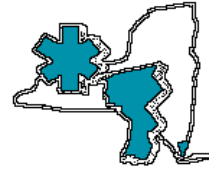


Westchester Regional



BASIC LIFE SUPPORT SPECIAL PROCEDURE PROTOCOLS



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WESTCHESTER REGIONAL EMERGENCY MEDICAL ADVISORY COMMITTEE
BASIC LIFE SUPPORT
SPECIAL PROTOCOLS AND PROCEDURES

INTRODUCTION

It is understood that the current New York State Basic Life Support Protocols issued by the New York State Department of Health are always to be initiated in conjunction with, and as an integral part of the Westchester Regional EMS Basic Life Support Special Procedure Protocols. The Basic Life Support Special Procedure Protocols contain advanced procedures that may be initiated under standing orders as described herein.

Only agencies and providers who have completed the required training and received authorization from the Westchester Regional Medical Advisory Committee and /or the New York State Department of Health may provide the care outlined in these protocols.



SPECIAL BLS PROCEDURE PROTOCOL 1

NEBULIZED ALBUTEROL TREATMENT

For use by EMT-Basics who have received both appropriate training and REMAC authorization to provide this care.

INDICATIONS: For patients between one (1) and sixty-five (65) years of age, who are experiencing an exacerbation of their previously diagnosed asthma:

1. Assess the airway.
2. Administer oxygen.

NOTE: FOR SEVERE RESPIRATORY DISTRESS, REQUEST ADVANCED LIFE SUPPORT IF AVAILABLE. DO NOT DELAY TRANSPORT TO THE HOSPITAL.

3. Monitor breathing.

NOTE: IF PATIENT EXHIBITS SIGNS OF IMMINENT RESPIRATORY FAILURE REFER TO NYS BLS PROTOCOL ADULT OR PEDIATRIC RESPIRATORY ARREST.

4. Do not permit physical activity.
5. Place the patient in the fowler's or semi-fowler's position.
6. Assess the following prior to administration of the first nebulized treatment:
 - Vital signs
 - Patient's ability to speak in complete sentences
 - Accessory muscle use
 - Wheezing
 - Assessment of severity, i.e. Peak flow meter, Borg scale (See Appendix A)

NOTE: FOR PATIENTS WITH A HISTORY OF ANGINA, MYOCARDIAL INFARCTION, ARRHYTHMIA OR CONGESTIVE HEART FAILURE, MEDICAL CONTROL MUST BE CONTACTED PRIOR TO INITIATING STEP #8.

7. Begin transport.
8. Administer Albuterol, 2.5mg / 3cc normal saline via nebulizer. Do not delay transport to complete medication administration.
9. If symptoms persist, treatment may be repeated once, after 10 minutes for a total of two (2) doses.
10. Reassess the patient after each treatment, and prior to any transfer of care, as per step #6.



SPECIAL BLS PROCEDURE PROTOCOL 2

EPINEPHRINE AUTO-INJECTORS

For use by Certified First Responders (CFR) and EMT-Basics (EMT-B) whose agencies have been authorized to possess and use Epinephrine auto-injectors by the New York State Department of Health and the Westchester Regional EMS Council.

CRITERIA:

- Respiratory distress (wheezing, stridor, use of respiratory accessory muscles).
 - Tongue, oropharynx, or uvular swelling.
 - Urticaria, pruritus, flushing.
 - BP < 90 systolic, or other signs of inadequate perfusion.
 - Auscultation of abnormal breath sounds (wheezing, stridor), or markedly decreased movement of air.
1. Routine medical care. Assess for signs, symptoms, and hemodynamic status.
 2. Assure airway patency and administer high flow oxygen.

NOTE: FOR SEVERE RESPIRATORY DISTRESS REQUEST ADVANCED LIFE SUPPORT IF AVAILABLE. DO NOT DELAY TRANSPORT TO THE HOSPITAL.
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3. If symptoms of inadequate perfusion, airway swelling or respiratory distress are present;
 - A. If the patient has his/her own anaphylactic emergency kit, the EMT-B may assist the patient to administer the kit's epinephrine auto-injector;
 - OR**
 - B. If the BLS agency has been authorized to possess an Epinephrine auto-injector, **AND** the EMT-B has been trained in the criteria and method of administration of an Epinephrine auto-injector, the EMT-B may administer the device's content.

NOTE: MEDICAL CONTROL MUST BE CONTACTED IF PATIENT HAS NOT HAD AN EPINEPHRINE AUTO-INJECTOR PREVIOUSLY PRESCRIBED BEFORE BLS MAY ADMINISTER.

4. Timely transport. **If Epinephrine has been given, and ALS is available, ALS must transport with the patient.**



SPECIAL BLS PROCEDURE PROTOCOL 3

MARK I KIT ADMINISTRATION

For use by Certified First Responders (CFR) EMT-Basics (EMT-B) and EMT-Intermediate (EMT-I) whose agencies have been authorized to possess and use Mark I Kits by the Westchester REMAC and who have received the training required by the New York State Department of Health and the Westchester REMAC to provide this care.

INDICATIONS: Commercially available Mark I kits (AtroPen® Auto-Injector and Pralidoxime Chloride Injector) may be possessed/used by a CFR, EMT or EMT-I only under the following conditions:

1. The CFR or EMT is working in the capacity of a First Responder for a BLS First Response or Ambulance Agency that has received REMAC authorization to carry Mark I kits;
2. The responder has received the minimum required training;
3. There has been a **KNOWN** exposure to the release of a nerve agent confirmed by a local competent authority (i.e. HAZMAT Team, WC DOH, NYS DOH, online Medical Control, regional poison control center, WMD trained Paramedic);
4. Under the authority of Direct Medical Control, or a General Medical Control Order¹ provided via a REMAC Credentialed EMT-P; **and,**
5. When specific signs and symptoms of exposure are present (i.e. SLUDGEM). Mark I kits **ARE NOT** to be used as a prophylactic.

NOTE IF EXPOSED TO A NERVE AGENT, A FIRST RESPONDER MUST LEAVE THE SCENE AND SEEK MEDICAL ATTENTION AS SOON AS POSSIBLE. **THERE IS TO BE NO SELF-ADMINISTRATION OF THE ANTIDOTE.** ALL USE OF MARK I KITS WILL BE IN COMPLIANCE WITH THE FOLLOWING INSTRUCTIONS.

PATIENT DECONTAMINATION:

Patient triage will be initiated in the “Hot Zone” and continued in the “Warm Zone” by HAZMAT or other similarly trained responders wearing appropriate Personal Protective Equipment (PPE), as determined by the Incident Commander. Patient treatment should be conducted by EMS in the “Cold Zone”, but “Mark I kits” may be administered simultaneous with and/or prior to decontamination by properly trained and PPE equipped personnel in the “Warm Zone” if severe exposure symptoms are present. Children should be decontaminated and have expedited transport off scene especially if they are demonstrating any signs and symptoms of exposure.

NOTE PERSONNEL OPERATING IN THE “COLD ZONE” SHOULD BE AWARE OF THE POTENTIAL FOR “OFF- GASSING” OF VAPORS FROM CHEMICALLY CONTAMINATED CLOTHING. EMERGENCY RESPONDERS ASSISTING EVACUATED VICTIMS OF NERVE AGENT EXPOSURE SHOULD AVOID EXPOSING THEMSELVES TO CROSSCONTAMINATION BY ENSURING THAT THEY DO NOT COME INTO DIRECT CONTACT WITH THE PATIENT’S CLOTHING.

¹ In the event of a large-scale incident, a REMAC Credentialed Paramedic may contact on-line Medical Control for a General Medical Control Order to provide direction regarding medication administration by REMAC approved NYS certified BLS providers under his or her supervision on the scene as appropriate under this protocol. If voice contact with Medical Control cannot be established by radio / telephone / cellular apparatus / telemetry for this order, the on-scene REMAC Credentialed Paramedic will follow Regional ALS protocols regarding communication failures, direct care as appropriate and document the incident as required.



**BLS SPECIAL PROCEDURE PROTOCOL 3
(Continued)**

MARK I KIT – ADULT ADMINISTRATION

1. Initiate routine medical care
2. Request ALS, (If it has not already been dispatched)
3. If basic life support airway management cannot maintain adequate ventilation and oxygen saturation, airway control with advanced airway management (if certified), 100% OXYGEN with BVM.
4. If the patient has had a **KNOWN** exposure to the release of a nerve agent, depending on the level of exposure symptoms, administer:

EXPOSURE	SYMPTOMS	DOSE
SEVERE	“SLUDGEM” (a) severe respiratory distress, seizures, altered mental status, unconsciousness	<ul style="list-style-type: none">• ATROPINE 6mg IM in three (3) stacked doses; repeat 2mg IM q 3-5 min PRN.• PRALIDOXIME CHLORIDE 1.8 gm IM in three (3) stacked doses.
MODERATE	“SLUDGEM” (a) , respiratory distress, agitation	<ul style="list-style-type: none">• ATROPINE 4mg IM in two (2) stacked doses; repeat 2mg IM q 5-10 min PRN.• PRALIDOXIME CHLORIDE 1.2 gm IM in two (2) stacked doses.
MILD	“SLUDGEM” (a) , agitation	<ul style="list-style-type: none">• ATROPINE 2mg IM in one (1) dose; repeat 2mg IM q 5-15 min PRN.• PRALIDOXIME CHLORIDE 600 mg IM in one (1) dose.

NOTE: ALWAYS ADMINISTER ATROPINE **BEFORE** PRALIDOXIME CHLORIDE (2-PAM CL)

5. If an exposure is suspected, but the patient is asymptomatic, **DO NOT** administer the contents of a Mark I kit, but monitor the patient for any changes.
6. Refer to *NYS DOH BLS Protocol # M-16: Seizures* for the treatment of patients presenting with uncontrolled seizures.
7. Monitor the patient for adverse reactions/deterioration and transport the patient to the local emergency room for definitive care.

FOOTNOTES

- a. Acronym for parasympathetic nervous system response to an organophosphate or nerve agent exposure: **s**alivation, **l**acrimation, **u**rination, **d**efecation, **g**astro-intestinal aggravation, **e**mesis, **m**uscular twitching. Response symptoms are proportional to the degree of exposure.



For this protocol, **PEDIATRIC** patients are considered to be anyone who has not reached their 15th Birthday.

NOTE: PEDIATRIC ADMINISTRATION IS ONLY UNDER THE DIRECTION OF AN ONSCENE PARAMEDIC OR ONLINE MEDICAL CONTROL

1. Initiate routine medical care
2. Request ALS, (If it has not already been dispatched)
3. If basic life support airway management cannot maintain adequate ventilation and oxygen saturation, airway control with advanced airway management (if NYS certified), 100% OXYGEN with BVM.
4. If the patient has had a **KNOWN** exposure to the release of a nerve agent, and is exhibiting **SEVERE / MODERATE** exposure symptoms, (e.g. “SLUDGEM” **(a)**, severe respiratory distress, seizures, altered mental status, unconsciousness), to administer the “Mark I Kit” the CFR, EMT or EMT-I must have direct on-scene Paramedic oversight or shall contact online Medical Control for permission to administer the “Mark I Kit” as follows:

AGE / WT	DOSE	KITS
8 – 14 YRS (25 – 50 KG)	<ul style="list-style-type: none">• ATROPINE 4mg IM• PRALIDOXIME CHLORIDE 1.2 gm IM	<ul style="list-style-type: none">• Two (2) Mark I Kits
2 – 7 YRS (12 – 24 KG)	<ul style="list-style-type: none">• ATROPINE 2mg IM,• PRALIDOXIME CHLORIDE 600 mg IM	<ul style="list-style-type: none">• One (1) Mark I Kit
< 2 YRS (< 12 KG)	<ul style="list-style-type: none">• ATROPINE 2mg IM• PRALIDOXIME CHLORIDE 600 mg IM	<ul style="list-style-type: none">• One (1) Mark I Kit

NOTE: ALWAYS ADMINISTER ATROPINE BEFORE PRALIDOXIME CHLORIDE (2-PAM CL)

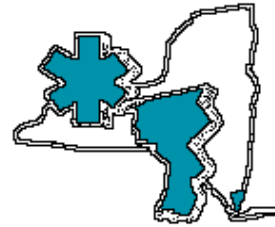
5. If a pediatric patient is presenting with **MILD** exposure symptoms, (e.g. “SLUDGEM” **(a)**, agitation), transport the patient ASAP. If transport is unavailable contact online MEDICAL CONTROL.
6. If an exposure is suspected, but the patient is asymptomatic, **DO NOT** administer the contents of a Mark I kit, but monitor the patient for any changes.
7. Refer to *NYS DOH BLS Protocol # M-16: Seizures* for the treatment of patients presenting with uncontrolled seizures.
8. Monitor the patient for adverse reactions/deterioration and transport the patient to the local emergency room for definitive care.

FOOTNOTES

- a. Acronym for parasympathetic nervous system response to an organophosphate or nerve agent exposure: **s**alivation, **l**acrimation, **u**rination, **d**efecation, **g**astro-intestinal aggravation, **e**mesis, **m**uscular twitching. Response symptoms are proportional to the degree of exposure.



APPENDIX A



RESPIRATORY ASSESSMENT SCALES



Modified Borg Scale Of Perceived Exertion

SCALE	SEVERITY
0	No Breathlessness At All
0.5	Very Very Slight (Just Noticeable)
1	Very Slight
2	Slight Breathlessness
3	Moderate
4	Some What Severe
5	Severe Breathlessness
6	**
7	Very Severe Breathlessness
8	**
9	Very Very Severe (Almost Maximum)
10	Maximum



RESPIRATORY ASSESSMENT SCALES

AVERAGE PEAK FLOW VALUES

PREDICTED AVERAGE PEAK EXPIRATORY FLOW: NORMAL MALES

		H E I G H T				
		60"	65"	70"	75"	80"
A G E	20	554	602	649	693	740
	25	543	590	636	679	725
	30	532	577	622	664	710
	35	521	565	609	651	695
	40	509	552	596	636	680
	45	498	540	583	622	665
	50	486	527	569	607	649
	55	475	515	556	593	634
	60	463	502	542	578	618
	65	452	490	529	564	603
70	440	477	515	550	587	

PREDICTED AVERAGE PEAK EXPIRATORY FLOW: NORMAL FEMALES

		H E I G H T				
		55"	60"	65"	70"	75"
A G E	20	390	423	460	496	529
	25	385	418	454	490	523
	30	380	413	448	483	516
	35	375	408	442	476	509
	40	370	402	436	470	502
	45	365	397	430	464	495
	50	360	391	424	457	488
	55	355	386	418	451	482
	60	350	380	412	445	475
	65	345	375	406	439	468
70	340	369	400	432	461	