

# EL DORADO COUNTY EMS AGENCY

## FIELD POLICIES

Effective: July 1, 2008

Reviewed: N/A

**Revised: July 2012, 2016, 2018**

Scope: ALS Personnel



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EMS Agency Medical Director

## NERVE AGENT EXPOSURE

### PURPOSE:

To establish standards for the requirements for EMT-Ps in treating patients with nerve agent exposures.

### AUTHORITY:

Health & Safety Code, Division 2.5. California Code of Regulations, Title 22, Division 9.  
California Code of Regulations, Title 19, Division 2, Articles 1-8, Sections 2400 et seq.,  
Standardized Emergency Management System (SEMS) Regulations.

### DEFINITIONS:

CHEMPACK: is a new voluntary component of the federal Strategic National Stockpile Program (SNS) operated by the Centers for Disease Control and Prevention (CDC) for the benefit of the U.S. civilian population. The CHEMPACK program's mission is to provide state and local governments a sustainable nerve agent antidote cache that increases their capability to respond quickly to a nerve agent event such as a terrorist attack.

Nerve Agents: Extremely toxic organophosphate-type chemicals, including GA (tabun), GB (sarin), GD (soman), GF (cyclosarin), and VX, which attack the nervous system and interfere with chemicals that control nerves, muscles, and glands. They are odorless and invisible and can be inhaled, absorbed through the skin, or swallowed.

Nerve Agent Antidotes: Counteract the effects of nerve gases by 1) decreasing symptoms and 2) regenerating an enzyme that is wiped out by nerve gases. Nerve agent antidotes are among the five (5) actions taken after exposure to nerve gas, as follows:

- 1) Terminate the exposure (stop breathing and move quickly to good air; decontaminate victims and emergency medical staff within minutes of exposure; don personal protective equipment; ventilate pre-hospital and hospital treatment areas).
- 2) Support ventilation.
- 3) Provide atropine therapy.
- 4) Provide pralidoxime therapy.
- 5) Provide antiseizure therapy.
- 6) Document treatment on the triage tag.

### POLICY:

- 1) In the event of a nerve agent release, CHEMPACKs will be deployed from strategically located positions within the county. CHEMPACKs can only be deployed by order of the Public Health Officer (or designate), or the Emergency Medical Services Medical Director.
- 2) Once deployed, the entire Nerve Agent Treatment Protocol may be utilized under standing orders that apply to all EMT-Ps operating at the incident.
- 3) All EMS personnel will ensure personal safety by assuring adequate decontamination of victims and using appropriate personal protective (PPE). Medical procedures within the Exclusion Zone (Hot Zone/contaminated area) will only be performed by personnel who have specific training to allow them to function in that area. Under no circumstances should responding personnel at any level of expertise use Personal Protective Equipment or assist in patient decontamination without completing the required training.

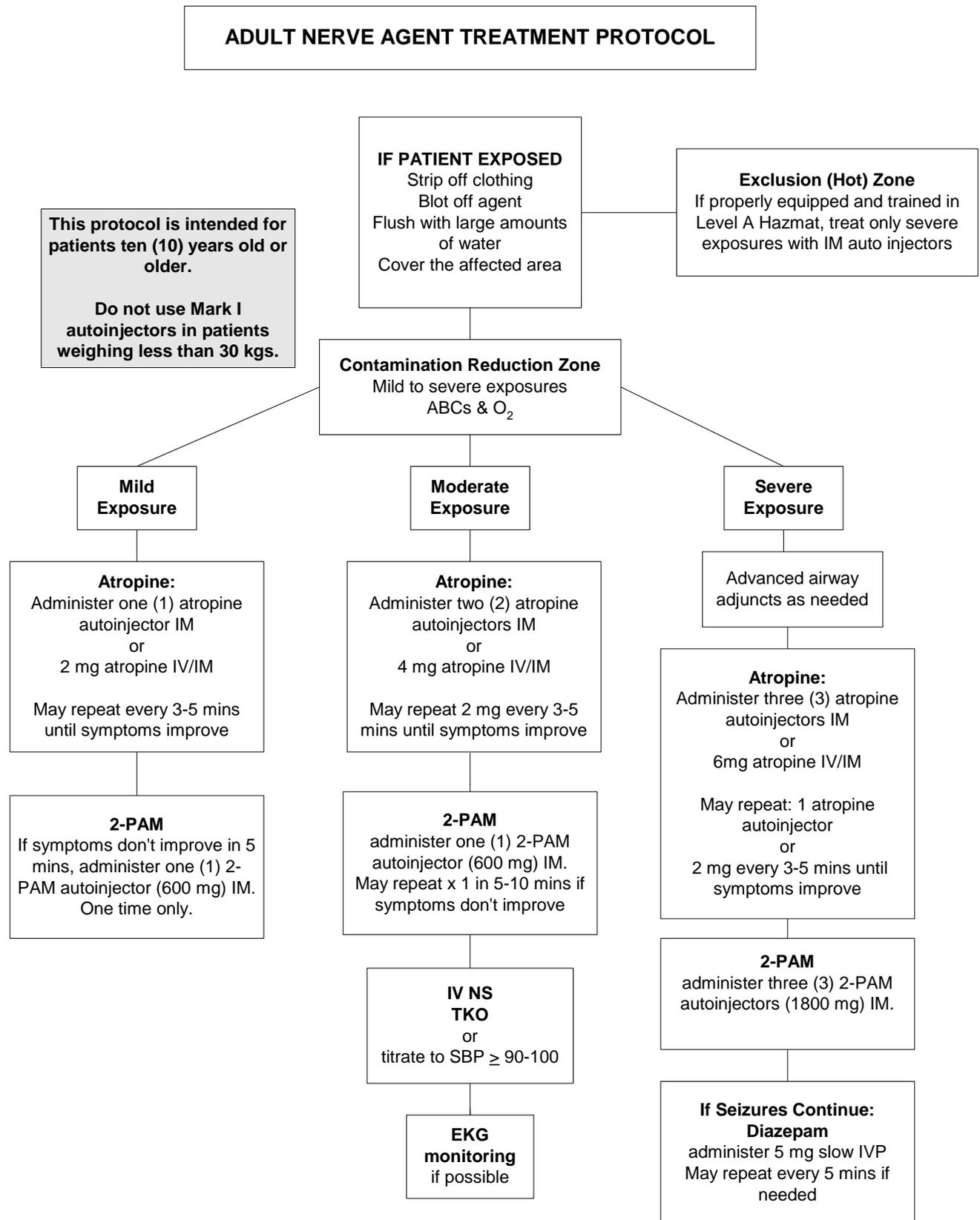
- 4) The auto-injectors included in CHEMPACK Nerve Agent Antidote Kits will be used only by those EMT-Ps that have been trained in their use and have them available. EMT-Ps may administer atropine IM/IV in situations where CHEMPACK Nerve Agents Antidote Kits are not available.
- 5) SELF ADMINISTRATION - EMT-Ps that have been trained and equipped may utilize the nerve gas protocol to self administer CHEMPACK auto-injectors when exposed to nerve agent.

**PROTOCOL:**

- 1) Scene safety is number one priority. Do not enter the Hot Zone unless specifically trained and equipped in Level A HAZMAT.
- 2) Once CHEMPACK is deployed the protocol may be performed entirely on standing order by all EMT-Ps operating at the incident.
- 3) Nerve agent medications should never be given prophylactically.
- 4) Decontamination should precede any treatment by EMS personnel. Remove all contaminated clothing, blot off any remaining agent, flush with copious quantities of water, and cover the victim to prevent any additional off-gassing.
- 5) Use the algorithms on the following pages for patients with these respective symptoms. Typically mild exposures do not require any treatment beyond decontamination.
- 6) For purposes of this protocol, patients  $\geq$  ten (10) years of age shall be treated as adults.

**LEVELS OF EXPOSURE**

<u>MILD</u>	<u>MODERATE</u>	<u>SEVERE</u>
Rhinorrhea	Salivation	Jerking
Chest tightness	Lacrimation	Twitching
Dyspnea	Urination	Staggering
Bronchospasm	Defecation	Headache
	GI symptoms	Drowsiness
	Emesis	Coma
	Miosis	Seizures
		Apnea



**PEDIATRIC NERVE AGENT TREATMENT PROTOCOL**

