

MARK 1 KITS

A MARK 1 Chemical Agent Treatment Kit contains an auto-injector with 2 mg of Atropine and an auto-injector with 600 mg of Pralidoxime (2-PAM) Chloride. These are antidotes to be used when a patient or provider becomes symptomatic from contact with a nerve agent or organophosphate agent (i.e. pesticides, herbicides).

ACTIONS: Atropine = blocks muscarinic effects of nerve agents (e.g. bronchorrhea, bronchoconstriction). 2-PAM Chloride = Reactivates cholinesterase outside the CNS which has been inactivated by organophosphate pesticides and related compounds.

INDICATIONS:

1. Recognition of the existence of a potential chemical or organophosphate agent release.
2. Some or all of the signs and symptoms consistent with exposure to a nerve agent, including:
 - A. SLUDGE: S-salivation, L-lacrimation, U-urination, D-defecation, G-GI symptoms & cramps, E-emesis.
 - B. Difficulty breathing.
 - C. Agitation: confusion, seizures or coma.

CONTRAINDICATIONS:

1. Not to be used as a prophylactic mode of protection.

PRECAUTIONS:

1. Atropine must be administered before 2-PAM CL

ADVERSE REACTIONS/SIDE EFFECTS:

1. Blurred or double vision
2. Dizziness
3. Headache
4. Tachycardia
5. Weakness
6. Nausea

ADMINISTRATION:

1. Scene safety – Use appropriate PPE and assure adequate decontamination of the patient.
2. Manage airway, breathing, circulation as needed
3. Administer Atropine Auto-injector IM and repeat every 3-5 minutes (2-20 mg) until symptoms improve.
4. After Atropine, administer Pralidoxime Chloride (2-PAMCL) Auto-injector IM. May repeat a second dose after 5-10 minutes if no improvement.
5. Start IV Normal Saline to sustain systolic BP over 90 mm/hg.
6. Monitor ECG.
7. Secure airway with advanced airway if needed.
8. Contact Medical Control Physician

PEDIATRIC CONSIDERATIONS:

1. Use pediatric Mark-1 if available and after contacting Medical Control Physician.

SPECIAL NOTES:

1. Some patients will need high-pressure ventilation to successfully ventilate them. Because these patients may need up to 70 cm/H₂O to provide adequate ventilation, use a Bag Valve Mask instead of the demand valve to ventilate the patient.
2. Hold each auto-injector in place for 10 seconds so the medication can be completely injected.
3. Properly dispose of the MARK 1 Kit auto-injectors in a sharps container.
4. If a MARK 1 Kit is not available, Atropine can be administered IM/IV/IO after consulting with a Medical Control Physician.
5. The use of a MARK 1 Kit is based on the patient's signs and symptoms, not the suspicion or presence of a nerve agent.
6. To control seizure activity, consult with a Medical Control Physician concerning the use of Versed.

