Jackson Hole Fire/EMS Operations Manual

Approved by: _____
Will Smith, MD, Medical Director

Approved by: _____
Rusty Palmer, Chief

Approved by: _____
Emergency Services Council

Title: **Medication Protocol: Mark-I Kit**
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MARK-I KIT
ATROPINE / 2-PAM INJECTORS
(ATROPINE / PRALIDOXIME CHLORIDE)
(Medication Protocol)

EMT-INTERMEDIATE PROVIDERS

IT IS UNDERSTOOD THAT THIS MEDICATION MAY BE ADMINISTERED ONLY AFTER VOICE AUTHORIZATION HAS BEEN GRANTED EITHER BY A WYOMING LICENSED PHYSICIAN OR A PHYSICIAN SUPPORT PERSON (PA) ACTING AS THE AGENT OF A WYOMING LICENSED PHYSICIAN, OR BY A WYOMING LICENSED REGISTERED NURSE; RELAYING THE AUTHORIZATION FROM A WYOMING LICENSED PHYSICIAN WITH WHOM THE NURSE HAS DIRECT COMMUNICATIONS VIA RADIO OR TELEPHONE.

PARAMEDIC PROVIDERS

SAME AS ABOVE – VOICE ORDER REQUIRED

MARK-I AUTOINJECTOR KITS ARE TO BE USED FOR KNOWN NERVE AGENT EXPOSURE CONFIRMED BY A LOCAL COMPETENT AUTHORITY.

PHARACOLOGY/ ACTIONS:

Atropine
Reduces vagal tone. Enhances the rate of discharge of the sinus node. Facilitates AV conduction. By speeding heart rate, reduces chance of ectopy, thus V-Fib. Reduces secretions in the mouth and respiratory passages.

Pralidoxime Chloride
Reactivates cholinesterase (mainly outside the central nervous system) which has been inactivated by phosphorylation due to an organophosphorus nerve agent or related compound. Its most critical effect is relieving paralysis of the muscles of respiration.

USE IN FIELD/ INDICATIONS:

Known exposure to a release of nerve agent, with any of the following signs or symptoms:
"SLUDGEM" – Salivation, Lacrimation, Urination, Defecation, Gastrointestinal aggravation, Emesis, Muscular twitching.

CONTRAINDICATIONS:

In the face of life-threatening poisoning by organophosphorus nerve agents, there are NO absolute contraindications for the use of the Mark-I Kit

SIDE EFFECTS: Atropine:
Blurred vision, flushed skin, dry mouth, pupil dilation, nausea, vomiting, palpitations, tachycardia, hypertension, headache, difficulty in urination (especially older men).

Pralidoxime Chloride:
Blurred vision, diplopia and impaired accommodation, dizziness, drowsiness, hyperventilation, nausea, tachycardia, hypertension, headache, decreased renal function, muscular weakness.

HOW SUPPLIED: Autoinjector

ROUTE: IM

DOSAGE:

		ADULT	PEDIATRIC	
Exposure	**Symptoms**		AGE	SEVERE & MODERATE
Severe	"SLUDGEM" + severe respiratory distress, seizures, altered mental status, unconsciousness	**Atropine:** 6 mg 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.	8–14 YRS (25–50 KG)	**Atropine:** 4 mg IM in two (2) doses **Pralidoxime Chloride:** 1.2 gm IM in two (2) doses
Moderate	"SLUDGEM" + respiratory distress, agitation	**Atropine:** 4 mg 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.	2–7 YRS (12-24 KG)	**Atropine:** 2 mg IM in one (1) dose **Pralidoxime Chloride:** 600 mg IM in one (1) dose
Mild	"SLUDGEM" + agitation	**Atropine:** 2 mg IM in one (1)dose; repeat 2mg IM q 5-15 min PRN. **Pralidoxime Chloride:** 600 mg IM in one (1) dose.	< 2 YRS (<12 KG)	**Atropine:** 2 mg IM in one (1) dose **Pralidoxime Chloride:** 600 mg IM in one (1) dose

NOTE: Administer atropine before pralidoxime chloride (2-PAM CL).
NOTE: If patient exposure is suspected, but is asymptomatic, DO NOT administer the Mark-I Kit

COMMENTS: While the Mark-I kit may be administered to all patients with a life threatening exposure to organophosphorus nerve agents, it should be administered with extreme caution to individuals with the following conditions when symptoms are mild/moderate; hypersensitive to either drug, arrythmias such as atrial flutter, severe narrow angle glaucoma, pyloric stenosis, or prostatic hypertrophy. Pralidoxime is not effective in the treatment of poisoning due to phosphorus, inorganic phosphates, or organophospates not having anticholinesterase activity