

Nerve Agents

Nerve agents are manufactured compounds that affect the nervous system. They are similar to insecticides and can be deadly.

Most nerve agents belong to a group of chemicals called “organophosphates.” They include GA (tabun), GB (sarin), GD (soman), and VX.

What do I need to know about nerve agents?

Nerve agents are clear and colorless and may have no odor or a faint, sweetish smell. They are all extremely dangerous and they can enter the body through the air or on contact with the skin. They can be released using bombs, missiles, spray tanks, rockets and landmines.

Most of the nerve agents were originally produced in a search for insecticides, but because of their toxicity, they were evaluated for military use. Nerve agents have been used in wars and by terrorists. They are known to be stored by several nations, including the United States.

Could I be exposed to a nerve agent?

The United States no longer produces nerve agents GA, GB, GD, and VX so the general public is not at risk unless there is an accidental release from a military storage facility. There is a possibility that people who work at military sites where these compounds are stored may be exposed to nerve agents.

How can I be exposed to nerve agents?

Air – People can be exposed through their skin, eyes, or by breathing contaminated air.

Water – People can be exposed by drinking contaminated water and by getting contaminated water on their skin.

Food – People can be exposed by eating contaminated food.

What are the symptoms of nerve agent exposure?

A person may not know they have been exposed to a nerve agent because nerve agents have no smell. The following symptoms happen within seconds to hours after a person has been exposed: Runny nose; watery eyes; small, pinpoint pupils; eye pain; blurred vision; drooling and excessive sweating; cough; chest tightness; rapid breathing; diarrhea; increased urination; confusion; drowsiness; weakness; headache; upset stomach; vomiting and or stomach ache, slow or fast heart rate; low or high blood pressure. Exposure to large doses of nerve agents can cause loss of consciousness, convulsions, paralysis and death.

What should I do if I think I may have been exposed to a nerve agent?

- ◆ Leave the building where the nerve agent has been released as quickly as possible and get to fresh air.
- ◆ If the nerve agent was released outside, go to the highest ground possible. Nerve agents are heavier than air and will sink to low-lying areas.
- ◆ Remove all clothing that has the nerve agent on it and seal clothing in a plastic bag. Put the sealed bag into a second sealed plastic bag.
- ◆ Rinse the eyes with plain water for 10-15 minutes if they are burning and vision is blurred.
- ◆ Wash all exposed areas of the skin with large amounts of soap and water.
- ◆ If the nerve agent was swallowed, do not induce vomiting. Drink fluids and seek immediate medical treatment.
- ◆ Call 911, explain what happened, and follow all medical orders.

What is the treatment?

Nerve agent exposure can be treated with antidotes and supportive medical care. The most important thing is proper decontamination and prompt medical treatment.

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