



- onset of action
- iii. Benzodiazepines may be provided in multi-dose or single-dose vials, pre-filled syringes, or auto-injectors
  - iv. CANA® (Convulsive Antidote Nerve Agent) is a commercially available auto-injector that contains 10 mg of diazepam
- d. Duodote®
- i. A commercially available auto-injector of nerve agent/organophosphate antidote
  - ii. Duodote® is one auto-injector that contains 2.1 mg of atropine and 600 mg of pralidoxime chloride
- e. ATNAA® (Antidote Treatment Nerve Agent Auto-injector)
- i. An auto-injector of nerve agent/organophosphate antidote that is typically in military supplies
  - ii. ATNAA® is one auto-injector that contains 2.1 mg of atropine and 600 mg of pralidoxime chloride
  - iii. ATNAA® may be seen in civilian supplies assets when Duodote® is unavailable or in short supply
- f. CHEMPACK
- i. Federal cache of nerve agent antidotes that is managed by the Centers for Disease Control and Prevention (CDC) and offered to states that voluntarily agree to maintain custody and security of CHEMPACK assets
  - ii. These are forward-deployed at sites determined by states that are part of the program such as hospitals and EMS centers
  - iii. Deployment of CHEMPACKs is reserved for events where the nerve agent/organophosphate exposure will deplete the local or regional supply of antidotes
  - iv. There are two types of CHEMPACK containers:
    - 1. **EMS Containers:** CHEMPACK assets for EMS contain a large portion of auto-injectors for rapid administration of antidotes by EMS clinicians of all levels of licensure/certification. They contain enough antidote to treat roughly 454 patients
    - 2. **Hospital Containers:** CHEMPACK assets contain a large portion of multidose vials and powders for reconstitution — they contain enough antidote to treat roughly 1,000 patients
2. **Medication Administration:**
- a. Atropine, in large and potentially multiple doses, is the antidote for an acetylcholinesterase inhibitor agent poisoning
  - b. Atropine should be administered immediately followed by repeated doses until the patient's secretions resolve
  - c. Pralidoxime chloride (2-PAM) is a secondary treatment and, when possible, should be administered concurrently with atropine
  - d. The stock of atropine and pralidoxime chloride available to EMS clinicians is usually not sufficient to fully treat the victim of an acetylcholinesterase inhibitor agent exposure; however, EMS clinicians should initiate the administration of atropine and, if available, pralidoxime chloride
  - e. Seizures should be treated with benzodiazepines. There is some emerging evidence that, for midazolam, the intranasal route of administration may be