

WMD-Nerve Agent Protocol

History

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

Signs and Symptoms

- Visual Disturbances
- Headache
- Nausea/Vomiting
- Salivation
- Lacrimation
- Respiratory Distress
- Diaphoresis
- 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.)


**Ensure Scene Safety and Proper PPE
IF THERE IS ANY CONCERN OF
CONTAMINATION DO NOT TRANSPORT
PATIENT ABOARD THE AIRCRAFT**


 **Universal Patient Care Protocol**
Routine Standard of Care


**Obtain history of exposure
Observe for specific toxidromes
Initiate triage and ensure decontamination.**


 **Assess for presence of symptoms.**
There must be symptoms before treatment.


 **Minor Symptoms:** Salivation, Lacrimation, Visual Disturbances


 **IV Protocol**

 **Atropine 2 mg IV/IM q 5 min(0.02-0.05 mg/kg) until symptoms resolve**


 **Monitor for appearance of major symptoms**


 **Appropriate Protocol**
Based on Specific Symptoms

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

 **IV Protocol**

Seizures

 **Midazolam IV/IO (0.1mg/kg)**
or
Lorazepam IV/IO (0.1mg/kg)
or
Diazepam IV/IO (0.1mg/kg)

 **Atropine 2 mg IV/IM q 5 min(0.02-0.05 mg/kg) until symptoms resolve**

Pearls

- If Triage/MCI issues exhaust the EMS supply of Nerve Agent Kits, use Atropine. Use a 0.5 mg dose if patient is less than 40 pounds (18 kg), a 1 mg dose if patient weighs between 40 to 90 pounds (18 to 40 kg), and a 2 mg dose for patients greater than 90 pounds (>40 kg).
- Follow local HAZMAT protocols for decontamination and use of personal protective equipment
- For patients with major symptoms, there is no limit for atropine dosing.
- Carefully evaluate patients to ensure they not suffering from exposure to another agent (e.g., narcotics, vesicants, etc.)
- The main symptom that the atropine addresses is excessive secretions so atropine should be given until salivation improves. Suction and intubate as needed for airway protection.