



# WMD-NERVE AGENT PROTOCOL

## History

- Exposure to chemical, biologic, radiologic, or nuclear hazard
- Potential exposure to unknown substance/hazard

## Signs and Symptoms

- **S**alivation
- **L**acrimation
- **U**rination; increased, loss of control
- **D**efecation / Diarrhea
- **G**I Upset; Abdominal pain / cramping
- **E**mesis
- **M**uscle Twitching
- Seizure Activity
- Respiratory Arrest

## Differential

- Nerve agent exposure (e.g., VX, Sarin, Soman, etc.)
- Organophosphate exposure (pesticide)
- Vesicant exposure (e.g., Mustard Gas, etc.)
- Respiratory Irritant Exposure (e.g., Hydrogen Sulfide, Ammonia, Chlorine, etc.)

Call for help/ additional resources  
Stage until scene safe

Obtain history of exposure  
Observe for specific toxidromes  
Initiate triage and/or decontamination as indicated.

Contact  
Carolinas Poison Control  
1-800-222-1222  
Or  
Agency Specific Number

Symptom Severity

Asymptomatic

Monitor and Reassess  
Every 15 minutes for symptoms  
Initiate Treatment per Appropriate Arm

**Minor Symptoms:**  
Respiratory Distress + SLUDGEM

IV or IO Access Protocol UP 6

**NERVE AGENT KIT**  
2 Doses Rapidly IM  
*if available*

**Major Symptoms:**  
Altered Mental Status, Seizures,  
Respiratory Distress, Respiratory Arrest

IV or IO Access Protocol UP 6

**NERVE AGENT KIT**  
3 Doses Rapidly IM  
*if available*

**ATROPINE**  
Adult: 2 mg IV / IO / IM  
Pediatric: (See Pearls) IV / IO / IM  
Repeat every 3 to 5 minutes until symptoms resolve

**PRALIDOXIME (2PAM)**  
Adult: 600 mg IV / IO / IM  
Pediatric: 15 – 25 mg / kg  
IV / IO / IM Over 30 minutes  
*if available*

Seizure Protocol UP 13

**CDC/ ASPR  
CHEMPACK Program**

NC -57 EMS containers  
-43 locations

Almost all citizens within 50 miles of CHEMPACK  
See Page 2 and Pearls

Multiple Patients

YES

NO

Consider  
Activation and deployment of CHEMPACK  
**CHEMPACK ACTIVATION:**  
(insert local number)  
**Healthcare Coalition Activation**  
(insert local number)

Notify Destination or  
Contact Medical Control



# WMD-NERVE AGENT PROTOCOL

## Pearls

- **Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Gastrointestinal, Neuro**
- **Follow local HAZMAT protocols for decontamination and use of personal protective equipment.**
- **Adult/ Pediatric Atropine Dosing Guides:**
  - Confirmed attack: Begin with 1 Nerve Agent Kit for patients less than 7 years of age, 2 Nerve Agent Kits from 8 to 14 years of age, and 3 Nerve Agent Kits for patients 15 years of age and over.
  - If Triage/ MCI issues exhaust supply of Nerve Agent Kits, use pediatric atropines (if available).
  - Usual pediatric doses: 0.5 mg ≤ 40 pounds (18 kg), 1 mg dose if patient weighs between 40 to 90 pounds (18 to 40 kg), and 2 mg dose ≥ 90 pounds (≥ 40 kg).
- Each Nerve Agent Kit contains 600 mg of Pralidoxime (2-PAM) and 2 mg of Atropine.
- **Seizure Activity: Any benzodiazepine by any route is acceptable.**
- For patients with major symptoms, there is no limit for atropine dosing.
- Carefully evaluate patients to ensure they do not have exposure to other agent(s) (e.g., narcotics, vesicants, etc.)
- The main symptom that the atropine addresses is excessive secretions, so atropine should be given until secretions improve/ dry.
- EMS personnel, public safety officers and EMR/ EMT may carry, self-administer, or administer atropine/ pralidoxime to others by protocol. Agency medical director may require Contact of Medical Control prior to administration.
- **CHEMPACK Program:**
  - For multiple patients, call for **CHEMPACK** deployment per local emergency management and healthcare coalition plans.
  - 1 EMS CHEMPACK supports 454 patients.**
  - Medication in CHEMPACK may be used regardless of expiration date.

| EMS Type CHEMPACK Container<br>454 Person Treatment Capacity |       |                |             |
|--|-------|----------------|-------------|
| Product  | Cases | Units per case | Total Units |
| Mark 1 Auto-injector   | 5     | 240            | 1,200       |
| -OR-   |       |                |             |
| ATNAA Auto-injector  | 6     | 200            | 1,200       |
| -OR-   |       |                |             |
| Atropen 2mg Auto-injector                                    | 9     | 135            | 1,224       |
| Pralidoxime 300mg Auto-injector                              | 5     | 240            | 1,200       |
| -AND-  |       |                |             |
| Diazepam 10mg Auto-injector                                  | 2     | 300            | 600         |
| Seizalam (Midazolam) 5mg/ml vial 10ml                        | 1     | 100            | 100         |
| Atropen 0.5mg Auto-injector                                  | 1     | 225            | 225         |
| Atropen 1mg Auto-injector                                    | 1     | 225            | 225         |
| Atropine Sulfate 0.4mg/ml vial 20ml                          | 1     | 100            | 100         |
| Pralidoxime 1gm inj. 20ml                                    | 1     | 275            | 275         |
| Sterile Water 20ml vials                                     | 1     | 150            | 150         |

