



<h1>NYC REMAC</h1>			
Advisory No.	2020-14		
Title:	♦ <b>Protocol Revisions: 500A &amp; 500B</b> ♦ <b>Unified Protocol NEW implementation date</b>		
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Supersedes:	n/a	Page:	1 of 13

*The Regional Emergency Medical Advisory Committee (REMAC) of New York City is responsible to develop, approve and implement prehospital treatment and transport protocols for use within the five boroughs of the City of New York. The Regional Emergency Medical Advisory Committee (REMAC) of New York City operates under the auspices of Article Thirty of the New York State Public Health Law.*

### **ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure**

**The Regional Emergency Medical Advisory Committee (REMAC) of New York City has revised ALS Protocols 500a and 500B. The protocols are attached showing specific revisions and clean versions. These are effective immediately.**

### **NYC Unified Protocols**

**The NYC Unified Protocols which were originally expected for a July 1, 2020 implementation date have been delayed until **January 1, 2021**. Agencies are expected to begin training and be prepared for system-wide implementation on January 1, 2021.**

Current and Updated Protocols can be accessed at the Regional EMS Council website: [www.nycremsco.org](http://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.

Josef Schenker, MD, CPE, FACEP, FAEMS  
Chair, Regional Emergency Medical Advisory  
Committee of New York City

Marie C. Diglio, BA, EMT-P  
Executive Director Operations,  
Regional Emergency Medical Services Council  
of New York City

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### SHOWING REVISIONS

#### 500-A

#### SMOKE INHALATION

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

1. Begin Basic Life Support Procedures
2. If necessary, perform Advanced Airway Management<sup>1</sup>.
3. Begin Cardiac & Pulse Oximetry monitoring.
4. Begin SpCO monitoring, if available
5. Begin two IV/IO infusions of Normal Saline (0.9% NS) or Lactated Ringers. Refer also to Protocol #528 for all patients with burns.
6. Patients with the following symptoms, after exposure to smoke in an enclosed space, ~~shall~~**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, as soon as possible, if available.

~~Whenever Hydroxocobalamin is administered, follow with a 20-ml flush of normal saline (0.9% NS) prior to administration of any other medication.~~

7. In the event of continued hypotension (SBP <90mmHg):
  - a. Administer epinephrine 10 mcg IV Bolus. Repeat epinephrine 10 mcg IV Bolus every 5 minutes. Titrate to a systolic BP greater 90mmHg.  
OR
  - b. Administer Norepinephrine 2 mcg/min IV 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 mcg/min, IV drip.

**Note:** Norepinephrine must be administered via 18 gauge or larger IV/IO, using an IV drip chamber or other suitable metering device (e.g. Dial a flow, infusion pump).

<sup>1</sup> If the patient is alert prior to performing Advanced Airway Management, refer to Prehospital Sedation in General Operating Procedures. Prior permission from Medical Control is required.

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## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### SHOWING REVISIONS

OR

- c. Administer Dopamine 5 mcg/kg/min, IV 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 mcg/kg/min, IV drip.)

<b>TABLE 1: One Bottle Kit (5.0gm/200mL/bottle)</b>		
<b>Age Group</b>	<b>Hydroxocobalamin<sup>A</sup></b>	<b>Sodium Thiosulfate<sup>B</sup></b>
<b>Infant/Toddler (0-2 years)</b>	<b>1/4 bottle</b>	<b>250mg/kg (prepare by mixing 12.5gm of Sodium Thiosulfate with 100mL of D5W, then drawing 3mL/kg of prepared solution) administered over 10 minutes, IV.</b>
<b>Preschool (3-5 years)</b>	<b>1/4 bottle</b>	
<b>Grade School (6-14 years)</b>	<b>1/2 bottle</b>	
<b>Adult (≥15 years)</b>	<b>1 bottle</b>	<b>12.5gm (150 mL of a prepared solution) administered over 10 minutes, IV.</b>

<b>TABLE 1: One Bottle Kit (5 g of powdered Hydroxocobalamin in a 250 ml bottle)</b>		
<b>Age Group</b>	<b>Hydroxocobalamin<sup>A</sup></b>	<b>Sodium Thiosulfate<sup>B</sup></b>
<b><u>Pediatric (0-14 years)</u></b>	<b><u>75 mg/kg (3 ml/kg) of the prepared Hydroxocobalamin solution administered IV/IO over 15 minutes</u></b> <b><u>Do not exceed adult dose</u></b>	<b><u>250 mg/kg (3 ml/kg) of the prepared Sodium Thiosulfate solution administered IV/IO over 10 minutes</u></b>
<b><u>Adult (≥15 years)</u></b>	<b><u>5 g (250 ml of the prepared solution) administered IV/IO over 15 min</u></b>	<b><u>12.5g (150 ml of a prepared solution) administered IV/IO over 10 minutes</u></b>

<sup>A</sup> Hydroxocobalamin solution is prepared by adding 200 ml of a crystalloid solution (NS, D<sub>5</sub>W, LR) to Hydroxocobalamin 5 g powder in the bottle provided. Due to the volume of Hydroxocobalamin powder, the total volume of Hydroxocobalamin solution will be 250 ml ~~may be mixed with D5W, Normal Saline, or Lactated Ringers.~~ The vented macro drip tubing that accompanies the Cyanokit, should be used to administer the Hydroxocobalamin solution in the wide open to ensure correct administration time of approximately 15 minutes ~~for the kit.~~

<sup>B</sup> Sodium Thiosulfate solution ~~is should be~~ prepared by adding Sodium Thiosulfate 12.5gm (50ml) to a 100ml ~~ee~~ bag of D5W for a total volume of 150ml.

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

ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

## SHOWING REVISIONS

**NOTE:** In the event that only one intravascular access line is established, administer Hydroxocobalamin BEFORE ~~first before~~ Sodium Thiosulfate, as Sodium Thiosulfate will inactivate Hydroxocobalamin.

Whenever Hydroxocobalamin is administered, follow with a 20 ml flush of Normal Saline (0.9% NS) prior to administration of any other medication.

### MEDICAL CONTROL OPTIONS:

OPTION A: Transportation Decision.

**NOTE:** For patients exhibiting signs and symptoms consistent with carbon monoxide poisoning, refer to **General Operating Procedures – Transportation Decisions and Procedures.**

### CYANIDE TOXICITY KIT (if available)

One (1) <del>5.0 gm</del> bottle of <u>lyophilized</u> <del>crystalline</del> powder Hydroxocobalamin	One (1) 2 ml fluoride oxalate whole blood tube
One (1) <del>12.5 gm</del> bottles of Sodium Thiosulfate (50 mL of 25% solution)	One (1) 2 ml K2 EDTA tube
Two (2) 100 ml bag 0.9% NS, D <sub>5</sub> W, LR	One (1) 2 ml lithium heparin tube
One (1) 100 ml bag D <sub>5</sub> W	<u>Three-way stopcock connector</u> <u>20 ml syringe</u>

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### SHOWING REVISIONS

#### 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 order<sup>12</sup> 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 with suspected cyanide exposure where the total patient count is 5 or less at one time, the following protocol remains as a Standing Order.

**NOTE: 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 Advanced Airway Management<sup>3</sup>.
  3. Begin Cardiac & Pulse Oximetry monitoring.
  4. Begin two IV/IO infusions of Normal Saline (0.9% NS) or Lactated Ringers.
- \* *If the patient is alert prior to performing Advanced Airway Management, refer to Prehospital Sedation in General Operating Procedures. Prior Permission from Medical Control Is Required.*
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
    - Respiratory arrest
    - Cardiac arrest

<sup>2</sup> *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.*

<sup>3</sup> *If the patient is alert prior to performing Advanced Airway Management, refer to Prehospital Sedation in General Operating Procedures. Prior permission from Medical Control is required.*

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### SHOWING REVISIONS

**NOTE:** Prior to administration of Hydroxocobalamin, obtain three blood samples using the tubes provided in the cyanide toxicity kit, as soon as possible, if available.

<b>Age Group</b>	<b>Hydroxocobalamin<sup>A</sup></b>	<b>Sodium Thiosulfate<sup>B</sup></b>
<b>Infant/Toddler (0-2 years)</b>	<b>1/4 bottle</b>	<b>250mg/kg (prepare by mixing 12.5gm of Sodium Thiosulfate with 100mL of D5W, then drawing 3mL/kg of prepared solution) administered over 10 minutes, IV.</b>
<b>Preschool (3-5 years)</b>	<b>1/4 bottle</b>	
<b>Grade School (6-14 years)</b>	<b>1/2 bottle</b>	
<b>Adult (≥15 years)</b>	<b>1 bottle</b>	<b>12.5gm (150 mL of a prepared solution) administered over 10 minutes, IV.</b>

<b>Age Group</b>	<b>Hydroxocobalamin<sup>A</sup></b>	<b>Sodium Thiosulfate<sup>B</sup></b>
<b><u>Pediatric (0-14 years)</u></b>	<b><u>75 mg/kg (3 ml/kg) of the prepared Hydroxocobalamin solution administered IV/IO over 15 minutes</u></b> <b><u>Do not exceed adult dose</u></b>	<b><u>250 mg/kg (3 ml/kg) of the prepared Sodium Thiosulfate solution administered IV/IO over 10 minutes</u></b>
<b><u>Adult (≥15 years)</u></b>	<b><u>5 g (250 ml of the prepared solution) administered IV/IO over 15 min</u></b>	<b><u>12.5g (150 ml of a prepared solution) administered IV/IO over 10 minutes</u></b>

<sup>A</sup> Hydroxocobalamin solution is prepared by adding 200 ml of a crystalloid solution (NS, D<sub>5</sub>W, LR) to Hydroxocobalamin 5 g powder in the bottle provided. Due to the volume of Hydroxocobalamin powder, the total volume of Hydroxocobalamin solution will be 250 ml ~~may be mixed with D5W, Normal Saline, or Lactated Ringers.~~ The vented macro drip tubing that accompanies the Cyanokit, should be used to administer the Hydroxocobalamin solution in the wide open to ensure correct administration time of approximately 15 minutes ~~for the kit.~~

<sup>B</sup> Sodium Thiosulfate solution ~~is should be~~ prepared by adding Sodium Thiosulfate 12.5gm (50ml) to a 100ml ~~ee~~ bag of D5W for a total volume of 150ml.

**NOTE:** In the event that only one intravascular access line is established, administer Hydroxocobalamin BEFORE first before Sodium Thiosulfate, as Sodium Thiosulfate will inactivate Hydroxocobalamin. Whenever Hydroxocobalamin is administered, follow with a 20 ml flush of Normal Saline (0.9% NS) prior to administration of any other medication.

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### SHOWING REVISIONS

#### MEDICAL CONTROL OPTIONS:

OPTION A: Transportation Decision.

**NOTE: For patients exhibiting signs and symptoms consistent with carbon monoxide poisoning, refer to General Operating Procedures – Transportation Decisions and Procedures.**

#### CYANIDE TOXICITY KIT (if available)

One (1) <del>5.0 gm</del> bottle of <u>lyophilized</u> <del>crystalline</del> powder Hydroxocobalamin	One (1) 2 ml fluoride oxalate whole blood tube
One (1) 12.5 <del>gm</del> bottles of Sodium Thiosulfate (50 mL of 25% solution)	One (1) 2 ml K2 EDTA tube
Two (2) 100 ml bag 0.9% NS, D <sub>5</sub> W, LR	One (1) 2 ml lithium heparin tube
One (1) 100 ml bag D <sub>5</sub> W	<u>Three-way stopcock connector</u> <u>20 ml syringe</u>

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### CLEAN – FINAL

#### 500-A

#### SMOKE INHALATION

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

8. Begin Basic Life Support Procedures
9. If necessary, perform Advanced Airway Management<sup>4</sup>.
10. Begin Cardiac & Pulse Oximetry monitoring.
11. Begin SpCO monitoring, if available
12. Begin two IV/IO infusions of Normal Saline (0.9% NS) or Lactated Ringers. Refer also to Protocol #528 for all patients with burns.
13. Patients with the following symptoms, after exposure to smoke in an enclosed space, shall be administered the medications listed in Table 1, if available.
  - Hypotension not attributable to other obvious causes
  - Altered mental status
  - Seizures
  - Respiratory arrest
  - Cardiac arrest

**NOTE: Prior to administration of Hydroxocobalamin, obtain three blood samples using the tubes provided in the cyanide toxicity kit, as soon as possible, if available.**

14. In the event of continued hypotension (SBP <90mmHg):
    - a. Administer epinephrine 10 mcg IV Bolus. Repeat epinephrine 10 mcg IV Bolus every 5 minutes. Titrate to a systolic BP greater 90mmHg.  
OR
    - b. Administer Norepinephrine 2 mcg/min IV 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 mcg/min, IV drip.
- Note: Norepinephrine must be administered via 18 gauge or larger IV/IO, using an IV drip chamber or other suitable metering device (e.g. Dial a flow, infusion pump).**

OR

<sup>4</sup> If the patient is alert prior to performing Advanced Airway Management, refer to Prehospital Sedation in General Operating Procedures. Prior permission from Medical Control is required.



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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### CLEAN – FINAL

- c. Administer Dopamine 5 mcg/kg/min, IV 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 mcg/kg/min, IV drip.)

Age Group	Hydroxocobalamin <sup>A</sup>	Sodium Thiosulfate <sup>B</sup>
Pediatric (0-14 years)	75 mg/kg (3 ml/kg) of the prepared Hydroxocobalamin solution administered IV/IO over 15 minutes Do not exceed adult dose	250 mg/kg (3 ml/kg) of the prepared Sodium Thiosulfate solution administered IV/IO over 10 minutes
Adult (≥15 years)	5 g (250 ml of the prepared solution) administered IV/IO over 15 min	12.5g (150 ml of a prepared solution) administered IV/IO over 10 minutes

<sup>A</sup> Hydroxocobalamin solution is prepared by adding 200 ml of a crystalloid solution (NS, D<sub>5</sub>W, LR) to Hydroxocobalamin 5 g powder in the bottle provided. Due to the volume of Hydroxocobalamin powder, the total volume of Hydroxocobalamin solution will be 250 ml. The vented macro drip tubing that accompanies the Cyanokit, should be used to administer the Hydroxocobalamin solution in the wide open to ensure correct administration time of approximately 15 minutes.

<sup>B</sup> Sodium Thiosulfate solution is prepared by adding Sodium Thiosulfate 12.5gm (50ml) to a 100ml bag of D5W for a total volume of 150ml.

**NOTE:** In the event that only one intravascular access line is established, administer Hydroxocobalamin BEFORE Sodium Thiosulfate, as Sodium Thiosulfate will inactivate Hydroxocobalamin.  
Whenever Hydroxocobalamin is administered, follow with a 20 ml flush of Normal Saline (0.9% NS) prior to administration of any other medication.

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### CLEAN – FINAL

#### MEDICAL CONTROL OPTIONS:

OPTION A: Transportation Decision.

**NOTE: For patients exhibiting signs and symptoms consistent with carbon monoxide poisoning, refer to General Operating Procedures – Transportation Decisions and Procedures.**

#### CYANIDE TOXICITY KIT (if available)

One (1) 5 g bottle of lyophilized powder Hydroxocobalamin	One (1) 2 ml fluoride oxalate whole blood tube
One (1) 12.5 g bottles of Sodium Thiosulfate (50 mL of 25% solution)	One (1) 2 ml K2 EDTA tube
Two (2) 100 ml bag 0.9% NS, D <sub>5</sub> W, LR	One (1) 2 ml lithium heparin tube
One (1) 100 ml bag D <sub>5</sub> W	Three-way stopcock connector 20 ml syringe

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

**CLEAN – FINAL**

**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 order<sup>5</sup> 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 with suspected cyanide exposure where the total patient count is 5 or less at one time, the following protocol remains as a Standing Order.

**NOTE: 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.**

6. Begin Basic Life Support Procedures.
7. If necessary, perform Advanced Airway Management<sup>6</sup>.
8. Begin Cardiac & Pulse Oximetry monitoring.
9. Begin two IV/IO infusions of Normal Saline (0.9% NS) or Lactated Ringers.
  - \* *If the patient is alert prior to performing Advanced Airway Management, refer to Prehospital Sedation in General Operating Procedures. Prior Permission from Medical Control Is Required.*
10. 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
  - Seizures
  - Respiratory arrest
  - Cardiac arrest

<sup>5</sup> *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.*

<sup>6</sup> *If the patient is alert prior to performing Advanced Airway Management, refer to Prehospital Sedation in General Operating Procedures. Prior permission from Medical Control is required.*

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### CLEAN – FINAL

**NOTE:** Prior to administration of Hydroxocobalamin, obtain three blood samples using the tubes provided in the cyanide toxicity kit, as soon as possible, if available.

Age Group	Hydroxocobalamin <sup>A</sup>	Sodium Thiosulfate <sup>B</sup>
Pediatric (0-14 years)	75 mg/kg (3 ml/kg) of the prepared Hydroxocobalamin solution administered IV/IO over 15 minutes Do not exceed adult dose	250 mg/kg (3 ml/kg) of the prepared Sodium Thiosulfate solution administered IV/IO over 10 minutes
Adult (≥15 years)	5 g (250 ml of the prepared solution) administered IV/IO over 15 min	12.5g (150 ml of a prepared solution) administered IV/IO over 10 minutes

<sup>A</sup> Hydroxocobalamin solution is prepared by adding 200 ml of a crystalloid solution (NS, D<sub>5</sub>W, LR) to Hydroxocobalamin 5 g powder in the bottle provided. Due to the volume of Hydroxocobalamin powder, the total volume of Hydroxocobalamin solution will be 250 ml. The vented macro drip tubing that accompanies the Cyanokit, should be used to administer the Hydroxocobalamin solution in the wide open to ensure correct administration time of approximately 15 minutes.

<sup>B</sup> Sodium Thiosulfate solution is prepared by adding Sodium Thiosulfate 12.5gm (50ml) to a 100ml bag of D5W for a total volume of 150ml.

**NOTE:** In the event that only one intravascular access line is established, administer Hydroxocobalamin **BEFORE** Sodium Thiosulfate, as Sodium Thiosulfate will inactivate Hydroxocobalamin.  
Whenever Hydroxocobalamin is administered, follow with a 20 ml flush of Normal Saline (0.9% NS) prior to administration of any other medication.

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

## ALS Protocol Revisions: 500A: Smoke Inhalation and 500 B: Cyanide Exposure

### CLEAN – FINAL

#### MEDICAL CONTROL OPTIONS:

OPTION A: Transportation Decision.

**NOTE: For patients exhibiting signs and symptoms consistent with carbon monoxide poisoning, refer to General Operating Procedures – Transportation Decisions and Procedures.**

#### CYANIDE TOXICITY KIT (if available)

One (1) 5 g bottle of lyophilized powder Hydroxocobalamin	One (1) 2 ml fluoride oxalate whole blood tube
One (1) 12.5 g bottles of Sodium Thiosulfate (50 mL of 25% solution)	One (1) 2 ml K2 EDTA tube
Two (2) 100 ml bag 0.9% NS, D <sub>5</sub> W, LR	One (1) 2 ml lithium heparin tube
One (1) 100 ml bag D <sub>5</sub> W	Three-way stopcock connector 20 ml syringe