

Westchester Regional Emergency Medical Advisory Committee



Nicholas DeRobertis, MD, FACEP
Chairperson

REMAC Advisory (March 2003) Mark I Kits

The Westchester Regional Emergency Medical Advisory Committee (WREMAC) established a regional protocol for the use of the "Mark I Kits" in January 2002. The Westchester Regional Paramedic Protocols addresses the use of Mark-I Kits in Appendix A: Special Procedure Protocol 2.

Since the approval of the WREMAC protocols, the Bio-Terrorism sub-committee of the State Emergency Medical Advisory Committee (SEMAC) developed its own policies in regards to the use of "Mark I Kits" by pre-hospital providers that were subsequently adopted by the SEMAC and State Emergency Medical Services Council (SEMSCO). The WREMAC protocol is inconsistent with NYS DOH policy, No. 03-05 (superceding No. 02-08), regarding the use of the "Mark I kits". Until such time as an updated protocol is developed and accepted by the WREMAC, the directives attached to this REMAC Advisory shall serve as the procedure for paramedic administration of "Mark I kits".

Administration of a Mark I kit to a patient younger than fifteen (15) years of age should follow the policy outlined in NYS DOH policy, No. 03-05 (see attached), until such time as the REMAC is able to develop its own treatment criteria.

Please refer all questions to the Regional EMS Office Staff. Your anticipated cooperation is appreciated.

A handwritten signature in black ink that reads "Nicholas E. DeRobertis MD". The signature is written in a cursive, flowing style.

Dr. Nicholas DeRobertis, MD, FACEP
Chair, Westchester Regional Emergency Medical Advisory Committee



WESTCHESTER REMAC ADVISORY March 2003 – Use of “Mark I kits” (AtroPen® Auto-Injector & Pralidoxime Chloride Injector)

INDICATIONS:

Commercially available Mark I kits (AtroPen® Auto-Injector & Pralidoxime Chloride Injector) may be possessed/used by a paramedic only under the following conditions:

1. The paramedic is working in the capacity of a paramedic for an EMT-P agency that has received WREMAC authorization to carry Mark I kits.
2. The paramedic 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, on-line Medical Control, regional poison control center, WMD Trained Paramedic)
4. When specific signs and symptoms of exposure are present (i.e. SLUDGEM). Mark I kits **ARE NOT** to be used as a prophylactic.

Patients exposed to other toxic parasympatholytic agents may be treated in compliance with the Westchester Regional Paramedic Treatment Protocol 25. ALS agencies may carry additional doses of Atropine during periods of heightened Federal threat levels.

NOTE IF EXPOSED TO A NERVE AGENT, A PARAMEDIC 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”¹ 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 CROSS-CONTAMINATION BY ENSURING THAT THEY DO NOT COME INTO DIRECT CONTACT WITH THE PATIENT’S CLOTHING.

¹ Scenes containing hazardous materials (HAZMAT), or contaminated patients, should be broken down into three zones: “Hot”, “Warm” and “Cold”. The “Hot” and “Warm” zones require the highest level of PPE specified for the toxic agent identified. Gross decontamination of patients begins in the “Hot Zone” with more complete decontamination achieved in the “Warm Zone”. EMS lacking HAZMAT training and equipment will make contact with the patients in the “Cold Zone”. At this point the usual dermal, respiratory and optical PPE required for EMS are sufficient to safely provide patient care.



ADULT ADMINISTRATION:

1. Initiate routine medical care
2. If basic life support airway management cannot maintain adequate ventilation and oxygen saturation, airway control with advanced airway management, 100% OXYGEN with BVM.
3. If the patient had had a **KNOWN** exposure to the release of a nerve agent, depending on the level of exposure symptoms, administer:

EXPOSURE	SYMPTOMS	DOSE
SEVERE	“SLUDGEM” ² , 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”, 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”, 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).

4. 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.
5. Refer to *Westchester Regional Paramedic Protocol # 27: Status Epilepticus* for the treatment of patients presenting with uncontrolled seizures.
6. Monitor the patient for adverse reactions/deterioration and transport the patient to the local emergency room for definitive care.

² 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.