



UNCLASSIFIED // FOR OFFICIAL USE ONLY // 12 JULY 2018

Safety Advisory for Public Safety Officials: Nerve Agents



IN THE MARCH 2018 ASSASSINATION ATTEMPT IN THE UNITED KINGDOM, A RESPONDING POLICE OFFICER FELL ILL TO NERVE AGENT POISONING. A FEW MONTHS LATER, TWO ADDITIONAL VICTIMS WERE AFFECTED BY NERVE AGENT POISONING, RESULTING IN THE DEATH OF ONE VICTIM. REVIEW THE FOLLOWING INFORMATION ABOUT NERVE AGENTS TO HELP PROTECT YOURSELF WHEN RESPONDING TO AN INCIDENT INVOLVING INCAPACITATED VICTIMS OR SUSPICIOUS ITEMS THAT MAY BE CONTAMINATED WITH NERVE AGENTS.

A variety of nerve agents exist. Sarin and VX are examples of nerve agents with different chemical properties that have been developed for military use. Nerve agents are extremely toxic and you can be exposed through ingestion, inhalation, or absorption through skin.

- Sarin is a clear, colorless, and tasteless liquid that has no odor in its pure form. It can evaporate into a vapor (gas) and spread into the environment.
- VX is an odorless, tasteless, oily liquid that is amber in color in pure form and very slow to evaporate. **It evaporates about as slowly as motor oil. This means that nerve agents which are slow to evaporate may be present on surfaces for a long time.**
- Based on these properties, you can be exposed by breathing in the vapor or skin contact with the liquid.
 - **THERE IS A RISK** of skin exposure if responders come into contact with nerve agent on victims, their clothing, or contaminated surfaces.
 - **A single layer of nitrile gloves will not protect you from nerve agents.** When investigating uncertain situations, **double your gloves** before touching a victim or the surrounding area. Once you suspect nerve agent poisoning, DO NOT TOUCH victims, move away, secure the area, and notify teams with appropriate Personal Protective Equipment (PPE) to safely enter the area.

All nerve agents have similar effects on the body which may include:

- SLUDGE (Salivation – drooling or foaming at the mouth; Lacrimation – tearing of eyes; Urination; Diarrhea; Gastrointestinal upset; Emesis – vomiting);
- Muscle twitching, tremors and seizures; and
- Sudden collapse to an unconscious state, convulsions, paralysis, and respiratory failure leading to death.

Delayed Symptoms are Possible: In an attack with nerve agent on a large crowd, many people may show the same signs of poisoning which start at approximately the same time. In other circumstances, similar to the incident in the UK, only one or a few people may show signs of nerve agent poisoning; the time and location of the exposure may not be immediately known.

Nerve Agent vs. Opioid Overdose: The findings of copious secretions from the mouth and nose, and wet or noisy breathing caused by fluid collecting in the lungs, and twitching or seizures and coma, are indicators of nerve agent poisoning. An unconscious person suffering from an opioid overdose is unlikely to have this collection of findings of nerve agent poisoning. There may also be evidence (drug paraphernalia) supporting another cause of incapacitation. (For more information about responding to opioid poisoning, click [here.](#))

If you suspect a nerve agent poisoning incident has occurred:

- Avoid contact with any liquids present, the victim, or contaminated items;
- Move out of the area immediately and prevent others from entering;
- Only those with proper training and PPE can safely enter the area, such as HazMat or special operations teams; and
- Contact the local FBI Field Office WMD coordinator.

If you suspect you are exposed, perform decontamination and seek medical care immediately. Remove any possibly contaminated clothing and isolate it from others; wash with copious soap and water. The onset of symptoms may be immediate or delayed, but prompt medical evaluation is important for proper medical treatment.

If you have any questions about this product, please contact the DHS Countering Weapons of Mass Destruction (CWMD) Watch Desk at (202) 282-9262.