

COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES  
 POLICY/PROCEDURE/PROTOCOL

No. **S-150**  
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**SUBJECT: TREATMENT PROTOCOL -  
 NERVE AGENT EXPOSURE AND AUTOINJECTOR USE**

Date: **07/01/2018**

**BLS**

**ALS**

<p><b>Upon identification of a scene involving suspected or known exposure of nerve agent:</b></p> <ul style="list-style-type: none"> <li>• Isolate Area</li> <li>• Notify dispatch of possible Mass Casualty Incident with possible Nerve Agent involvement.</li> <li>• DO NOT ENTER AREA</li> </ul> <p><b>If exposed:</b></p> <ul style="list-style-type: none"> <li>• Blot off agent</li> <li>• Strip off all clothing, avoiding contact with outer clothing surfaces.</li> <li>• Flush affected area(s) with copious amounts of water</li> <li>• Cover affected area(s)</li> </ul> <p><u>If you begin to experience any signs/symptoms of nerve agent exposure, for example (Use "SLUDGE" mnemonic):</u> Salivation, Lacrimation, Urination, Defecation, Gastric Complications, Emesis</p> <ul style="list-style-type: none"> <li>• Increased secretions (tears, saliva, runny nose, sweating)</li> <li>• Diminished vision</li> <li>• SOB</li> <li>• Nausea, vomiting, diarrhea</li> <li>• Muscle twitching/weakness</li> <li>• NOTIFY THE INCIDENT COMMANDER (or dispatch if no IC) immediately of your exposure and declare yourself a patient</li> </ul> <p><b>Self-Treat Immediately</b> per the following Acuity Guidelines:</p> <p><b>Mild:</b> <i>Miosis, rhinorrhea, increasing dyspnea fasciculations, sweating</i></p> <ul style="list-style-type: none"> <li>o Atropine autoinjector</li> <li>o 2-PAM Cl autoinjector</li> </ul>	<p>Triage, decontaminate and treat patient based on severity of symptoms <u>SO</u></p> <p><b>Mild:</b> <i>Miosis, rhinorrhea, increasing dyspnea, fasciculations, sweating</i></p> <ul style="list-style-type: none"> <li>o Atropine autoinjector (or 2 mg) IM</li> <li>o 2-PAM Cl autoinjector (or 600 mg) IM</li> </ul> <p><b>Moderate:</b> <i>Headache, weakness, miosis, rhinorrhea, dyspnea/wheezing (if inhaled), increased secretions, generalized fasciculations, muscle weakness, GI effects</i></p> <ul style="list-style-type: none"> <li>o Atropine autoinjector (or 2 mg) IM, MR x1 in 5-10"</li> <li>o 2-PAM Cl autoinjector (or 600 mg) IM, MR x1 in 5-10"</li> </ul> <p>*Diazepam autoinjector or midazolam 5 mg IM if diazepam autoinjector not available</p> <p><b>Severe:</b> <i>Unconscious, seizures, muscle weakness, fatigue, flaccid, paralysis, apnea, bradycardia, heart block or tachycardia</i></p> <p><u>Initial dosing:</u></p> <ul style="list-style-type: none"> <li>o Atropine autoinjector (or 2 mg) IM x3 doses in succession</li> <li>o 2-PAM Cl autoinjector (or 600 mg) IM x3 doses in succession</li> </ul> <p>*Diazepam autoinjector, or midazolam 10 mg IM if diazepam autoinjector not available, for seizure activity</p> <ul style="list-style-type: none"> <li>o O<sub>2</sub> /intubate</li> </ul> <p><u>Ongoing treatment:</u></p> <ul style="list-style-type: none"> <li>o Atropine autoinjector (or 2 mg) IM, MR q3-5" until secretions diminish</li> <li>o 2-PAM Cl autoinjector (or 600 mg) IM, MR x1 in 3-5"</li> <li>o For continuous seizure activity, MR midazolam 10 mg IM x1 in 10"</li> </ul> <p><b>Pediatric doses:</b></p> <table border="1"> <thead> <tr> <th>Weight</th> <th>Atropine</th> <th>2-PAM Cl</th> <th>Midazolam</th> </tr> </thead> <tbody> <tr> <td>&lt;20 kg</td> <td>0.5 mg</td> <td>100 mg</td> <td>2.5 mg</td> </tr> <tr> <td>20-39 kg</td> <td>1 mg</td> <td>300 mg</td> <td>5.0 mg</td> </tr> <tr> <td>≥40 kg</td> <td>2 mg</td> <td>600 mg</td> <td>10 mg</td> </tr> </tbody> </table> <p><b>For doses less than the amount in the autoinjector, use the medication vial and administer with a syringe.</b></p> <p><u>Consider:</u> For frail, medically compromised, hypertensive, or renal failure patients, administer half doses of atropine and 2-PAM Cl</p>	Weight	Atropine	2-PAM Cl	Midazolam	<20 kg	0.5 mg	100 mg	2.5 mg	20-39 kg	1 mg	300 mg	5.0 mg	≥40 kg	2 mg	600 mg	10 mg
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Note: \*Diazepam autoinjectors available from Chempack caches only.

Diazepam, Atropine and 2-Pam Cl autoinjectors are approved for self-treatment, treatment of public safety personnel, and the treatment of patients ONLY by prehospital personnel who have completed the County of San Diego approved training **or** on scene (Just - In -Time training by trained personnel) specific to the use of autoinjectors.