



NYC REMAC

Advisory No.	2009-05
Title:	Revisions / Updates to REMAC Prehospital Treatment & Transport Protocols
Issue Date:	June 1 st , 2009
Effective Date:	July 1 st , 2009
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The Regional Emergency Medical Advisory Committee (REMAC) of New York City has revised and updated the regional prehospital treatment and transport protocols. All protocols have been approved by the New York State Emergency Medical Advisory Committee for use in the NYC region.

A list of all revised protocols summarizing changes is attached, along with actual protocols identifying specific changes. New Language is **underlined and bold**. Deleted Language is **~~struck-out~~**.

PROTOCOLS MAY BE IMPLEMENTED BEGINNING JULY 1ST, 2009. FINAL DATE BY WHEN ALL EMS PERSONNEL MUST BE UPDATED IS August 1ST, 2009.

Current and Updated Protocols can be accessed at the Regional EMS Council website:
www.nycremsco.org.

Owners/operators of Ambulance and ALS First Response Services providing prehospital medical treatment within the five boroughs of the City of New York are responsible to provide copies of the NYC REMAC Prehospital Treatment Protocols to their personnel, and to ensure that Service Medical Directors and EMS personnel are informed of all changes/updates to the NYC REMAC Prehospital Treatment Protocols.

In order to provide evidence that all EMS personnel have been updated in current protocols, the EMS Agency must provide a list of updated personnel accompanied by a letter of affirmation signed by the service medical director and Chief Executive Officer no later than FOUR (4) weeks after completion of training/in-service.

Lewis W. Marshall, Jr., MD, JD
Chair, Regional Emergency Medical Advisory Committee of New York City

THE REGIONAL EMERGENCY MEDICAL SERVICES COUNCIL OF NEW YORK CITY, INC.

Revision/Update of REMAC Prehospital Treatment & Transport Protocols

<i>Item</i>	<i>Explanation</i>
GENERAL OPERATING PROCEDURES	
Transportation Procedures and Decisions: Acute Stroke	Reference to 'extremis' deleted since this term is not well defined
Transportation Procedures and Decisions: STEMI	Reference to 'extremis' deleted since this term is not well defined
Definition of Unstable Dysrhythmias	Reference to 'Congestive Heart Failure' deleted
Interpretation of Protocols	Adult and pediatric protocols clearly identified
Pharmacology Table	Second NOTE added for the purpose of ensuring that obese pediatric patients are not administered medications in amounts that exceed adult maximum dose. Lidocaine deleted
Basic Life Support Protocols	
BLS Protocol 404 Non-Traumatic Chest Pain	Title changed to Suspected MI to be more inclusive of all ACS patients New NOTE gives a broad definition of Acute Coronary Syndrome (ACS). Step 4 clarified – ALS should always be requested for these types of patients, however, transport can not be delayed. If time for arrival of ALS exceeds time to hospital, patient is to be transported. Administration of NTG is moved from standing order #7 to standing order # 9. Administration of aspirin is clarified: no contraindications except known aspirin allergy or hypersensitivity.

THE REGIONAL EMERGENCY MEDICAL SERVICES COUNCIL OF NEW YORK CITY, INC.

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<i>Item</i>	<i>Explanation</i>
Advanced Life Support Protocols	
ALS protocol 500 Suspected Cyanide Toxicity Or Smoke Inhalation	This protocol has been split into two protocols: <u>Routine protocol:</u> <ul style="list-style-type: none"> ▪ 500-A Smoke Inhalation and/or Suspected Carbon Monoxide Exposure, and <u>WMD Protocol:</u> <ul style="list-style-type: none"> ▪ 500-B Cyanide Exposure Minor Language changes have been made for the purposes of clarification.
ALS Protocol 504-A Drug Therapy of Myocardial Ischemia	Nitro-paste deleted because dose can not be guaranteed.
ALS Protocol 506 Acute Pulmonary Edema	Nitro-paste deleted because dose can not be guaranteed.
ALS Protocol 511 Altered Mental Status	Administration of Narcan clarified to identify titration in increments of 0.4 mg. Individual dose of up to 2 mg, and maximum does of 10 mg remains unchanged.
ALS Protocol 521 Head Injuries	Language clarified to identify administration of seizure medications, omitting dextrose.
ALS Protocol 528 Burns	Clarification of fluid administration. Reduce fluid from 3 to 2 liter maximum.
ALS Protocol 556 Pediatric Altered Mental Status	Administration of Narcan clarified to identify titration in increments of 0.4 mg.
Appendices	
Appendix C Do Not Resuscitate Order	Has been re-written to include NYS DOH information on <u>Medical Orders for Life Sustaining Treatment (MOLST)</u>
Appendix F Trauma Patient Criteria	Clarified to be consistent with General Operating Procedures

TRANSPORTATION PROCEDURES AND DECISIONS

Acute Stroke

If the historical/physical findings indicate an acute stroke, transport the patient to the nearest NYS DOH designated Stroke Center (See Appendix R, Stroke Patient Criteria), unless **one** of the following conditions is met:

- ~~The patient's condition deteriorates to extremis;~~
- The patient is in cardiac arrest;
- The patient has an unmanageable airway;
- The patient has other medical conditions that warrant transport to the nearest appropriate hospital emergency department as per protocol;
- The total time from when the patient's symptoms and/or signs first began to when the patient is first assessed by EMS is greater than two (2) hours;
- The closest NYS DOH designated Stroke Center is **more** than 20 minutes away;
- An on-line medical control physician so directs.

NOTE: PATIENTS WITH UNMANAGEABLE AIRWAYS MUST BE TAKEN TO THE NEAREST NEW YORK CITY 911 SYSTEM AMBULANCE DESTINATION EMERGENCY DEPARTMENT.

STEMI (ST Elevation) / Myocardial Infarction

For all adults, if the historical / physical findings indicate an acute myocardial infarction, and the 12 lead EKG reveals 1 mm ST elevation in 2 or more contiguous leads, or new left bundle branch block; transport the patient to the closest 24 hour NYS certified interventional cardiac catheterization facility, as per medical control, unless one of the following conditions is met:

- ~~The patient is in extremis;~~
- The patient has an unmanageable airway;
- The patient has other medical conditions (Trauma, Burn, CVA) that warrant transport to the closest appropriate hospital emergency department as per protocol.

DEFINITION OF UNSTABLE DYSRHYTHMIAS

For the purposes of these protocols, an unstable dysrhythmia is defined as:

Any adult patient having a dysrhythmia associated with:

- Hypotension (systolic blood pressure BELOW 90 mm Hg), i.e., decompensated shock;
- Altered mental status (e.g., agitation, confusion);
- Persistent chest pain;
- Shortness of breath;
- ~~• Congestive heart failure;~~
- Possible myocardial infraction.

Any pediatric patient having a dysrhythmia associated with:

- Depressed mental status and absent peripheral pulses
- Hypotension (systolic blood pressure BELOW 70 mm Hg + [2x age in years]), i.e., decompensated shock.

INTERPRETATION OF PROTOCOLS

The Advanced Life Support (Paramedic) Treatment Protocols are for the use of the AEMT-P in the field and the Medical Control physician. They have been developed to ensure high quality, standardized prehospital emergency medical care. The protocols are specific for Advanced Life Support treatment. Patient assessment and Basic Life Support treatment have not been enumerated herein. However, they are the foundation upon which these protocols are based, and are always to be performed as necessary. All references to Basic Life Support procedures refer to the appropriate Regional Emergency Medical Advisory Committee (REMAC) of New York City Basic Life Support Treatment Protocols.

Protocols 501 through 521, and ~~Protocols 528 and~~ 530 apply to **adult** patients 14 years of age and older. (For patients 14 years of age and older who weigh less than 40 kg, see the Pharmacology Table for appropriate drug dosages.) Protocols 527 through 529 apply to all patients. Protocols 540 through 559 apply to **pediatric** patients 13 years of age or younger.

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PHARMACOLOGY TABLE

The following are recommended doses for **adult** patients fourteen (14) years of age and **older** and **under** 40 kg in weight:

Amiodarone	5 mg/kg
Atropine Sulfate	0.02 mg/kg (minimum dose 0.1 mg)
Epinephrine	0.01 mg/kg/dose
Furosemide (Lasix)	1 mg/kg/dose
Lidocaine (bolus)	1.5 mg/kg/dose
Sodium Bicarbonate	1 mEq/kg/dose

NOTE: THE DOSE OF EPINEPHRINE 1:1,000 SHOULD NOT EXCEED 0.3 MG, IM.

NOTE: Dosing should not exceed dose from appropriate adult protocol.

~~NON-TRAUMATIC CHEST PAIN~~ SUSPECTED MYOCARDIAL INFARCTION

NOTE: ACUTE CORONARY SYNDROME IS A TERM USED FOR ANY CONDITION BROUGHT ON BY SUDDEN, REDUCED BLOOD FLOW TO THE HEART.

1. Monitor the airway.
2. Administer oxygen.
3. Do **NOT** permit physical activity.
4. Request Advanced Life Support assistance, **if available**. Do NOT delay transport.
5. Monitor breathing for adequacy.
6. Place patient in a position of comfort.

[NTG administration and note were formerly in this position – now dropped to position #9]

7. If the patient is 33 years of age or older, or a patient of any age who has a cardiac history, administer two (2) Chewable Aspirins, **totaling** 162 mg, by mouth, **unless the patient has a known Aspirin allergy or hypersensitivity.**
 - ~~a. Known Aspirin allergy or hypersensitivity~~
 - ~~b. Recent gastrointestinal bleeding~~
 - ~~c. Bleeding disorder~~
 - ~~d. Is taking Warfarin (Coumadin).~~
8. When EMTs are on the scene of an assignment and requesting Advanced Life Support assistance, transport procedures should begin. If the time of arrival of Advanced Life Support exceeds the time to the hospital **or is unknown**, transport from the scene should not be delayed.
9. Either during transport or while waiting for the arrival of an ALS unit, if chest pain is still present, assist the patient with self-administration of the patient's own previously prescribed Nitroglycerin, if available. One tablet or spray may be taken provided that the patient's **systemic** pressure is at least 120 mm Hg.

NOTE: UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, PATIENTS WHO HAVE USED ERECTILE DYSFUNCTION MEDICATIONS IN THE PREVIOUS 72 HOURS SHALL NOT BE GIVEN NITROGLYCERIN.

10. Transport.

500-A

SMOKE INHALATION AND/OR SUSPECTED CARBON MONOXIDE EXPOSURE

This protocol should be utilized ONLY for the management of symptomatic patients after exposure to smoke in an enclosed space.

1. Begin Basic Life Support Procedures
2. If necessary, perform Endotracheal Intubation*.
3. Begin cardiac & pulse oximetry monitoring.
4. Begin SpCO monitoring, if available
5. Begin two IV infusions of Normal Saline (0.9% NS). Refer also to Protocol #528 for all patients with burns.
6. Patients with the following symptoms, after exposure to smoke in an enclosed space, should be administered the medications listed in Table 1, if available. ~~The following symptomatic patients, after exposure to smoke in an enclosed space, should be administered the medications listed below, if available.~~
 - Hypotension not attributable to other obvious causes
 - Altered mental status
 - Coma
 - Seizures
 - Respiratory arrest
 - Cardiac arrest

~~7. Continue treatment and refer to Medical Control Option B for a Transportation Decision~~

NOTE: PRIOR TO ADMINISTRATION OF HYDROXOCOBALAMIN, ~~IF POSSIBLE,~~ OBTAIN THREE BLOOD SAMPLES USING THE TUBES PROVIDED IN THE CYANIDE TOXICITY KIT.

NOTE: WHENEVER HYDROXOCOBALAMIN IS ADMINISTERED, FOLLOW WITH A 20ML FLUSH OF NORMAL SALINE (0.9% NS) PRIOR TO ADMINISTRATION OF ANY OTHER MEDICATION.

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TABLE 1

AGE GROUP	HYDROXOCOBALAMIN*	SODIUM THIOSULFATE
<u>Infant/Toddler (0-2 years)</u>	<u>¼ bottle</u>	<u>250mg/kg (1cc/kg of a 25% solution) administered over 15 minutes, IV</u>
<u>Preschool (3-5 years)</u>	<u>½ bottle</u>	
<u>Grade School (6-13 years)</u>	<u>1 bottle</u>	
<u>Adult (≥14 years)</u>	<u>2 bottles (entire kit)</u>	<u>12.5g (50cc of a 25% solution) administered over 10 minutes IV</u>

AGE GROUP	DOSAGE
Infant/Toddler (0-2 years)	¼ bottle
Preschool (3-5 years)	½ bottle
Grade School (6-13 years)	1 bottle
Adult (≥14 years)	2 bottles (entire kit)

* Hydroxocobalamin may be mixed with D5W, normal saline, or lactated ringers. The vented macro drip tubing that accompanies the cyanokit, should be used, wide open to ensure correct administration time of approximately 15 minutes (7.5 minutes per bottle).

NOTE: IN THE EVENT THAT ONLY ONE INTRAVASCULAR ACCESS LINE IS ESTABLISHED, ADMINISTER HYDROXOCOBALAMIN FIRST BEFORE SODIUM THIOSULFATE.

~~In the event that only one intravascular access line is established, administer hydroxocobalamin first before sodium thiosulfate.~~

MEDICAL CONTROL OPTIONS:

OPTION A: Administer Dopamine 5 ug/kg/min, IV/Saline Lock drip. If there is insufficient improvement in hemodynamic status, the infusion rate may be increased until the desired therapeutic effects are achieved or adverse effects appear. (Maximum dosage is 20 ug/kg/min, IV/Saline Lock drip.)

OPTION B: Transportation Decision.

NOTE: FOR PATIENTS EXHIBITING SIGNS AND SYMPTOMS CONSISTENT WITH CARBON MONOXIDE POISONING, REFER TO GENERAL OPERATING PROCEDURES – TRANSPORTATION DECISIONS AND PROCEDURES: HYPERBARIC CANDIDATES.

CYANIDE TOXICITY KIT (if available)

- 2 – 2.5g **vials** **bottles** of crystalline powder hydroxocobalamin
- 1 – 12.5g **vial** **bottles** of sodium thiosulfate (50 mL of 25% solution)
- 2 – 100mL bag 0.9% NS, D₅W, LR
- 1 – 2 ml fluoride oxalate whole blood tube
- 1 – 2ml K₂ EDTA tube
- 1 – 2ml lithium heparin tube

500-B

CYANIDE EXPOSURE

This protocol should be utilized ONLY for the management of critically ill patients with suspected exposure to cyanide.

If operating at a scene with suspected cyanide exposure where the total patient count is greater than 5, a class order¹ is required by an FDNY-OMA Medical Director to utilize this protocol due to the likelihood of a Weapons of Mass Destruction attack. Refer to REMSCO WMD protocol management decisions. The class order may be issued by a FDNY-OMA Medical Director who is on-scene or as relayed through an FDNY-OMA Medical Director through On-Line Medical Control (Telemetry) or through FDNY Emergency Medical Dispatch.

NOTE: THE ISSUANCE OF ANY CLASS ORDER SHALL BE CONVEYED TO ALL REGIONAL MEDICAL CONTROL FACILITIES FOR RELAY TO UNITS IN THE FIELD.

If operating at a scene of with suspected documented cyanide exposure where the total patient count is 5 or less at one time, the following protocol remains as a Standing Order.

TREATMENT WITHIN THE “HOT” AND “WARM” ZONES MAY BE PERFORMED ONLY BY APPROPRIATELY TRAINED PERSONNEL WEARING APPROPRIATE CHEMICAL PROTECTIVE CLOTHING (CPC) AS DETERMINED BY THE FDNY INCIDENT COMMANDER.

NOTE: IF PROVIDERS ENCOUNTER A PATIENT WHO HAS NOT BEEN APPROPRIATELY DECONTAMINATED FROM LIQUID CYANIDE, THE PROVIDERS SHOULD LEAVE THE AREA IMMEDIATELY UNTIL SUCH TIME AS APPROPRIATE DECONTAMINATION HAS BEEN PERFORMED.

1. Begin Basic Life Support Procedures.
2. If necessary, perform Endotracheal Intubation*.
3. Begin cardiac & pulse oximetry monitoring.
4. Begin two IV infusions of Normal Saline (0.9% NS).
5. Patients with the following symptoms, after exposure to cyanide, should be administered the medications listed in Table 1, if available. ~~The following symptomatic patients, after exposure to smoke in an enclosed space cyanide, should be administered the medications listed below, if available.~~
 - Hypotension not attributable to other obvious causes
 - Altered Mental Status

¹ Class Order - A general order given by a FDNY-OMA Medical Director to perform a specific intervention or interventions at a specific location/s during a specified time period. This order is generally reserved for disaster situations.

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- Coma
- Seizures
- Respiratory arrest
- Cardiac arrest

~~6. Continue treatment and refer to Medical Control Option B for a Transportation Decision.~~

NOTE: IF THERE ARE NO SIGNS OF CARDIAC/RESPIRATORY ARREST, HYPOTENSION, AMS, COMA, SEIZURES, DECOMPENSATED SHOCK, OR IS NOT OTHERWISE DEEMED CRITICAL: **DO NOT ADMINISTER HYDROCOBALAMIN OR SODIUM THIOSULFATE.** BEGIN TREATMENT AND REFER TO MEDICAL CONTROL OPTION B FOR TRANSPORTATION DECISION.

NOTE: PRIOR TO ADMINISTRATION OF HYDROXOCOBALAMIN, IF POSSIBLE, OBTAIN THREE BLOOD SAMPLES USING THE TUBES PROVIDED IN THE CYANIDE TOXICITY KIT.

TABLE 1

AGE GROUP	HYDROXOCOBALAMIN*	SODIUM THIOSULFATE
<u>Infant/Toddler (0-2 years)</u>	<u>¼ bottle</u>	<u>250mg/kg (1cc/kg of a 25% solution) administered over 10 minutes, IV</u>
<u>Preschool (3-5 years)</u>	<u>½ bottle</u>	
<u>Grade School (6-13 years)</u>	<u>1 bottle</u>	
<u>Adult (≥14 years)</u>	<u>2 bottles (entire kit)</u>	<u>12.5g (50cc of a 25% solution) administered over 10 minutes IV</u>

AGE GROUP	DOSAGE
Infant/Toddler (0-2 years)	¼ bottle
Preschool (3-5 years)	½ bottle
Grade School (6-13 years)	1 bottle
Adult (≥14 years)	2 bottles (entire kit)

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* Hydroxocobalamin may be mixed with D5W, normal saline, or lactated ringers. The vented macro drip tubing that accompanies the cyanokit, should be used, wide open to ensure correct administration time of approximately 15 minutes (7.5 minutes per bottle).

~~In the event that only one Intravascular access line is established, administer hydroxocobalamin first **before sodium thiosulfate.**~~

NOTE: WHENEVER HYDROXOCOBALAMIN IS ADMINISTERED, FOLLOW WITH A 20ML FLUSH OF NORMAL SALINE (0.9% NS) PRIOR TO ADMINISTRATION OF ANY OTHER MEDICATION.

MEDICAL CONTROL OPTIONS:

OPTION A: Administer Dopamine 5 ug/kg/min, IV/Saline Lock drip. If there is insufficient improvement in hemodynamic status, the infusion rate may be increased until the desired therapeutic effects are achieved or adverse effects appear. (Maximum dosage is 20 ug/kg/min, IV/Saline Lock drip.)

OPTION B: Transportation Decision.

CYANIDE TOXICITY KIT (if available)

- 2 – 2.5g **vials** **bottles** of crystalline powder hydroxocobalamin
- 1 – 12.5g **vial** **bottles** of sodium thiosulfate (50 mL of 25% solution)
- 2 – 100mL bag 0.9% NS, D₅W, LR
- 1 – 2 ml fluoride oxalate whole blood tube
- 1 – 2ml K₂ EDTA tube
- 1 – 2ml lithium heparin tube

504-A

DRUG THERAPY OF MYOCARDIAL ISCHEMIA

1. If chest pain persists, administer a Nitroglycerin Tablet 1/150 gr. or Spray 0.4 mg, sublingually, every 5 minutes, for a total of 3 doses. Before each administration, check the patient's pulse and blood pressure to ensure the patient is hemodynamically stable.

NOTE: UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, NITROGLYCERIN **AND/OR NITROPASTE** MAY NOT BE ADMINISTERED TO PATIENTS WITH A SYSTOLIC BLOOD PRESSURE OF LESS THAN 100 mmHg.

UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, PATIENTS WHO HAVE USED ERECTILE DYSFUNCTION MEDICATIONS IN THE PREVIOUS 72 HOURS SHALL NOT BE GIVEN NITROGLYCERIN **AND/OR NITROPASTE**.

~~2. If chest pain still persists, apply Nitropaste 1½ inches (if available).~~

3. Administer two (2) chewable Aspirin Tablets, 162 mg.
4. If chest pain or other evidence of myocardial ischemia still persists, contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Administer Morphine Sulfate 0.1mg/kg (not to exceed 5mg), IV/Saline Lock bolus. Repeat doses of Morphine Sulfate 0.1mg/kg (not to exceed 5mg) IV/Saline Lock bolus, may be given as necessary. (Maximum total dosage is 15 mg.)

NOTE: IF HYPOVENTILATION DEVELOPS, ADMINISTER NALOXONE UP TO 2 MG, IV/SALINE LOCK BOLUS.

OPTION B: Repeat Nitroglycerin Tablet 1/150 gr. or Spray 0.4 mg, sublingually, every 5 minutes (if transport is delayed or extended).

OPTION C: Transportation Decision.

NOTE: FOR PATIENTS EXHIBITING ST ELEVATION, REFER TO GENERAL OPERATING PROCEDURES – TRANSPORTATION DECISIONS AND PROCEDURES: STEMI PATIENTS.

ACUTE PULMONARY EDEMA

1. Begin Basic Life Support Respiratory Distress procedures.
2. Begin Cardiac Monitoring, record and evaluate EKG rhythm.
3. Begin an IV infusion of Normal Saline (0.9% NS) to keep vein open, or a Saline Lock.
4. Monitor vital signs every 2-3 minutes.
5. Administer Nitroglycerin Tablet 1/150 gr or Spray 0.4 mg, sublingually, every 5 minutes, for a total of 3 doses. Before each administration, check the patient's pulse and blood pressure to ensure the patient is hemodynamically stable.

NOTE: UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, PATIENTS WHO HAVE USED ERECTILE DYSFUNCTION MEDICATIONS IN THE PREVIOUS 72 HOURS SHALL NOT BE GIVEN NITROGLYCERIN **AND/OR NITROPASTE**.

~~6. Administer Nitropaste 1½ inches (if available).~~

NOTE: UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, NITROGLYCERIN **AND/OR NITROPASTE** MAY NOT BE ADMINISTERED TO PATIENTS WITH A SYSTOLIC BLOOD PRESSURE OF LESS THAN 100 mm Hg.

7. Administer Furosemide 20 – 80 mg, IV/Saline Lock bolus. (Maximum combined total dosage is 80 mg.)
8. Initiate CPAP Therapy, if available, (see Appendix P)
9. Contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Administer Morphine Sulfate 0.1mg/kg (not to exceed 5mg), IV/Saline Lock bolus. Repeat doses of Morphine Sulfate 0.1mg/kg (not to exceed 5mg) IV/Saline Lock bolus, may be given as necessary. (Maximum total dosage is 15 mg.)

NOTE: IF HYPOVENTILATION DEVELOPS, ADMINISTER NALOXONE UP TO 2 MG, IV/SALINE LOCK BOLUS

OPTION B: Administer Lorazepam 1 – 2 mg, IV/IN Saline Lock bolus.

OR

Administer Midazolam 1 – 2 mg, IV/IN Saline Lock bolus.

OPTION C: Repeat Nitroglycerin Tablet 1/150 gr. or Spray 0.4 mg, sublingually.

OPTION D: Transportation Decision.

MANDATORY QUALITY ASSURANCE COMPONENT: FOR EVERY APPLICATION OF A CPAP ON A PATIENT, THE ACR/PCR DOCUMENTATION MUST BE REVIEWED BY THE SERVICE MEDICAL DIRECTOR, WHO IS THEN RESPONSIBLE FOR FORWARDING A COPY OF THE ACR/PCR TO THE NYC REMAC FOR SYSTEM-WIDE QA PURPOSES.

FOR THE PURPOSES OF PATIENT CONFIDENTIALITY, COPIES OF THE PCR/ACR CAN BE MAILED TO: THE REGIONAL EMS COUNCIL OF NYC, 475 RIVERSIDE DRIVE, SUITE 1929, NEW YORK, NEW YORK 10115. PLEASE LABEL THE ENVELOPE "CONFIDENTIAL QA".

ALTERED MENTAL STATUS

1. Begin Basic Life Support Altered Mental Status procedures.
2. Begin an IV infusion of Normal Saline (0.9% NS) to keep vein open, or Saline Lock.
3. Administer Dextrose 25 gm (50 ml of a 50% solution), IV/Saline Lock bolus.

NOTE: A GLUCOMETER (IF AVAILABLE) MAY BE USED TO DOCUMENT BLOOD GLUCOSE LEVEL PRIOR TO DEXTROSE ADMINISTRATION.

IF THE GLUCOMETER READING IS ABOVE 120 mg/dl, DEXTROSE MAY BE WITHHELD.

4. In patients with diabetic histories where an IV/Saline Lock route is unavailable, administer Glucagon 1 mg, IM.
5. If the patient's there still is no change in mental status or it fails to improve significantly, administer Naloxone, titrate in increments of 0.4 mg up to response, up to 2 mg, IV/Saline Lock bolus. If IV/Saline Lock access has not been established, administer Naloxone 0.8 mg up to 2 mg, IM or IN.

NOTE: IF AN OVERDOSE IS STRONGLY SUSPECTED, ADMINISTER NALOXONE PRIOR TO DEXTROSE.

6. If there still is no change in mental status or it fails to improve significantly, repeat Dextrose 25 gm (50 ml of a 50% solution), IV/Saline Lock bolus.
- ~~7. If there still is no change in the patient's mental status still for it fails to improve significantly, repeat Naloxone, titrate in increments of 0.4 mg up to response, up to 2 mg, IV/Saline Lock bolus. If IV/Saline Lock access has not been established, administer Naloxone 0.8 mg up to 2 mg, IM or IN.~~
7. If there is still no change in mental status, contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Repeat any of the above standing orders. Naloxone, titrate in increments of 0.4 mg up to response, up to 2 mg, IV/Saline Lock bolus (~~0.8 mg up to 2 mg, IM or IN if IV/Saline Lock access has not been established~~), up to 3 additional doses. (Maximum total dosage is 10 mg.)

OPTION B: Transportation Decision.

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HEAD INJURIES

In patients with head trauma with a Glasgow Coma Scale (GCS) score of 13 or lower

1. Begin Basic Life Support Head and Spine Injuries procedures.
2. Begin an IV infusion of Normal Saline (0.9% NS) to keep vein open, or a Saline Lock.
3. Begin Cardiac Monitoring, record and evaluate EKG rhythm.
4. Perform Endotracheal Intubation* in patients with a Glasgow Coma Scale score of less than 8, if less invasive methods of airway management are not effective.

~~NOTE: ADMINISTER LIDOCAINE 1.5 MG/KG, IV/SALINE LOCK BOLUS, IMMEDIATELY PRIOR TO INTUBATION TO MINIMIZE THE INCREASE IN INTRACRANIAL PRESSURE. (MAXIMUM DOSE IS 1.5 mg/kg.)~~

5. If a seizure is witnessed: **~~see Protocol 513.~~**
 - a. Administer Lorazepam 2 mg, IV/Saline Lock bolus, or, if IV access is unavailable, IN or IM. A single repeat dose of Lorazepam 2 mg, may be given after 5 minutes if seizure activity persists or recurs.

OR

- b. Administer Diazepam 5 mg, IV/Saline Lock bolus. A single repeat dose of Diazepam 5 mg, IV/Saline Lock bolus, may be given if seizure activity persists or recurs. (Rate of administration may not exceed 5 mg/min.)

OR

- c. Administer Midazolam 10 mg, IM or IN, if IV access is unavailable.

6. If seizure activity persists, contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Repeat Lorazepam 2 mg, IV/Saline Lock bolus, or, if IV access is unavailable, IN or IM.

OR

Repeat Diazepam 5 mg, IV/Saline Lock bolus. (Rate of administration may not exceed 5 mg/min.)

OR

Repeat Midazolam 10 mg, IN or IM, if IV access is unavailable.

5. Transportation Decision.

* If the patient is alert prior to performing Endotracheal Intubation, refer to Prehospital Sedation in General Operating Procedures. Prior Permission from Medical Control Is Required.

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BURNS

1. Begin Basic Life Support Burns procedures.
2. If there is evidence of burns to the upper airway or upper airway compromise is anticipated, perform Endotracheal Intubation*.
3. For patients with electrical burns, begin Cardiac Monitoring, record and evaluate the EKG rhythm.
4. Begin Pulse Oximetry monitoring.
5. Begin an IV infusion of Normal Saline (0.9% NS) or Ringer's Lactate (RL) **to keep vein open, or a Saline Lock.**
6. **Begin a rapid IV/Saline Lock infusion of Normal Saline (0.9% NS) or Ringer's Lactate (RL),** up to **3 2** liters, via a macro-drip, if transport is delayed or extended.
7. For patients who are experiencing severe pain due to the burn injury:
 - a) For patients with a systolic blood pressure greater than 110mmHg, administer Morphine Sulfate 0.1mg/kg (not to exceed 5mg), IV/Saline Lock bolus. For continued pain, repeat dose of 0.1mg/kg (not to exceed 5mg) may be repeated five minutes following the initial dose. (Maximum total dose is 10mg.)

NOTE: IF HYPOVENTILATION DEVELOPS, ADMINISTER NALOXONE UP TO 2 MG, IV/IN/SALINE LOCK BOLUS.

THE ADMINISTRATION OF NARCOTIC ANALGESICS IS CONTRAINDICATED IN PATIENTS WITH BURNS INVOLVING THE FACE AND/OR AIRWAY.

MEDICAL CONTROL OPTIONS:

OPTION A: Transportation Decision.

- * *If the patient is alert prior to performing Endotracheal Intubation, refer to Prehospital Sedation in General Operating Procedures. Prior Permission from Medical Control Is Required.*

PEDIATRIC ALTERED MENTAL STATUS

For pediatric patients in coma, with evolving neurological deficit, or with altered mental status of unknown etiology:

NOTE: MAINTENANCE OF NORMAL RESPIRATORY AND CIRCULATORY FUNCTION IS ALWAYS THE FIRST PRIORITY. PATIENTS WITH ALTERED MENTAL STATUS DUE TO RESPIRATORY FAILURE OR ARREST, OBSTRUCTED AIRWAY, SHOCK, TRAUMA, NEAR DROWNING OR OTHER ANOXIC INJURY SHOULD BE TREATED UNDER OTHER PROTOCOLS.

1. Begin Basic Life Support Altered Mental Status procedures.
2. During transport, or if transport is delayed:
 - Administer Glucagon 1 mg, IM.
3. Begin an IV or IO infusion of Normal Saline (0.9% NS) to keep vein open, or a Saline Lock. Attempt vascular access no more than twice.
4. Administer Dextrose 0.5 gm/kg, IV/Saline Lock or IO bolus. Use 10% Dextrose in patients less or equal to one (1) month of age. Use 25% Dextrose in patients greater than one (1) month of age and less than 14 years of age. (Refer to Length Based Dosing Device)
5. If the patient's mental status fails to improve significantly, administer Naloxone, titrate in increments of 0.4 mg up to response, up to 2 mg, IV/Saline Lock /IO bolus. If IV/Saline Lock/IO access has not been established, administer Naloxone 0.8 mg up to response, up to 2 mg, IM or IN.
- ~~5. If there is still no change in mental status, repeat Naloxone, titrate in increments of 0.4 mg up to response, up to 2 mg, IV/Saline Lock or IO bolus, in patients two (2) years of age or older. Use half the amount (1 mg) of this drug in patients less than two (2) years of age. (Refer to Length Based Dosing Device)~~
6. ~~2, in patients two (2) years of age or older. Use half the amount (1 mg) of this drug in patients less than two (2) years of age. (Refer to Length Based Dosing Device)~~ If there is still no change in mental status, contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Repeat any of the above standing orders.

OPTION B: Transportation Decision.

APPENDIX C

DO NOT RESUSCITATE ORDER

No Not Resuscitate Orders now include two different forms:

1. New York State Department of Health has an approved standard Out of Hospital **No Not Resuscitate (DNR)** form that is legally recognized statewide for DNR requests occurring outside of Article 28 licensed facilities. This form is intended for patients *not* originating from a hospital or nursing home. The form (DOH-3474) is available on the Department's web site (www.health.state.ny.us)
2. **Medical Orders for Life Sustaining Treatment (MOLST)** is an alternative form and process for patients to provide their end of life care preferences to health care providers and may be honored by EMS agencies. The MOLST form is a bright pink form.

This appendix contains excerpts from NYS DOH BEMS Policy Statement # 99 – 10, "Frequently Asked Questions re: DNR's", and Policy Statement # 08-07 "Medical Orders for Life Sustaining Treatment (MOLST)".

Although Policy 08-07 supersedes Policy 99-10, these guidelines are not intended to replace the current out of hospital DNR orders and Policy #99-10 governed by Chapter 370 of the Laws of 1991.

No Not Resuscitate (DNR)

The following are excerpts from the New York State Department of Health Bureau of Emergency Medical Services, Policy Statement # 99 – 10, "Frequently Asked Questions re: DNR's". This policy can be found at: www.health.state.ny.us/nysdoh/ems/main.htm.

What is an "Out of Hospital" DNR?

The New York State Department of Health has an approved standard **Out of Hospital DNR** form that is legally recognized statewide for DNR requests occurring outside of Article 28 licensed facilities. This form is intended for patients *not* originating from a hospital or nursing home. The form (DOH-3474) is available on the Department's web site (www.health.state.ny.us) or from your local DOH EMS Office or health department. There are NO other approved Out of Hospital DNR forms. Copies can be kept on ambulances and made available to patients, facilities or physicians as a part of their community education program.

What is a recognized DNR Bracelet?

A standard DOH approved metal bracelet, worn by the patient, which includes a caduceus and the words "Do Not Resuscitate". EMT's should assume that a DNR order is in place authorizing the bracelet. It is not necessary to locate the written DNR order.

Where/When is an Out of Hospital DNR Order Valid?

For any patient *NOT* originating from a hospital or nursing facility including but not limited to:

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- The patient's home
- A hospice
- A clinic

What determines the validity of the Out of Hospital DNR?

- Merely the presentation of a signed Out of Hospital DNR form (or a copy) or a DNR bracelet to the EMT.
- A good faith attempt to identify the patient. A witness who can reliably identify the patient is useful.
- Out of hospital DNRs do not expire.
- The Out of Hospital DNR form and/or bracelet should be taken with the patient.

Hospital & Nursing Home DNR orders

EMS providers will honor hospital DNR orders for patient transports originating from the facility. The DNR *can not* be expired. The facility staff must provide a copy of the order and/or patient's chart with the recorded DNR order to the ambulance crew.

May EMS providers accept living wills or health care proxies?

A living will or health care proxy is *NOT* valid in the prehospital setting.

Under what circumstances may an EMS provider disregard an Out of Hospital DNR order?

- Any case where there is reasonable evidence to suggest that the DNR order has been revoked or cancelled.
- If the patient is conscious and states that they wish resuscitative measures, the DNR Form should be ignored.
- If the patient is unable to state his or her desire and a family member is present and requests resuscitative measures for the patient and a confrontational situation is likely to result, if the request is denied.
- A physician directs that the order be disregarded.

What procedures are and are not performed if the patient presents a DNR?

- Do not resuscitate (DNR) means, for the patient in cardiac or respiratory arrest, NO chest compressions, ventilation, defibrillation, endotracheal intubation, or medications.
- If the patient is NOT in cardiac or respiratory arrest, full treatment for all injuries, pain, difficult or insufficient breathing, hemorrhage and/or other medical conditions must be provided.
- Relief of choking caused by a foreign body is usually appropriate, although if breathing has stopped, ventilation should not be assisted.
- CPR must be initiated if no Out of Hospital or facility DNR is presented. If a DNR order is presented after CPR has been started, stop CPR.
- For unusual situations or questions on individual patient circumstances, contact medical control.

What documentation is required for a patient with a DNR order?

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- Emergency medical technicians/paramedics should attach a copy of the Out of Hospital DNR form, hospital DNR order and/or copy of the patient's chart to the patient care report, along with all other usual documentation. It should be noted on the patient care report that a written DNR order was present including the name of the physician, date signed and other appropriate information.
- If the cardiac/respiratory arrest occurred during transport, the DNR Form should accompany the patient so that it may be incorporated into the medical record at the receiving facility.

Medical Orders for Life Sustaining Treatment (MOLST)

Unlike the Non Hospital Order Not to Resuscitate form (DOH-3474), the MOLST form is not a New York State Department of Health produced or distributed form. However, it is an approved form that was previously modified with the assistance of the NYS Department of Health, Division of Legal Affairs so that it complies with other health care statutes. The MOLST form is currently utilized by many health care systems.

What are the DNR requirements in NYS laws that affect EMS agencies and providers now?

1. Effective July 7, 2008 the MOLST form may be honored without the need for a non-hospital DNR order.
2. EMS agencies must still honor the use of the non-hospital DNR form or bracelet.
3. A patient with a DNR bracelet only refers to the do not resuscitate rules that apply to the non-hospital DNR order. At present there are no MOLST DNR bracelets.
4. The MOLST form also provides the patient with the ability to give a Do Not Intubate order to health care providers including EMS. See section on DNI.

What are the differences and similarities between the non-hospital DNR order and the MOLST form?

1. The MOLST form is a bright pink multi-page form; however a photocopy or facsimile of the original form is acceptable and legal. The DNR order remains a single page form on white paper with black ink.
2. The MOLST form is meant to be utilized by health care providers across the health care system. It is not limited to EMS agencies. The Non Hospital Order Not to Resuscitate form (DOH-3474) is valid in out of hospital settings only.
3. MOLST provides end of life orders for resuscitation and intubation orders for Advanced EMTs when the patient has progressive or impending pulmonary failure without acute cardiopulmonary arrest. The Non Hospital Order Not to Resuscitate form (DOH-3474) only applies to patients in full cardiopulmonary arrest.
4. Both forms, the MOLST form and the Non Hospital Order Not to Resuscitate form (DOH-3474) form, must be authorized by a physician.
5. Different than the non-hospital DNR form, there are multiple patient orders contained on the MOLST form that is intended for other health care providers to follow in other health care settings such as the hospital or nursing home.

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6. EMS providers and agencies are provided direction regarding the patient end of life treatment orders in Section A (page 1) and Section E (page 2). See below.

Section A of the MOLST Form

Section A is on the first page of the MOLST form. It is titled RESUSCITATION INSTRUCTION (ONLY for Patients in Cardiopulmonary Arrest). It then provides two boxes, one of which will be checked. The first box indicates the patient does not want resuscitation efforts to be made if they are found in full cardiopulmonary arrest. The second box indicates they want full CPR efforts with no limitations.

Note: The current MOLST form in use contains additional written guidance in this section. The last sentence states "For patients in the community, also complete NYS DOH Non-hospital DNR Form unless located in Monroe or Onondaga Counties. Please disregard this. The passage of Chapter 197 makes this form valid in all counties. It is expected that this form will be revised at a later date but. However, MOLST forms with this language may be honored without the need of the non-hospital NYS DNR form.

Section C of the MOLST Form

This section contains the physician authorization. As with the Non Hospital Order Not to Resuscitate form (DOH-3474), the MOLST form is recommended to be reviewed by the patient and his/her physician periodically. However, both forms should be considered valid unless it is known that it has been revoked.

Section E (DNI instructions)

This section, on page 2 of the MOLST form contains a box titled "Additional Intubation and Mechanical Ventilation Instructions". This section should be honored by EMS providers when the patient has progressive or impending pulmonary failure without acute cardiopulmonary arrest.

What is progressive or impending pulmonary failure?

The recognition of progressive or impending pulmonary failure must be made by the Advanced EMT in charge of patient care at the scene. Advanced EMTs who are not certain if this condition exists should contact medical control for advice.

Some Questions to consider

What do I do if the patient has both a non-hospital's DNR order and a MOLST form? Which do I honor?

If one form has different orders, you should follow the form that has the most recently dated authorization. In all instances you should follow the DNI instructions on the MOLST form if the form is signed by a physician as the non-hospital DNR order does not provide this advice.

What if the MOLST form was signed prior to the date the statute was authorized?

You may honor the form as if it were authorized after the statutory date?

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Does the new MOLST law allow EMS to honor other advanced directives?

The law does not add the ability of EMS personnel to honor advanced directives such as a Health Care Proxy or Living Will.

MOLST Training

EMS providers and agencies who are interested in more specific training regarding the MOLST form and process may go to <http://www.compassionandsupport.com>. This site has a specific training program for EMS providers. The site contains frequently asked questions and a training video that would be useful to better understand the MOLST form and process.

If you have other questions about this policy guidance please contact your DOH Regional EMS office or you may call 518-402-0996.

Thank you for your efforts to comply with your patient's end of life wishes.

Resources

Compassion and Support Website:

- <http://www.compassionandsupport.com>

MOLST Training Center:

- http://www.compassionandsupport.com/index.php/for_professionals/molst_training_center

MOLST EMS Training Page:

- http://www.compassionandsupport.com/index.php/for_professionals/molst_training_center/ems_molst_training

New York State Department of Health MOLST Information:

- http://www.health.state.ny.us/professionals/patients/patient_rights/molst

APPENDIX F

TRAUMA PATIENT CRITERIA

Adult Major Trauma (~~Including Traumatic Cardiac Arrest~~)

Major trauma present if the patient's physical findings or the mechanism of injury meets **any one** of the following criteria:

PHYSICAL FINDINGS

1. Glasgow Coma Scale is less than or equal to 13
2. Respiratory rate is less than 10 or more than 29 breaths per minute
3. Pulse rate is less than 50 or more than 120 beats per minute
4. Systolic blood pressure is less than 90 mmHg
5. Penetrating injuries to head, neck, torso or proximal extremities
6. Two or more suspected proximal long bone fractures
7. Suspected flail chest
8. Suspected spinal cord injury or limb paralysis
9. Amputation (except digits)
10. Suspected pelvic fracture
11. Open or depressed skull fracture

MECHANISM OF INJURY

1. Ejection or partial ejection from an automobile
2. Death in the same passenger compartment
3. Extrication time in excess of 20 minutes
4. Vehicle collision resulting in 12 inches of intrusion in to the passenger compartment
5. Motorcycle crash >20 MPH or with separation of rider from motorcycle
6. Falls from greater than 20 feet
7. Vehicle rollover (90 degree vehicle rotation or more) with unrestrained passenger
8. Vehicle vs. pedestrian or bicycle collision above 5 MPH

HIGH RISK PATIENTS – **DOES NOT REQUIRE TRANSPORT TO A TRAUMA CENTER**

If a patient does not meet the above criteria for Major Trauma, but has sustained an injury and has one or more of the following criteria, they are considered a "High Risk Patient".

CONSIDER transportation to a Trauma Center.

CONSIDER contacting medical control.

1. Bleeding disorders or patients who are on anticoagulant medications
2. Cardiac disease and/or respiratory disease
3. Insulin dependent diabetes, cirrhosis, or morbid obesity
4. Immuno-suppressed patients (HIV disease, transplant patients, and patients on chemotherapy treatment)
5. Age >55

Clean versions of revised/clarified Protocols

TRANSPORTATION PROCEDURES AND DECISIONS

Acute Stroke

If the historical/physical findings indicate an acute stroke, transport the patient to the nearest NYS DOH designated Stroke Center (See Appendix R, Stroke Patient Criteria), unless **one** of the following conditions is met:

- The patient is in cardiac arrest;
- The patient has an unmanageable airway;
- The patient has other medical conditions that warrant transport to the nearest appropriate hospital emergency department as per protocol;
- The total time from when the patient's symptoms and/or signs first began to when the patient is first assessed by EMS is greater than two (2) hours;
- The closest NYS DOH designated Stroke Center is **more** than 20 minutes away;
- An on-line medical control physician so directs.

NOTE: PATIENTS WITH UNMANAGEABLE AIRWAYS MUST BE TAKEN TO THE NEAREST NEW YORK CITY 911 SYSTEM AMBULANCE DESTINATION EMERGENCY DEPARTMENT.

STEMI (ST Elevation) / Myocardial Infarction

For all adults, if the historical / physical findings indicate an acute myocardial infarction, and the 12 lead EKG reveals 1 mm ST elevation in 2 or more contiguous leads, or new left bundle branch block; transport the patient to the closest 24 hour NYS certified interventional cardiac catheterization facility, as per medical control, unless one of the following conditions is met:

- The patient has an unmanageable airway;
- The patient has other medical conditions (Trauma, Burn, CVA) that warrant transport to the closest appropriate hospital emergency department as per protocol.

DEFINITION OF UNSTABLE DYSRHYTHMIAS

For the purposes of these protocols, an unstable dysrhythmia is defined as:

Any adult patient having a dysrhythmia associated with:

- Hypotension (systolic blood pressure BELOW 90 mm Hg), i.e., decompensated shock;
- Altered mental status (e.g., agitation, confusion);
- Persistent chest pain;
- Shortness of breath;
- Possible myocardial infraction.

Any pediatric patient having a dysrhythmia associated with:

- Depressed mental status and absent peripheral pulses
- Hypotension (systolic blood pressure BELOW 70 mm Hg + [2x age in years]), i.e., decompensated shock.

INTERPRETATION OF PROTOCOLS

The Advanced Life Support (Paramedic) Treatment Protocols are for the use of the AEMT-P in the field and the Medical Control physician. They have been developed to ensure high quality, standardized prehospital emergency medical care. The protocols are specific for Advanced Life Support treatment. Patient assessment and Basic Life Support treatment have not been enumerated herein. However, they are the foundation upon which these protocols are based, and are always to be performed as necessary. All references to Basic Life Support procedures refer to the appropriate Regional Emergency Medical Advisory Committee (REMAC) of New York City Basic Life Support Treatment Protocols.

Protocols 501 through 521, and 530 apply to **adult** patients 14 years of age and older. (For patients 14 years of age and older who weigh less than 40 kg, see the Pharmacology Table for appropriate drug dosages.) Protocols 527 through 529 apply to all patients. Protocols 540 through 559 apply to **pediatric** patients 13 years of age or younger.

PHARMACOLOGY TABLE

The following are recommended doses for **adult** patients fourteen (14) years of age and **older** and **under** 40 kg in weight:

Amiodarone	5 mg/kg
Atropine Sulfate	0.02 mg/kg (minimum dose 0.1 mg)
Epinephrine	0.01 mg/kg/dose
Furosemide (Lasix)	1 mg/kg/dose
Sodium Bicarbonate	1 mEq/kg/dose

NOTE: THE DOSE OF EPINEPHRINE 1:1,000 SHOULD NOT EXCEED 0.3 MG, IM.

NOTE: DOSING SHOULD NOT EXCEED DOSE FROM APPROPRIATE ADULT PROTOCOL.

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SUSPECTED MYOCARDIAL INFARCTION

NOTE: ACUTE CORONARY SYNDROME IS A TERM USED FOR ANY CONDITION BROUGHT ON BY SUDDEN, REDUCED BLOOD FLOW TO THE HEART.

1. Monitor the airway.
2. Administer oxygen.
3. Do **NOT** permit physical activity.
4. Request Advanced Life Support assistance. Do NOT delay transport.
5. Monitor breathing for adequacy.
6. Place patient in a position of comfort.
7. If the patient is 33 years of age or older, or a patient of any age who has a cardiac history, administer two (2) Chewable Aspirins, totaling 162 mg, by mouth, unless the patient has a known Aspirin allergy or hypersensitivity.
8. When EMTs are on the scene of an assignment and requesting Advanced Life Support assistance, transport procedures should begin. If the time of arrival of Advanced Life Support exceeds the time to the hospital or is unknown, transport from the scene should not be delayed.
9. Either during transport or while waiting for the arrival of an ALS unit, if chest pain is still present, assist the patient with self-administration of the patient's own previously prescribed Nitroglycerin, if available. One tablet or spray may be taken provided that the patient's **systolic** pressure is at least 120 mm Hg.

NOTE: UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, PATIENTS WHO HAVE USED ERECTILE DYSFUNCTION MEDICATIONS IN THE PREVIOUS 72 HOURS SHALL NOT BE GIVEN NITROGLYCERIN.

10. Transport.

500-A

SMOKE INHALATION AND/OR SUSPECTED CARBON MONOXIDE EXPOSURE

This protocol should be utilized ONLY for the management of symptomatic patients after exposure to smoke in an enclosed space.

1. Begin Basic Life Support Procedures
2. If necessary, perform Endotracheal Intubation*.
3. Begin cardiac & pulse oximetry monitoring.
4. Begin SpCO monitoring, if available
5. Begin two IV infusions of Normal Saline (0.9% NS). Refer also to Protocol #528 for all patients with burns.
6. Patients with the following symptoms, after exposure to smoke in an enclosed space, should be administered the medications listed in Table 1, if available.
 - Hypotension not attributable to other obvious causes
 - Altered mental status
 - Coma
 - Seizures
 - Respiratory arrest
 - Cardiac arrest

NOTE: PRIOR TO ADMINISTRATION OF HYDROXOCOBALAMIN, OBTAIN THREE BLOOD SAMPLES USING THE TUBES PROVIDED IN THE CYANIDE TOXICITY KIT.

NOTE: WHENEVER HYDROXOCOBALAMIN IS ADMINISTERED, FOLLOW WITH A 20ML FLUSH OF NORMAL SALINE (0.9% NS) PRIOR TO ADMINISTRATION OF ANY OTHER MEDICATION.

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TABLE 1		
AGE GROUP	HYDROXOCOBALAMIN*	SODIUM THIOSULFATE
Infant/Toddler (0-2 years)	¼ bottle	250mg/kg (1cc/kg of a 25% solution) administered over 15 minutes, IV
Preschool (3-5 years)	½ bottle	
Grade School (6-13 years)	1 bottle	
Adult (≥14 years)	2 bottles (entire kit)	12.5g (50cc of a 25% solution) administered over 10 minutes IV

* Hydroxocobalamin may be mixed with D5W, normal saline, or lactated ringers. The vented macro drip tubing that accompanies the cyanokit, should be used, wide open to ensure correct administration time of approximately 15 minutes (7.5 minutes per bottle).

NOTE: IN THE EVENT THAT ONLY ONE INTRAVASCULAR ACCESS LINE IS ESTABLISHED, ADMINISTER HYDROXOCOBALAMIN FIRST BEFORE SODIUM THIOSULFATE.

MEDICAL CONTROL OPTIONS:

OPTION A: Administer Dopamine 5 ug/kg/min, IV/Saline Lock drip. If there is insufficient improvement in hemodynamic status, the infusion rate may be increased until the desired therapeutic effects are achieved or adverse effects appear. (Maximum dosage is 20 ug/kg/min, IV/Saline Lock drip.)

OPTION B: Transportation Decision.

NOTE: FOR PATIENTS EXHIBITING SIGNS AND SYMPTOMS CONSISTENT WITH CARBON MONOXIDE POISONING, REFER TO GENERAL OPERATING PROCEDURES – TRANSPORTATION DECISIONS AND PROCEDURES: HYPERBARIC CANDIDATES.

CYANIDE TOXICITY KIT (if available)

- 2 – 2.5g bottles of crystalline powder hydroxocobalamin
- 1 – 12.5g bottles of sodium thiosulfate (50 mL of 25% solution)
- 2 – 100mL bag 0.9% NS, D₅W, LR
- 1 – 2 ml fluoride oxalate whole blood tube
- 1 – 2ml K₂ EDTA tube
- 1 – 2ml lithium heparin tube

500-B

CYANIDE EXPOSURE

This protocol should be utilized ONLY for the management of critically ill patients with suspected exposure to cyanide.

If operating at a scene with suspected cyanide exposure where the total patient count is greater than 5, a class order² is required by an FDNY-OMA Medical Director to utilize this protocol due to the likelihood of a Weapons of Mass Destruction attack. Refer to REMSCO WMD protocol management decisions. The class order may be issued by a FDNY-OMA Medical Director who is on-scene or as relayed through an FDNY-OMA Medical Director through On-Line Medical Control (Telemetry) or through FDNY Emergency Medical Dispatch.

NOTE: THE ISSUANCE OF ANY CLASS ORDER SHALL BE CONVEYED TO ALL REGIONAL MEDICAL CONTROL FACILITIES FOR RELAY TO UNITS IN THE FIELD.

If operating at a scene of with suspected documented cyanide exposure where the total patient count is 5 or less at one time, the following protocol remains as a Standing Order.

TREATMENT WITHIN THE “HOT” AND “WARM” ZONES MAY BE PERFORMED ONLY BY APPROPRIATELY TRAINED PERSONNEL WEARING APPROPRIATE CHEMICAL PROTECTIVE CLOTHING (CPC) AS DETERMINED BY THE FDNY INCIDENT COMMANDER.

NOTE: IF PROVIDERS ENCOUNTER A PATIENT WHO HAS NOT BEEN APPROPRIATELY DECONTAMINATED FROM LIQUID CYANIDE, THE PROVIDERS SHOULD LEAVE THE AREA IMMEDIATELY UNTIL SUCH TIME AS APPROPRIATE DECONTAMINATION HAS BEEN PERFORMED.

1. Begin Basic Life Support Procedures.
2. If necessary, perform Endotracheal Intubation*.
3. Begin cardiac & pulse oximetry monitoring.
4. Begin two IV infusions of Normal Saline (0.9% NS).
5. Patients with the following symptoms, after exposure to cyanide, should be administered the medications listed in Table 1, if available.
 - Hypotension not attributable to other obvious causes
 - Altered Mental Status
 - Coma
 - Seizures

² Class Order - A general order given by a FDNY-OMA Medical Director to perform a specific intervention or interventions at a specific location/s during a specified time period. This order is generally reserved for disaster situations.

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- Respiratory arrest
- Cardiac arrest

NOTE: IF THERE ARE NO SIGNS OF CARDIAC/RESPIRATORY ARREST, HYPOTENSION, AMS, COMA, SEIZURES, DECOMPENSATED SHOCK, OR IS NOT OTHERWISE DEEMED CRITICAL: **DO NOT ADMINISTER HYDROCOBALAMIN OR SODIUM THIOSULFATE.** BEGIN TREATMENT AND REFER TO MEDICAL CONTROL OPTION B FOR TRANSPORTATION DECISION.

NOTE: PRIOR TO ADMINISTRATION OF HYDROXOCOBALAMIN, IF POSSIBLE, OBTAIN THREE BLOOD SAMPLES USING THE TUBES PROVIDED IN THE CYANIDE TOXICITY KIT.

AGE GROUP	HYDROXOCOBALAMIN*	SODIUM THIOSULFATE
Infant/Toddler (0-2 years)	¼ bottle	250mg/kg (1cc/kg of a 25% solution) administered over 15 minutes, IV
Preschool (3-5 years)	½ bottle	
Grade School (6-13 years)	1 bottle	
Adult (≥14 years)	2 bottles (entire kit)	12.5g (50cc of a 25% solution) administered over 10 minutes IV

* Hydroxocobalamin may be mixed with D5W, normal saline, or lactated ringers. The vented macro drip tubing that accompanies the cyanokit, should be used, wide open to ensure correct administration time of approximately 15 minutes (7.5 minutes per bottle).

NOTE: WHENEVER HYDROXOCOBALAMIN IS ADMINISTERED, FOLLOW WITH A 20ML FLUSH OF NORMAL SALINE (0.9% NS) PRIOR TO ADMINISTRATION OF ANY OTHER MEDICATION.

MEDICAL CONTROL OPTIONS:

OPTION A: Administer Dopamine 5 ug/kg/min, IV/Saline Lock drip. If there is insufficient improvement in hemodynamic status, the infusion rate may be increased until the desired therapeutic effects are achieved or adverse effects appear. (Maximum dosage is 20 ug/kg/min, IV/Saline Lock drip.)

OPTION B: Transportation Decision.

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CYANIDE TOXICITY KIT (if available)

- 2 – 2.5g bottles of crystalline powder hydroxocobalamin
- 1 – 12.5g bottles of sodium thiosulfate (50 mL of 25% solution)
- 2 – 100mL bag 0.9% NS, D₅W, LR
- 1 – 2 ml fluoride oxalate whole blood tube
- 1 – 2ml K₂ EDTA tube
- 1 – 2ml lithium heparin tube

504-A

DRUG THERAPY OF MYOCARDIAL ISCHEMIA

1. If chest pain persists, administer a Nitroglycerin Tablet 1/150 gr. or Spray 0.4 mg, sublingually, every 5 minutes, for a total of 3 doses. Before each administration, check the patient's pulse and blood pressure to ensure the patient is hemodynamically stable.

NOTE: UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, NITROGLYCERIN MAY NOT BE ADMINISTERED TO PATIENTS WITH A SYSTOLIC BLOOD PRESSURE OF LESS THAN 100 mmHg.

UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, PATIENTS WHO HAVE USED ERECTILE DYSFUNCTION MEDICATIONS IN THE PREVIOUS 72 HOURS SHALL NOT BE GIVEN NITROGLYCERIN.

2. Administer two (2) chewable Aspirin Tablets, 162 mg.
3. If chest pain or other evidence of myocardial ischemia still persists, contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Administer Morphine Sulfate 0.1mg/kg (not to exceed 5mg), IV/Saline Lock bolus. Repeat doses of Morphine Sulfate 0.1mg/kg (not to exceed 5mg) IV/Saline Lock bolus, may be given as necessary. (Maximum total dosage is 15 mg.)

NOTE: IF HYPOVENTILATION DEVELOPS, ADMINISTER NALOXONE UP TO 2 MG, IV/SALINE LOCK BOLUS.

OPTION B: Repeat Nitroglycerin Tablet 1/150 gr. or Spray 0.4 mg, sublingually, every 5 minutes (if transport is delayed or extended).

OPTION C: Transportation Decision.

NOTE: FOR PATIENTS EXHIBITING ST ELEVATION, REFER TO GENERAL OPERATING PROCEDURES – TRANSPORTATION DECISIONS AND PROCEDURES: STEMI PATIENTS.

ACUTE PULMONARY EDEMA

1. Begin Basic Life Support Respiratory Distress procedures.
2. Begin Cardiac Monitoring, record and evaluate EKG rhythm.
3. Begin an IV infusion of Normal Saline (0.9% NS) to keep vein open, or a Saline Lock.
4. Monitor vital signs every 2-3 minutes.
5. Administer Nitroglycerin Tablet 1/150 gr or Spray 0.4 mg, sublingually, every 5 minutes, for a total of 3 doses. Before each administration, check the patient's pulse and blood pressure to ensure the patient is hemodynamically stable.

NOTE: UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, PATIENTS WHO HAVE USED ERECTILE DYSFUNCTION MEDICATIONS IN THE PREVIOUS 72 HOURS SHALL NOT BE GIVEN NITROGLYCERIN.

NOTE: UNLESS OTHERWISE DIRECTED BY ON-LINE MEDICAL CONTROL, NITROGLYCERIN MAY NOT BE ADMINISTERED TO PATIENTS WITH A SYSTOLIC BLOOD PRESSURE OF LESS THAN 100 mm Hg.

6. Administer Furosemide 20 – 80 mg, IV/Saline Lock bolus. (Maximum combined total dosage is 80 mg.)
7. Initiate CPAP Therapy, if available, (see Appendix P)
8. Contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Administer Morphine Sulfate 0.1mg/kg (not to exceed 5mg), IV/Saline Lock bolus. Repeat doses of Morphine Sulfate 0.1mg/kg (not to exceed 5mg) IV/Saline Lock bolus, may be given as necessary. (Maximum total dosage is 15 mg.)

NOTE: IF HYPOVENTILATION DEVELOPS, ADMINISTER NALOXONE UP TO 2 MG, IV/SALINE LOCK BOLUS

OPTION B: Administer Lorazepam 1 – 2 mg, IV/IN Saline Lock bolus.

OR

Administer Midazolam 1 – 2 mg, IV/IN Saline Lock bolus.

OPTION C: Repeat Nitroglycerin Tablet 1/150 gr. or Spray 0.4 mg, sublingually.

OPTION D: Transportation Decision.

MANDATORY QUALITY ASSURANCE COMPONENT: FOR EVERY APPLICATION OF A CPAP ON A PATIENT, THE ACR/PCR DOCUMENTATION MUST BE REVIEWED BY THE SERVICE MEDICAL DIRECTOR, WHO IS THEN RESPONSIBLE FOR FORWARDING A COPY OF THE ACR/PCR TO THE NYC REMAC FOR SYSTEM-WIDE QA PURPOSES.

FOR THE PURPOSES OF PATIENT CONFIDENTIALITY, COPIES OF THE PCR/ACR CAN BE MAILED TO: THE REGIONAL EMS COUNCIL OF NYC, 475 RIVERSIDE DRIVE, SUITE 1929, NEW YORK, NEW YORK 10115. PLEASE LABEL THE ENVELOPE "CONFIDENTIAL QA".

ALTERED MENTAL STATUS

1. Begin Basic Life Support Altered Mental Status procedures.
2. Begin an IV infusion of Normal Saline (0.9% NS) to keep vein open, or Saline Lock.
3. Administer Dextrose 25 gm (50 ml of a 50% solution), IV/Saline Lock bolus.

NOTE: A GLUCOMETER (IF AVAILABLE) MAY BE USED TO DOCUMENT BLOOD GLUCOSE LEVEL PRIOR TO DEXTROSE ADMINISTRATION.

IF THE GLUCOMETER READING IS ABOVE 120 mg/dl, DEXTROSE MAY BE WITHHELD.

4. In patients with diabetic histories where an IV/Saline Lock route is unavailable, administer Glucagon 1 mg, IM.
5. If the patient's mental status fails to improve significantly, administer Naloxone, titrate in increments of 0.4 mg up to response, up to 2 mg, IV/Saline Lock bolus. If IV/Saline Lock access has not been established, administer Naloxone 0.8 mg, up to response, up to 2 mg IM or IN.

NOTE: IF AN OVERDOSE IS STRONGLY SUSPECTED, ADMINISTER NALOXONE PRIOR TO DEXTROSE.

6. If there still is no change in mental status or it fails to improve significantly, repeat Dextrose 25 gm (50 ml of a 50% solution), IV/Saline Lock bolus.
7. If there is still no change in mental status, contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Repeat any of the above standing orders.

OPTION B: Transportation Decision.

HEAD INJURIES

In patients with head trauma with a Glasgow Coma Scale (GCS) score of 13 or lower

1. Begin Basic Life Support Head and Spine Injuries procedures.
2. Begin an IV infusion of Normal Saline (0.9% NS) to keep vein open, or a Saline Lock.
3. Begin Cardiac Monitoring, record and evaluate EKG rhythm.
4. Perform Endotracheal Intubation* in patients with a Glasgow Coma Scale score of less than 8, if less invasive methods of airway management are not effective.
5. If a seizure is witnessed:
 - a. Administer Lorazepam 2 mg, IV/Saline Lock bolus, or, if IV access is unavailable, IN or IM. A single repeat dose of Lorazepam 2 mg, may be given after 5 minutes if seizure activity persists or recurs.OR
 - b. Administer Diazepam 5 mg, IV/Saline Lock bolus. A single repeat dose of Diazepam 5 mg, IV/Saline Lock bolus, may be given if seizure activity persists or recurs. (Rate of administration may not exceed 5 mg/min.)OR
 - c. Administer Midazolam 10 mg, IM or IN, if IV access is unavailable.
6. If seizure activity persists, contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Repeat Lorazepam 2 mg, IV/Saline Lock bolus, or, if IV access is unavailable, IN or IM.

OR

Repeat Diazepam 5 mg, IV/Saline Lock bolus. (Rate of administration may not exceed 5 mg/min.)

OR

Repeat Midazolam 10 mg, IN or IM, if IV access is unavailable.

OPTION B: Transportation Decision.

* If the patient is alert prior to performing Endotracheal Intubation, refer to Prehospital Sedation in General Operating Procedures. Prior Permission from Medical Control Is Required.

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BURNS

1. Begin Basic Life Support Burns procedures.
2. If there is evidence of burns to the upper airway or upper airway compromise is anticipated, perform Endotracheal Intubation*.
3. For patients with electrical burns, begin Cardiac Monitoring, record and evaluate the EKG rhythm.
4. Begin Pulse Oximetry monitoring.
5. Begin an IV infusion of Normal Saline (0.9% NS) or Ringer's Lactate (RL) up to 2 liters, via a macro-drip, if transport is delayed or extended.
6. For patients who are experiencing severe pain due to the burn injury:
 - a) For patients with a systolic blood pressure greater than 110mmHg, administer Morphine Sulfate 0.1mg/kg (not to exceed 5mg), IV/Saline Lock bolus. For continued pain, repeat dose of 0.1mg/kg (not to exceed 5mg) may be repeated five minutes following the initial dose. (Maximum total dose is 10mg.)

NOTE: IF HYPOVENTILATION DEVELOPS, ADMINISTER NALOXONE UP TO 2 MG, IV/IN/SALINE LOCK BOLUS.

THE ADMINISTRATION OF NARCOTIC ANALGESICS IS CONTRAINDICATED IN PATIENTS WITH BURNS INVOLVING THE FACE AND/OR AIRWAY.

MEDICAL CONTROL OPTIONS:

OPTION A: Transportation Decision.

* *If the patient is alert prior to performing Endotracheal Intubation, refer to Prehospital Sedation in General Operating Procedures. Prior Permission from Medical Control Is Required.*

PEDIATRIC ALTERED MENTAL STATUS

For pediatric patients in coma, with evolving neurological deficit, or with altered mental status of unknown etiology:

NOTE: MAINTENANCE OF NORMAL RESPIRATORY AND CIRCULATORY FUNCTION IS ALWAYS THE FIRST PRIORITY. PATIENTS WITH ALTERED MENTAL STATUS DUE TO RESPIRATORY FAILURE OR ARREST, OBSTRUCTED AIRWAY, SHOCK, TRAUMA, NEAR DROWNING OR OTHER ANOXIC INJURY SHOULD BE TREATED UNDER OTHER PROTOCOLS.

1. Begin Basic Life Support Altered Mental Status procedures.
2. During transport, or if transport is delayed:
 - Administer Glucagon 1 mg, IM.
3. Begin an IV or IO infusion of Normal Saline (0.9% NS) to keep vein open, or a Saline Lock. Attempt vascular access no more than twice.
4. Administer Dextrose 0.5 gm/kg, IV/Saline Lock or IO bolus. Use 10% Dextrose in patients less or equal to one (1) month of age. Use 25% Dextrose in patients greater than one (1) month of age and less than 14 years of age. (Refer to Length Based Dosing Device)
5. If the patient's mental status fails to improve significantly, administer Naloxone, titrate in increments of 0.4 mg up to response, up to 2 mg, IV/Saline Lock or IO bolus. If IV/Saline Lock/IO access has not been established, administer Naloxone 0.8 mg up to response, up to 2 mg, IM or IN.
6. If there is still no change in mental status, contact Medical Control for implementation of one or more of the following MEDICAL CONTROL OPTIONS:

MEDICAL CONTROL OPTIONS:

OPTION A: Repeat any of the above standing orders.

OPTION B: Transportation Decision.

APPENDIX C

DO NOT RESUSCITATE ORDER

No Not Resuscitate Orders now include two different forms:

1. New York State Department of Health has an approved standard Out of Hospital **No Not Resuscitate (DNR)** form that is legally recognized statewide for DNR requests occurring outside of Article 28 licensed facilities. This form is intended for patients *not* originating from a hospital or nursing home. The form (DOH-3474) is available on the Department's web site (www.health.state.ny.us)
2. **Medical Orders for Life Sustaining Treatment (MOLST)** is an alternative form and process for patients to provide their end of life care preferences to health care providers and may be honored by EMS agencies. The MOLST form is a bright pink form.

This appendix contains excerpts from NYS DOH BEMS Policy Statement # 99 – 10, "Frequently Asked Questions re: DNR's", and Policy Statement # 08-07 "Medical Orders for Life Sustaining Treatment (MOLST)".

Although Policy 08-07 supersedes Policy 99-10, these guidelines are not intended to replace the current out of hospital DNR orders and Policy #99-10 governed by Chapter 370 of the Laws of 1991.

No Not Resuscitate (DNR)

The following are excerpts from the New York State Department of Health Bureau of Emergency Medical Services, Policy Statement # 99 – 10, "Frequently Asked Questions re: DNR's". This policy can be found at: www.health.state.ny.us/nysdoh/ems/main.htm.

What is an "Out of Hospital" DNR?

The New York State Department of Health has an approved standard **Out of Hospital DNR** form that is legally recognized statewide for DNR requests occurring outside of Article 28 licensed facilities. This form is intended for patients *not* originating from a hospital or nursing home. The form (DOH-3474) is available on the Department's web site (www.health.state.ny.us) or from your local DOH EMS Office or health department. There are NO other approved Out of Hospital DNR forms. Copies can be kept on ambulances and made available to patients, facilities or physicians as a part of their community education program.

What is a recognized DNR Bracelet?

A standard DOH approved metal bracelet, worn by the patient, which includes a caduceus and the words "Do Not Resuscitate". EMT's should assume that a DNR order is in place authorizing the bracelet. It is not necessary to locate the written DNR order.

Where/When is an Out of Hospital DNR Order Valid?

For any patient *NOT* originating from a hospital or nursing facility including but not limited to:

- The patient's home

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- A hospice
- A clinic

What determines the validity of the Out of Hospital DNR?

- Merely the presentation of a signed Out of Hospital DNR form (or a copy) or a DNR bracelet to the EMT.
- A good faith attempt to identify the patient. A witness who can reliably identify the patient is useful.
- Out of hospital DNRs do not expire.
- The Out of Hospital DNR form and/or bracelet should be taken with the patient.

Hospital & Nursing Home DNR orders

EMS providers will honor hospital DNR orders for patient transports originating from the facility. The DNR *can not* be expired. The facility staff must provide a copy of the order and/or patient's chart with the recorded DNR order to the ambulance crew.

May EMS providers accept living wills or health care proxies?

A living will or health care proxy is *NOT* valid in the prehospital setting.

Under what circumstances may an EMS provider disregard an Out of Hospital DNR order?

- Any case where there is reasonable evidence to suggest that the DNR order has been revoked or cancelled.
- If the patient is conscious and states that they wish resuscitative measures, the DNR Form should be ignored.
- If the patient is unable to state his or her desire and a family member is present and requests resuscitative measures for the patient and a confrontational situation is likely to result, if the request is denied.
- A physician directs that the order be disregarded.

What procedures are and are not performed if the patient presents a DNR?

- Do not resuscitate (DNR) means, for the patient in cardiac or respiratory arrest, NO chest compressions, ventilation, defibrillation, endotracheal intubation, or medications.
- If the patient is NOT in cardiac or respiratory arrest, full treatment for all injuries, pain, difficult or insufficient breathing, hemorrhage and/or other medical conditions must be provided.
- Relief of choking caused by a foreign body is usually appropriate, although if breathing has stopped, ventilation should not be assisted.
- CPR must be initiated if no Out of Hospital or facility DNR is presented. If a DNR order is presented after CPR has been started, stop CPR.
- For unusual situations or questions on individual patient circumstances, contact medical control.

What documentation is required for a patient with a DNR order?

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- Emergency medical technicians/paramedics should attach a copy of the Out of Hospital DNR form, hospital DNR order and/or copy of the patient's chart to the patient care report, along with all other usual documentation. It should be noted on the patient care report that a written DNR order was present including the name of the physician, date signed and other appropriate information.
- If the cardiac/respiratory arrest occurred during transport, the DNR Form should accompany the patient so that it may be incorporated into the medical record at the receiving facility.

Medical Orders for Life Sustaining Treatment (MOLST)

Unlike the Non Hospital Order Not to Resuscitate form (DOH-3474), the MOLST form is not a New York State Department of Health produced or distributed form. However, it is an approved form that was previously modified with the assistance of the NYS Department of Health, Division of Legal Affairs so that it complies with other health care statutes. The MOLST form is currently utilized by many health care systems.

What are the DNR requirements in NYS laws that affect EMS agencies and providers now?

1. Effective July 7, 2008 the MOLST form may be honored without the need for a non-hospital DNR order.
2. EMS agencies must still honor the use of the non-hospital DNR form or bracelet.
3. A patient with a DNR bracelet only refers to the do not resuscitate rules that apply to the non-hospital DNR order. At present there are no MOLST DNR bracelets.
4. The MOLST form also provides the patient with the ability to give a Do Not Intubate order to health care providers including EMS. See section on DNI.

What are the differences and similarities between the non-hospital DNR order and the MOLST form?

1. The MOLST form is a bright pink multi-page form; however a photocopy or facsimile of the original form is acceptable and legal. The DNR order remains a single page form on white paper with black ink.
2. The MOLST form is meant to be utilized by health care providers across the health care system. It is not limited to EMS agencies. The Non Hospital Order Not to Resuscitate form (DOH-3474) is valid in out of hospital settings only.
3. MOLST provides end of life orders for resuscitation and intubation orders for Advanced EMTs when the patient has progressive or impending pulmonary failure without acute cardiopulmonary arrest. The Non Hospital Order Not to Resuscitate form (DOH-3474) only applies to patients in full cardiopulmonary arrest.
4. Both forms, the MOLST form and the Non Hospital Order Not to Resuscitate form (DOH-3474) form, must be authorized by a physician.
5. Different than the non-hospital DNR form, there are multiple patient orders contained on the MOLST form that is intended for other health care providers to follow in other health care settings such as the hospital or nursing home.

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6. EMS providers and agencies are provided direction regarding the patient end of life treatment orders in Section A (page 1) and Section E (page 2). See below.

Section A of the MOLST Form

Section A is on the first page of the MOLST form. It is titled RESUSCITATION INSTRUCTION (ONLY for Patients in Cardiopulmonary Arrest). It then provides two boxes, one of which will be checked. The first box indicates the patient does not want resuscitation efforts to be made if they are found in full cardiopulmonary arrest. The second box indicates they want full CPR efforts with no limitations.

Note: The current MOLST form in use contains additional written guidance in this section. The last sentence states "For patients in the community, also complete NYS DOH Non-hospital DNR Form unless located in Monroe or Onondaga Counties. Please disregard this. The passage of Chapter 197 makes this form valid in all counties. It is expected that this form will be revised at a later date but. However, MOLST forms with this language may be honored without the need of the non-hospital NYS DNR form.

Section C of the MOLST Form

This section contains the physician authorization. As with the Non Hospital Order Not to Resuscitate form (DOH-3474), the MOLST form is recommended to be reviewed by the patient and his/her physician periodically. However, both forms should be considered valid unless it is known that it has been revoked.

Section E (DNI instructions)

This section, on page 2 of the MOLST form contains a box titled "Additional Intubation and Mechanical Ventilation Instructions". This section should be honored by EMS providers when the patient has progressive or impending pulmonary failure without acute cardiopulmonary arrest.

What is progressive or impending pulmonary failure?

The recognition of progressive or impending pulmonary failure must be made by the Advanced EMT in charge of patient care at the scene. Advanced EMTs who are not certain if this condition exists should contact medical control for advice.

Some Questions to consider

What do I do if the patient has both a non-hospital's DNR order and a MOLST form? Which do I honor?

If one form has different orders, you should follow the form that has the most recently dated authorization. In all instances you should follow the DNI instructions on the MOLST form if the form is signed by a physician as the non-hospital DNR order does not provide this advice.

What if the MOLST form was signed prior to the date the statute was authorized?

You may honor the form as if it were authorized after the statutory date?

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Does the new MOLST law allow EMS to honor other advanced directives?

The law does not add the ability of EMS personnel to honor advanced directives such as a Health Care Proxy or Living Will.

MOLST Training

EMS providers and agencies who are interested in more specific training regarding the MOLST form and process may go to <http://www.compassionandsupport.com>. This site has a specific training program for EMS providers. The site contains frequently asked questions and a training video that would be useful to better understand the MOLST form and process.

If you have other questions about this policy guidance please contact your DOH Regional EMS office or you may call 518-402-0996.

Thank you for your efforts to comply with your patient's end of life wishes.

Resources

Compassion and Support Website:

- <http://www.compassionandsupport.com>

MOLST Training Center:

- http://www.compassionandsupport.com/index.php/for_professionals/molst_training_center

MOLST EMS Training Page:

- http://www.compassionandsupport.com/index.php/for_professionals/molst_training_center/ems_molst_training

New York State Department of Health MOLST Information:

- http://www.health.state.ny.us/professionals/patients/patient_rights/molst

APPENDIX F

TRAUMA PATIENT CRITERIA

Adult Major Trauma

Major trauma present if the patient's physical findings or the mechanism of injury meets **any one** of the following criteria:

PHYSICAL FINDINGS

1. Glasgow Coma Scale is less than or equal to 13
2. Respiratory rate is less than 10 or more than 29 breaths per minute
3. Pulse rate is less than 50 or more than 120 beats per minute
4. Systolic blood pressure is less than 90 mmHg
5. Penetrating injuries to head, neck, torso or proximal extremities
6. Two or more suspected proximal long bone fractures
7. Suspected flail chest
8. Suspected spinal cord injury or limb paralysis
9. Amputation (except digits)
10. Suspected pelvic fracture
11. Open or depressed skull fracture

MECHANISM OF INJURY

1. Ejection or partial ejection from an automobile
2. Death in the same passenger compartment
3. Extrication time in excess of 20 minutes
4. Vehicle collision resulting in 12 inches of intrusion in to the passenger compartment
5. Motorcycle crash >20 MPH or with separation of rider from motorcycle
6. Falls from greater than 20 feet
7. Vehicle rollover (90 degree vehicle rotation or more) with unrestrained passenger
8. Vehicle vs. pedestrian or bicycle collision above 5 MPH

HIGH RISK PATIENTS – **DOES NOT REQUIRE TRANSPORT TO A TRAUMA CENTER**

If a patient does not meet the above criteria for Major Trauma, but has sustained an injury and has one or more of the following criteria, they are considered a "High Risk Patient".

CONSIDER transportation to a Trauma Center.

CONSIDER contacting medical control.

1. Bleeding disorders or patients who are on anticoagulant medications
2. Cardiac disease and/or respiratory disease
3. Insulin dependent diabetes, cirrhosis, or morbid obesity
4. Immuno-suppressed patients (HIV disease, transplant patients, and patients on chemotherapy treatment)
5. Age >55