

# Sierra – Sacramento Valley EMS Agency Treatment Protocol

## Nerve Agent Treatment



Effective: 12/01/2016

Next Review: 07/2019

**E-8 (LALS)**

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**Refer to S-SV EMS Hazardous Material Incidents policy (836)**

**Important caveats for medical responders:**

- EMS personnel shall not enter or provide treatment in the Contamination Reduction Zone (Warm Zone) or Exclusion Zone (Hot Zone) unless specifically trained, equipped and authorized to do so.
- EMS personnel shall not use Haz Mat specific personal protective equipment (PPE), including self-contained breathing apparatus (SCBA), unless specifically trained, fit tested and authorized to do so.
- Do not transport patients until they have been completely decontaminated. If transport personnel become contaminated, they shall immediately undergo decontamination.

**Treatment notes:**

- Base/Modified Base Hospital Physician order must be obtained prior to utilizing this protocol for patient treatment. Once an order is obtained, the entire protocol becomes a standing order that applies to all authorized/trained EMS personnel operating at the incident.
- Atropine (2mg) and pralidoxime chloride (600mg) auto-injectors included in MARK I/DuoDote nerve agent antidote kits shall only be used by authorized/trained EMS personnel.
- AEMT II personnel may administer atropine IM/IV in situations where auto-injector nerve agent antidote kits are not available.
- EMS personnel may self-administer nerve agent antidote kits when authorized/trained to do so.
- Adult auto-injectors are not to be used in children under 40 Kg.
- Nerve agent antidote medications are only given if the patient is showing signs and symptoms of nerve agent poisoning, they are not to be given prophylactically. A decrease in bronchospasm and respiratory secretions are the best indicators of a positive response to atropine and pralidoxime therapy.

**Signs/Symptoms of Nerve Agent Exposure (mild to severe)**

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| 1. Unexplained runny nose         | 9. Abdominal cramps                  |
| 2. Chest tightness                | 10. Involuntary urination/defecation |
| 3. Difficulty breathing           | 11. Jerking/twitching/staggering     |
| 4. Bronchospasm                   | 12. Headache                         |
| 5. Pinpoint pupils/blurred vision | 13. Drowsiness                       |
| 6. Drooling                       | 14. Coma                             |
| 7. Excessive sweating             | 15. Convulsions                      |
| 8. Nausea/vomiting                | 16. Apnea                            |

**Nerve Agent Exposure Mnemonic (SLUDGEM)**

- Salivation
- Lacrimation
- Urination
- Defecation
- GI distress
- Emesis
- Miosis/muscle fasciculation



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**CHEMPACK**

**Description:**

- As an addition to the Strategic National Stockpile (SNS) Program, the Centers for Disease Control and Prevention (CDC) established the CHEMPACK project resulting in the forward placement of sustainable caches of nerve agent antidotes.
- CHEMPACK caches have been placed at select sites throughout the S-SV EMS region and surrounding areas. Placements were planned according to program requirements and effective transportation alternatives.
- EMS CHEMPACK caches contain enough antidote to treat approximately 454 patients. These caches contain primarily auto-injectors for rapid administration, but also have some multi-dose vials for variable dosing and prolonged treatment.
- Authorization to deploy, break the seal on, or move CHEMPACK assets from their designated location will be limited to an event that:
  1. Threatens the medical security of the community; and
  2. Places multiple lives at risk; and
  3. Is otherwise beyond local emergency response capabilities; and
  4. Will likely make the material medically necessary to save human life.

**CHEMPACK requesting/deployment:**

- A requestor is considered to be one of the following at the scene of a suspected nerve agent or organophosphate release with known, suspected, or potential contaminated, exposed, or affected patients:
  1. EMS prehospital personnel; or
  2. Incident Commander (IC); or
  3. Medical Group Supervisor (MGS).
- Potential requestors should be familiar with and follow their Operational Area (OA)/county specific CHEMPACK plans and procedures
- The S-SV EMS Duty Officer and MHOAC Program shall be notified as soon as possible in the event of a CHEMPACK request/deployment.

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• DuoDote Auto-Injector (Atropine 2.1 mg/0.7ml & Pralidoxime Chloride 600 mg/2ml) may be utilized if MARK I kits (Atropine 2mg & Pralidoxime Chloride 600mg) are not available

