; or other unusual public health or safety emergencies. Such conditions may be a threat to the health and/or safety of all providers, patients, and other persons at the scene. CFRs, EMTs, and Paramedics must use caution in situations that they are not trained or equipped to handle
In accordance with the REMAC GOP: Coordination of Prehospital Resources Procedure, prehospital providers may use a NYC 911 system participating agency as an operational resource for incident scene safety. In addition, FDNY must be notified for situations involving multiple casualty incidents (MCIs), unscheduled medevac transports, HAZMAT situations which require decontamination, fires or crimes in progress, or unusual public health or safety emergencies.

**Universal Approach to Patient Care**

1. Perform initial scene survey including assessment of scene safety. Refrain from making direct contact with patients exposed to hazardous materials until they have been decontaminated.
2. Perform basic cardiac life support as needed.
3. Perform initial assessment (i.e. primary survey).
4. Administer oxygen, if appropriate.
5. Monitor breathing for adequacy.
6. Determine if ALS assistance is required.
7. Obtain at least two sets of vital signs and monitor as necessary. Obtaining vital signs should not interfere with treatment or delay transport of the critically ill or injured patient.
8. Obtain a focused medical history.
9. Complete a physical examination as the patient's condition indicates.
10. Treat the patient according to the appropriate REMAC Prehospital Treatment Protocol.
11. Provide emotional support.
12. Maintain body temperature.
13. While continuing to monitor and treat the patient, the patient shall be transported as soon as possible to the nearest appropriate facility.
   - Patients may be moved to the ambulance by stair chair, scoop stretcher, long board, ambulance stretcher, or other appropriate means.
   - The method of transportation should not aggravate the patient's condition or injuries.
14. Document all findings and information as they pertain to patient condition or care in the ePCR.

**Requesting Additional Assistance**

- Prehospital providers shall request additional appropriate resources as soon as possible.
Initiating Transport

- When EMTs and Paramedics are on scene of an assignment and request additional assistance or resources, patient transport procedures shall begin in accordance with their level of training. For non-transporting EMS agencies, ambulance transport shall begin once an appropriate transport vehicle is available.

- When EMTs are on the scene of an assignment and request ALS assistance, transport procedures should begin. If the time of arrival of Paramedics exceeds the transport time to the destination facility, transport from the scene should not be delayed unless otherwise specified in a particular protocol.

Transportation Decisions and Procedures

- Wherever the term “transport” appears throughout these protocols, it refers to BLS and ALS transportation procedures and decisions as follows:

TRANSPORT DECISIONS

- Patients with an unmanageable airway MUST be taken to the nearest NYC 911 ambulance destination emergency department.

- OLMC may direct transport to a facility that differs from the closest specialty center.

TRANSPORT PROCEDURES

- Patient extrication as needed and preparation of the patient for transport.

- Safe conveyance of the patient from the scene to the ambulance in a clinically appropriate position on appropriate equipment.

- Transportation of the patient in a properly equipped ambulance in accordance with current NYC REMAC staffing policies.

- Initiation of transport in consultation with OLMC as needed when using medical control options or discretionary orders.

- Appropriate transfer of care to another unit for transport (GOP: Coordination of Prehospital Resources Procedure).
TRANSPORTATION TO SPECIALTY CARE FACILITIES

• After appropriate treatment has been initiated in accordance with these protocols, EMTs and Paramedics shall transport the patient as soon as possible to the nearest appropriate facility. If the patient meets criteria for the specialty facilities defined in Appendix I: Hospital Specialty Capacities or as detailed in specific protocols, transport the patient according to the following guidelines:

  • **Major Trauma**
    - If the history or physical exam findings indicate major trauma, transport the patient to the nearest NYC 911 System Trauma Center as determined by Appendix E: Trauma Center Transport Criteria, unless the patient has an unmanageable airway

  • **Major Burns**
    - If the history or physical exam findings indicate major burns, transport the patient to the nearest NYC 911 System Burn Center as determined by Appendix F: Burn Center Transport Criteria, unless the patient has ANY of the following conditions:
      - Cardiac arrest OR unmanageable airway
      - Trauma Center transport criteria (i.e. patients with major burns and major trauma must be taken to the closest NYC 911 Trauma Center)
      - Activation of the NYC Burn Disaster Plan by FDNY, NYSDOH, New York City Emergency Management (NYCEM), or New York City Department of Health and Mental Hygiene (NYCDOHMH)

  • **Acute Stroke**
    - If the history or physical exam findings indicate an acute stroke, with symptoms < 24 hours, transport the patient to the closest appropriate Stroke Center as determined by Appendix G: Stroke Patient Assessment Triage and Transport, unless the patient has ANY of the following conditions:
      - Cardiac arrest OR unmanageable airway
      - Trauma Center transport criteria (i.e. patients with suspected acute stroke and major trauma must be taken to the closest NYC 911 Trauma Center)
• **ST Elevation Myocardial Infarction (STEMI)**
  
  • If the history or physical exam findings indicate an acute myocardial infarction and the 12-lead EKG reveals at least one (1) mm ST-segment elevation in two (2) or more contiguous leads; transport the patient to the closest STEMI Center after consultation with OLMC unless the patient has ANY of the following conditions:
    
    - Unmanageable airway
    - Trauma Center transport criteria (i.e. patients with STEMI and major trauma must be taken to the closest NYC 911 Trauma Center)
  
  • If the patient deteriorates into cardiac arrest during transport, the unit shall continue transport to the STEMI Center as previously directed by OLMC
  
• **Other Specialty Care**
  
  • If the mechanism of illness/injury, history or physical exam findings indicates a need for another type of specialty care not previously listed, transport the patient to the nearest NYC 911 ambulance receiving facility with the required specialty care capability (Appendix I: Hospital Specialty Capabilities). These capabilities may include:
    
    - Hyperbaric
    - Replantation
    - Left ventricular assist device (LVAD)
    - Venomous bites
    - Sexual assault
    - Child abuse and neglect
    - Critical pediatric care

**Spinal Precautions**

• Patients shall be assessed for spinal cord injuries and require spinal precautions as indicated. Whenever the term spinal precautions is used in these protocols, it refers to the following:
  
  - Application of an appropriately-sized rigid cervical collar
  - Maintenance of patient in a supine position; if the patient is unable to tolerate a supine position, the head of the stretcher may be raised to position of comfort (maximum 45°)
  - Appropriate security of the patient’s trunk and limbs to a padded stretcher
  - Minimal movement and transfers
Maintenance of inline stabilization during any movement

Extrication and conveyance of patients may be performed with a rigid longboard. If resources are sufficient, the longboard should be removed via logroll maneuver with manual inline stabilization after the patient is moved to the EMS stretcher. Patients in extremis may remain on the rigid longboard to expedite rapid transport

**Cardiopulmonary Resuscitation (CPR)**

- Basic cardiac life support in adult and pediatric patients that is not specifically described in these protocols shall follow the current American Heart Association (AHA) guidelines

- CPR shall be initiated on all patients who are not breathing (apneic) and pulseless unless the patient has any of the following conditions:
  - Extreme dependent lividity
  - Rigor mortis
  - Tissue decomposition
  - Obvious mortal injury
  - Valid do not resuscitate (DNR) order or medical orders for life-sustaining treatment (MOLST) form or eMOLST (Appendix C: Do Not Resuscitate (DNR) / Medical Orders for Life Sustaining Treatment (MOLST))
    - Terminal illness is not a contraindication to CPR
  - Cardiac arrests secondary to drowning, hanging, or electrocution shall be treated as non-traumatic cardiac arrests

- **Pediatric:**
  - CPR is required for pediatric patients with severe bradycardia (heart rate < 60 beats/min AND signs of shock or altered mental status)
  - If available, pediatric AED/monitor pads and cables shall be used for all pediatric patients age < 9 years
  - If pediatric AED/monitor pads and cables are not available, the adult AED/monitor pads and cables shall be used

- CPR shall be continued until any of the following conditions are present
  - Return of spontaneous circulation (ROSC)
  - Resuscitative efforts have been transferred to providers of equal or higher level of training
  - Qualified, licensed physician assumes responsibility for the outcome of the patient
• Presentation of a valid DNR order, MOLST, or eMOLST form after the initiation of CPR

**Oxygen Administration**

• All patients who are in respiratory arrest must have ventilatory assistance unless a valid NYS prehospital DNR order, MOLST or eMOLST is presented

• Wherever the term “appropriate oxygen therapy” is used throughout these protocols, oxygen therapy shall be administered via a non-rebreather mask (NRB) at 10-15 liters/min, or a nasal cannula (NC) at 2-6 liters/min and is required for any of the following conditions:
  - \( \text{SpO}_2 < 94\% \)
  - \( \text{SpO}_2 \) is unavailable
  - Other signs/symptoms of respiratory distress

• Wherever the term “administer oxygen” is used throughout these protocols, administer high concentration oxygen via a non-rebreather mask at 10-15 liters/min. The reservoir bag must remain at least one-third full following inspiration
  - If a mask is not tolerated by the patient, a nasal cannula at 6 liters/min should be used and properly documented
  - Patients who are chronically maintained on oxygen and who do not require high concentration oxygen shall be administered oxygen at their prescribed flowrate
  - Assisted ventilations may be required using a bag valve mask and reservoir with oxygen flowrate at 10-15 liters/min for patients with signs of hypoxia, inability to adequately protect their airway, or signs of inadequate respiration

• **Pediatric Patients:**
  - High concentration oxygen should always be used
  - Blow-by oxygen is an inadequate method of oxygenation. Use the closest age or size-appropriate oxygen delivery mechanism (e.g. nasal cannula, facemask, bag valve mask)
  - Do not allow the mask to press against the eyes
  - Chest rise is the best indication of adequate ventilation in pediatric patients
  - Do not overinflate the lungs when assisting ventilations

**Airway Management and Airway Monitoring**

**AIRWAY MANAGEMENT**

• All patients require continuous monitoring of their airway to ensure patency

• Wherever the term "airway management" is used throughout these protocols, the following shall be considered:
• Position of the patient’s head
• Need for airway adjuncts
• Need for oropharyngeal suctioning
• Need for ALS advanced airway management

**Pediatric Patients:**
• Do not hyperextend the neck

**AIRWAY MONITORING**

• Use of pulse oximetry (SpO₂) is mandatory for ALS and BLS units

• Continuous waveform capnography (ETCO₂) is mandatory for ALS and must be used whenever advanced airway management (endotracheal intubation or use of a supraglottic device) is performed EXCEPT when a supraglottic device is used and there are insufficient resources available to provide continuous waveform capnography to all patients requiring advanced airway management (e.g. MCI event or other similar situations)

• Non-invasive capnography is optional for monitoring a patient’s respiratory status due to medication administration (i.e. opioids, benzodiazepines) and/or medical condition (i.e. severe asthma, altered mental status)

**ADVANCED AIRWAY MANAGEMENT**

• Advanced airway management refers to endotracheal intubation or the use of a supraglottic airway device (i.e. dual-lumen esophageal/tracheal tubes, laryngotraheal tubes, or other non-visualized airways as approved by an EMS agency Medical Director)

• For patients in cardiac arrest, there is no preference for the type of advanced airway intervention performed; however, do not interrupt chest compressions for placement of an advanced airway. If after two unsuccessful attempts at endotracheal intubation, a supraglottic airway device shall be used

• Nasal intubation is not an approved form of advanced airway management within the New York City region

• **Pediatric Patients**
  • Effective bag valve mask ventilation is a reasonable alternative to advanced airway interventions (endotracheal intubation or use of a supraglottic airway) in the management of pediatric cardiac arrests in the out-of-hospital setting
When noted in the protocols, or when other maneuvers used to ventilate the pediatric patient are inadequate, endotracheal intubation should be attempted with a cuffed endotracheal tube.

**OROGASTRIC TUBE**

- After performing advanced airway management and after the device is secured, consider placement of an orogastric tube.

**Blood Drawing**

- Blood drawing by Paramedics is permitted at the discretion of an EMS agency Medical Director.

**Medication Administration**

**ENDOTRACHEAL MEDICATION ADMINISTRATION**

- Medication administration via the endotracheal tube is not the standard of care in the NYC region.

**INTRANASAL (IN) MEDICATION ADMINISTRATION**

- In the absence of intravascular access, the following medications are approved for intranasal administration when an appropriate atomizer device is available. Use the dosing as specified in the protocols for the following medications:
  - Glucagon
  - Fentanyl
  - Lorazepam
  - Midazolam
  - Naloxone
  - Ketamine
  - Diazepam
- The intranasal route of administration is contraindicated in patients with epistaxis.

**INTRAVASCULAR ACCESS AND MEDICATION ADMINISTRATION**

- The term “intravascular access” refers to either intravenous (IV) or intraosseous (IO) access. For adult and pediatric patients in shock in which IV access is not obtained after two attempts, IO access shall be attempted (maximum 2 attempts) via a REMAC-approved extremity site.
Where ever the term “IV” is used in these Prehospital Treatment Protocols, medications may be administered with the same dosages via IV or IO as these are considered equivalent routes.

For a conscious patient, administer preservative-free 2% Lidocaine 0.5 mg/kg IO (maximum 50 mg) slowly over 2-3 minutes, PRIOR to the administration of any medication or fluid IO. If needed, administer additional preservative-free 2% Lidocaine 0.25 mg/kg IO (maximum 25 mg) slowly over 30 seconds.

**VASOPRESSOR MEDICATION ADMINISTRATION**

- All continuous vasopressor infusions MUST be administered using an IV flow regulating device or IV infusion pump.
- These infusions should be preferably administered via an 18 gauge or larger IV catheter.
- Standard IV administration sets are not considered to be IV flow regulating devices.

**Pediatric Size Estimation**

- A length-based dosing device may ONLY be used to estimate the weight, height or size of equipment used when treating pediatric patients.
- Medication dosing shall follow the dosing specified in the REMAC Prehospital Treatment Protocols and NOT those listed on the length-based dosing device.

**Shock**

- **Adult:** Patients are considered to be in shock if they are hypotensive (mean arterial blood pressure (MAP) < 65 mmHg or systolic blood pressure (SBP) < 90 mmHg) AND symptomatic with signs of hypoperfusion, including the following:
  - Altered mental status
  - Tachycardia with heart rate > 110 beats/min
  - Tachypnea with respiratory rate > 20 breaths/min or ETCO2 < 30 mmHg
  - Pallor
  - Diaphoresis
  - Delayed capillary refill
  - Orthostatic vital sign changes
- **Pediatric:** Patients are considered to be in shock if they have any of the above signs of hypoperfusion and is not dependent on blood pressure.
• Vital signs for pediatric patients are age-dependent. Abnormal heart rates, blood pressure, and respiratory rates may not necessarily follow the adult guidelines specified above (Appendix J: Normal Pediatric Vital Signs)

• In general, pediatric patients are considered to be hypotensive if they have a SBP (mmHg) < 70 + (2 x [age in years])

### Stable Dysrhythmia

- **Adult:** Patients with a dysrhythmia NOT associated with signs of hypoperfusion
- **Pediatric:** Patients with a dysrhythmia NOT associated with depressed mental status and/or absent peripheral pulses and/or hypotension

### Unstable Dysrhythmia

- **Adult:** Patients with a dysrhythmia associated with ANY of the following:
  - Hypotension (SBP < 90 mmHg or MAP < 65 mmHg)
  - Altered mental status
- **Pediatric:** Patients with a dysrhythmia associated with ANY of the following:
  - Depressed mental status and absent peripheral pulses
  - Hypotension (SBP < 70 mmHg + [2 x age in years])

### Maintenance of IVs by EMTs

- In accordance with NYSDOH EMS Policy # 04-02, EMTs may transport a patient with secured intravascular access in place as long as fluids or medications are not attached. The EMT must ensure that the venous access site is secured and dressed prior to leaving the health care facility

### Use of Pre-Existing Central Venous Lines

- For unstable patients, including those in cardiac arrest, who require IV access and in whom peripheral IV access cannot be rapidly obtained, Paramedics may consider using already established peripherally inserted central venous catheters in the upper extremities (PICC) under standing orders
- All other types of central lines, including those with ports extending from the neck or chest, shall not be used under standing orders and requires OLMC approval prior to use
- Any catheter port requiring insertion of a needle through skin (i.e. Hickman Ports or Port-a-Caths) shall not be used. The use of these ports require techniques beyond the Paramedic's scope of practice; and as such, Paramedics should not use the patient's needles or equipment to access such devices. Dialysis catheters or shunts shall not be accessed in the out-of-hospital environment
It is beyond the Paramedic’s scope of practice to troubleshoot, maintain, remove, reinsert, or otherwise manipulate central lines. Patients with central line issues should be transported to the emergency department for further management. Under no circumstances shall Paramedics attempt to clear an obstructed or clogged line. Any line that cannot be easily flushed with 10 ml of crystalloid fluid, should be considered not functional.

**Age Definitions for Pediatric Patients**

- Any patient age ≥ 15 years is considered an adult patient, and the appropriate protocols shall be used.

- To further define pediatric patients, the following age guidelines shall be used:
  - Preterm – birth prior to the 37th week of gestation
  - Newborn – Immediately following birth to the first few hours after birth
  - Neonate - After the first few hours following birth up to 28 days
  - Infant – age between 1 month - 1 year
  - Child – age between 1 - 9 years
  - Adolescent Child - age between 9 - 14 years

- Avoid agitating pediatric patients when conducting an assessment or providing treatment since this may provoke or increase respiratory distress.
- Obtaining a blood pressure is not necessary when it agitates the patient or delays transport.
- Every attempt should be made to keep pediatric patients warm during transport.

**Minors**

- For terms of consent, patients age < 18 years are considered minors; while patients age ≥ 18 years are considered adults.

- Any minor with a life-threatening condition shall be treated and transported without delay. A minor may request or refuse treatment without parental consent under the Laws of Emancipation if the minor has any of the following conditions:
  - Married
  - Pregnant (for purposes of consenting to medical, dental, health and hospital services related to prenatal care)
  - Parent
  - Request treatment for HIV or a sexually transmitted disease
  - Military enlistment
• Self-supporting and has left their parents' home

**Suspected Child / Spouse / Elder Abuse**

• For suspected child, spouse, or elder abuse, the prehospital provider shall visually assess the scene for evidence of possible abuse and record information in the ePCR. In addition to the ePCR, a verbal report summarizing the suspected abuse shall be given to hospital staff upon arrival at the emergency department

• EMTs and Paramedics are mandatory child abuse reporters under New York State Social Services Law. Failure to report suspected cases of child abuse to the New York State Child Abuse and Maltreatment Register (i.e. State Central Register) may subject the EMT or Paramedic to liability for criminal and civil prosecution and penalties. Notification of suspected child abuse is to be performed in accordance with agency policy. The State Central Register may be contacted by telephone at 1-800-635-1522

• Do not delay transport to obtain the information needed to complete the required reports. Do not use accusatory, confrontational, or threatening statements or attempt to conduct an investigation at the scene

**Abandoned Infant Protection Act**

• New York State Social Services Law states that infants age ≤ 30 days may be abandoned by their parents or caretakers in a safe location, such as a hospital, ambulance, police station, or fire house, or with an appropriate person. Some parents or caretakers may request to remain anonymous; but, if their contact information is freely given, record these in the ePCR

• If an infant is abandoned to the care of a prehospital provider, administer appropriate treatment as needed and transport the infant to the nearest appropriate hospital. The parents or caretakers should be informed of the hospital destination, and told they may contact the hospital for further information should they wish to do so

• The Abandoned Infant Protection Act does not relieve the EMT or Paramedic of the responsibility to report abandonment to the State Central Register (800-635-1522)

• The Abandoned Infant Protection Act provides the parent or caretaker with an acceptable defense against prosecution for infant abandonment
Coordination of Prehospital Resources Procedure

INTRODUCTION

1. This procedure sets forth the NYC regional guidelines for the coordination of prehospital resources at the scene when multiple EMS agencies are present. An EMS agency is any NYS DOH or NYC REMAC approved ambulance or first response service, including municipal, hospital, volunteer or commercial entities that are authorized to provide patient care and/or transport in NYC.

2. This procedure addresses who has the authority to determine:
   - Who provides patient care
   - Who accompanies the patient
   - Which ambulance(s) provide transport
   - Appropriate destination(s)
   - Need for additional resources

PARTICIPATION GUIDELINES

3. All providers must properly and reasonably identify themselves and their respective certification levels. Providers must provide their name, agency, and provider number (shield or NYS DOH certification number). If available, written identification (i.e. patch, agency ID) is preferable to avoid confusion.

4. All providers present at an incident must function as part of a response by the EMS agency with which they are affiliated and remain within their scope of training and practice.

5. The EMS agency must be authorized to provide prehospital care within the New York City region and operate under REMAC approved protocols specific to the provider’s level of care.

RESPONSIBILITY FOR PATIENT CARE

6. The prehospital provider with the highest level of certification who first establishes patient contact at the scene assumes responsibility for providing initial patient care. The provider retains responsibility for patient care until relinquished to a prehospital provider as determined by patient condition/medical necessity, mutual consent, operational necessity, or patient request.
TRANSFER OF CARE BETWEEN ALS AND BLS PROVIDERS

7. The following is intended to guide prehospital providers to determine the appropriate level of care that a patient requires for transport to the hospital. This will facilitate safe transport of patients, as well as optimize the availability of resources.

8. When ALS and BLS providers are both providing care for the same patient, the Paramedics may transfer care to the BLS unit for purposes of transporting the patient to the hospital if the patient has ALL of the following conditions:
   - Hemodynamically stable
   - Ability to follow simple commands (patients with suspected intoxication who are able to follow simple commands and have a BGL > 60 mg/dl may be transported by BLS)
   - NOT received any medications or treatments under ALS protocols
   - NOT expected to require any ALS interventions during transport
   - NO reports of acute coronary syndrome either ongoing or within the past 24 hours

9. When an ALS and BLS unit are both providing care for the same patient, and the patient requires the ALS unit for transport, BOTH units shall transport the patient if the patient has ANY of the following conditions:
   - Placement of an advanced airway or assisted ventilations
   - Cardiac arrest or there is concern for deterioration in the patient’s condition
   - Paramedic feels the need for additional assistance during transport

10. When ALS and BLS units are both caring for the same patient, each shall complete an ePCR to document the care provided.

11. When ALS and BLS units are both caring for the same patient, and only one of the units will transport, both units must discuss the patient’s condition and care provided to ensure that there is agreement about the transport plan.

12. Under no circumstances should patients be transferred between ambulance units that is medically unnecessary or have transport be delayed.

COORDINATION OF PREHOSPITAL RESOURCES

13. The prehospital provider with the highest level of certification who first establishes patient contact at the scene assumes responsibility for decisions related to the coordination of prehospital resources.

14. Higher level prehospital providers must assume responsibility for the coordination of prehospital resources if they assume responsibility for patient care.
15. Responsibility for coordination of prehospital resources may be relinquished to later arriving prehospital providers based on mutual consent

16. When a NYC 911 participating EMS agency is not the first EMS agency on the scene and is not acting in the role of primary care provider, it shall act as an operational resource for information regarding hospital diversions, specialty referral center bed availability, and other specialized resources, as well as incident scene safety (i.e., environmental conditions, crowd/traffic control, potentially dangerous patient or family member to self and/or others)

17. The Fire Department City of New York (FDNY) is responsible for the coordination of patient care resources and medical control at the scene of multiple casualty incidents (MCIs), unscheduled medevac transports, hazardous material (HAZMAT) situations which require decontamination, fires/crimes in progress, or unusual public health/safety emergencies. At the point that FDNY assumes operational responsibility for coordination of prehospital resources, incident command procedures are in effect

MULTIPLE CASUALTY INCIDENTS (MCIs)

18. The criteria for the definition of MCIs are not primarily dependent upon the number of patients; however, MCIs are generally defined as five (5) or more patients with the potential need for extraordinary resources

19. The NYC REMSCO and FDNY should include all involved EMS agencies when planning and coordinating training for MCIs

PATIENT TRANSPORTATION

20. Due to the potential need for the coordination of available specialty centers and receiving facilities, transport decisions during an MCI shall be determined by FDNY

IMPLEMENTATION / EVALUATION

21. Each EMS agency shall develop guidelines and policies to ensure the implementation of this procedure, including continuing education. Complaints shall be first addressed between involved agencies, and then to the REMAC Quality Assurance Committee. Evaluation of the effectiveness of the procedure shall be ongoing as part of each EMS agency’s QA processes and integrated into system-wide QA activities pursuant to Article 30 of the New York State Public Health Law
Alternative Treatment / Alternative Transport Destination Decisions

- If the mechanism of illness/injury, history or physical exam findings do not indicate major trauma, burns, or a need for other types of specialty care, the patient must be transported to the nearest NYC 911 System Ambulance Destination Emergency Department (Appendix I), unless the patient has any of the following conditions:
  - The patient is stable and remains stable throughout transport, and the patient requests transport to an alternative 911 system ambulance destination emergency department, and the estimated transport time to the alternative 911 system ambulance destination emergency department is less than or equal to an additional ten minutes
  - The patient requires specialty care as described previously that is available at an alternative 911 system ambulance destination emergency department, but is unavailable at the nearest New York City 911 system ambulance destination emergency department, or OLMC so directs
  - Ambulances participating in the 911 system may provide treat-in-place with patient release or may transport patients to the nearest appropriate regionally-approved alternative destination if the patient meets criteria established for that destination type or to an equivalent alternative destination less than or equal to an additional 10 minutes

TREAT-IN-PLACE WITH PATIENT RELEASE

1. Medical Issue/Complaint (i.e. physical injury/illness/complaint):
   1.1 All patients considered for treat-in-place with patient release must be offered a choice between treat-in-place, transport to the nearest appropriate alternative destination, or transport to the nearest appropriate 911 receiving emergency department. Prehospital providers must not refuse a patient’s request for transport. For patients agreeing to treat-in-place, the provider shall:
      - Contact Telehealth if the patient meets criteria as specified in Appendix P: Alternate Destination/Treat-In-Place Patient Selection Criteria AND whom the provider thinks may be safely considered for this option
      - Contact OLMC for approval to contact Telehealth for treat-in-place for patients who do not fulfill the criteria as specified in Appendix P: Alternate Destination / Treat-In-Place Patient Selection Criteria, but:
        - Are otherwise considered low index of suspicion for illness or injury
        - Have NOT received medications and/or treatments other than those used for cases of low index of suspicion (e.g. oxygen, bandages)
• Have received medications for the treatment of hypoglycemia and who post-treatment have normal vitals and normal mental status

1.2 If Telehealth determines that the patient is not appropriate for treat-in-place then Telehealth can direct the prehospital provider to follow their standard protocol, policy and procedures for transport. If the patient refuses transport, then the RMA shall be processed through OLMC

1.3 The prehospital provider is responsible for monitoring patient stability during the Telehealth interaction. If at any time the provider determines that the patient is unstable, the provider is to announce this to Telehealth and immediately suspend Telehealth and follow 911 system protocol(s) to provide patient stabilization and transport to the nearest appropriate 911 system ambulance destination emergency department. OLMC contact is not required unless the provider has questions or requires medical control direction

1.4 Telehealth cannot provide medical control direction and cannot direct the prehospital providers to administer medications

1.5 Either Telehealth or OLMC may refer patients to the other as appropriate

2. Behavioral Health Issue/Complaint:

2.1 If the prehospital provider believes that the patient meets behavioral health criteria as specified in Appendix P: Alternate Destination/Treat-In-Place Patient Selection Criteria AND whom the provider thinks may be safely considered for treat-in-place; (On scene evaluation by a licensed mental health professional when available, details to be provided in a separate directive)

2.2 Behavioral health issues/complaints are not appropriate for Telehealth

ALTERNATIVE TRANSPORT DESTINATIONS

3. For patients that fulfill the criteria listed in Appendix P: Alternate Destination/Treat-In-Place Patient Selection Criteria, AND who the provider feels are not appropriate for treat-in-place with patient release or refuse treat-in-place may be transported to the nearest appropriate alternative destination without contacting OLMC

4. For patients that do not fulfill the criteria as specified in Appendix P: Alternate Destination/Treat-In-Place Patient Selection Criteria, the provider must contact OLMC for consultation/approval to transport the following patients whom the provider thinks may still be appropriately transported to an alternative destination:

• Meet exclusion criteria but are otherwise considered low index of suspicion for illness or injury

• Have NOT received medications and/or treatments other than those used for cases of low
index of suspicion (e.g. oxygen, bandages)

- Have received medications for the treatment of hypoglycemia and who post-treatment have normal vitals and normal mental status

5. The provider must contact OLMC for RMAs
THE REGIONAL EMERGENCY MEDICAL SERVICES COUNCIL OF NEW YORK CITY

Does the pt have a condition that is considered a low index of suspicion?

Yes

Does pt want to go to the hospital?

No

Tx pt to nearest appropriate 911 receiving ED

Yes

Does pt want to go to the hospital?

No

Tx pt to nearest appropriate 911 receiving ED

Does pt meet criteria listed in Appendix T?

No

Does provider think pt is safe for Treat-in-Place or tx to an Alternative Destination?

Yes

Contact OLMC for approval for Telehealth (Treat-in-Place) or tx to Alternative Destination

No

Contact OLMC for RMA

Does pt prefer to have Treatment-in-Place?

No

Does provider think pt can be safely considered Treat-in-Place?

Yes

Tx pt to nearest appropriate Alternative Destination

No

Contact OLMC for RMA if pt refuses tx

Is pt’s condition a behavioral health issue?

Yes

Contact Telehealth for Treat in Place

No

On scene response by licensed mental health professional

Yes

Contact OLMC for Behavioral Health Alternative Destination

No

Tx pt to Behavioral Health Alternative Destination

NOTE: NYC 911 participating units must contact FDNY for OLMC
Mutual Aid Mobilization Procedure

INTRODUCTION

1. This procedure sets forth the guidelines for the request and utilization of voluntary hospital, volunteer, and proprietary ambulance resources for mutual aid during times when these resources are needed to manage an incident within the New York City region.

PROCEDURE AUTHORITY

2. This procedure is authorized by the New York State Public Health Law.

PARTICIPATION GUIDELINES

3. In accordance with the NYC REMAC GOP Coordination of Prehospital Resources Procedure, prehospital providers shall not respond to any incident outside of their community or primary operating territory without a specific request from Fire Department City of New York (FDNY) and/or NYC Emergency Management (NYCEM).

4. In the event of a major incident when mutual aid is requested by FDNY and/or NYCEM, ambulance service participants shall at the minimum, staff and field ambulance units to maintain or enhance service to the provider’s primary operating territory, and then if possible provide units for MCI response by contacting FDNY Resource Communication Center (RCC) as follows:
   - Voluntary hospital services – Contact FDNY RCC to identify any need for additional 911 units. After ensuring all essential and contract services are appropriately staffed, provide additional units for mutual aid as requested.
   - Volunteer Services – staff community-based ambulances and log on the units with FDNY RCC. Provide additional units for mutual aid as available.
   - Proprietary Services – After ensuring all essential and contract services are appropriately staffed, log on with FDNY RCC. Provide additional units for mutual aid as available.

5. Ambulance units shall respond to mobilization points identified by FDNY and are not to respond directly to any incident scene unless specifically directed by the FDNY Incident Command. Ambulance units will be dispatched from mobilization points to specific assignments as needed.
Weapons of Mass Destruction Procedure

INTRODUCTION

1. This procedure sets forth the New York City regional guidelines regarding Hazardous Materials (HAZMAT) and/or Weapons of Mass Destruction (WMD) (Chemical, Biological, Radiological, Nuclear, and high yield explosives [CBRNE])

PROCEDURE

2. The safety of both providers and the public is paramount

3. Patients must be decontaminated prior to being removed from the scene

4. EMS providers shall wear appropriate personal protective equipment (PPE) as determined by the FDNY Incident Commander

5. When a HAZMAT or WMD situation is suspected, prehospital providers shall:
   - Immediately notify 911 and respective agency dispatcher and provide an initial scene survey report
   - If not exposed or contaminated, immediately withdraw to a safe distance upwind
   - If exposed or contaminated, isolate the ambulance unit and providers, and await decontamination instructions
   - Operate within the Incident Command System under FDNY’s operational coordination of prehospital resources and patient care

6. Only those resources specifically designated by FDNY incident command shall initially be utilized on scene or within the immediate vicinity of the incident. Ambulances not already on scene shall report to an established mobilization or staging area as directed

7. Any non-911 ambulance inadvertently responding to such an event, will upon recognizing the situation as HAZMAT or WMD, immediately withdraw to a safe distance upwind and notify 911 and their respective agency dispatcher