Sarin Fact Sheet

Military gear worn to protect against sarin (Source: U.S. Army)

Quick Facts

Agent Type: Chemical nerve agent  
Lethality: High  
Transmission: None  
Treatment: Antidote, if administered quickly  
Status: CDC Nerve Agent  
Delivery: Inhalation, ingestion, absorption

Mechanism: Sarin disrupts the ability of the body to regulate nerve impulses. When this happens, the glands and muscles of the body are continually stimulated, leading to system fatigue. The victim will lose control over his bodily functions. Ultimately, the victim will fall into a coma and suffocate.

Effects: The first signs of sarin exposure are a runny nose, tightness in the chest, pinpoint pupils, eye pain, and blurred vision. The victim will then experience drooling, excessive sweating, coughing, chest pain, diarrhea, increased urination, confusion, drowsiness, weakness, headache, nausea, and vomiting. Exposure to large doses of sarin will result in loss of consciousness, involuntary twitching and jerking, paralysis, coma, and eventually, death.

Sarin is a colorless, odorless, tasteless, human-made chemical warfare agent. It was originally developed in Germany in the 1930's as a pesticide. Sarin is a nerve agent—it disrupts the functioning of the nervous system. Nerve agents are the most toxic and rapidly acting of all known chemical warfare agents. Sarin is highly toxic in both its liquid and vapor states.

Delivery: Following the release of sarin into the air, people can be exposed to it through contact with skin or eyes. Sarin can also be inhaled as a gas. Sarin mixes easily with water, and since it is odorless, people would not be aware of sarin in drinking water. Furthermore, sarin in water can be absorbed through the skin.
Production: Sarin is made by mixing several commercially available chemicals in the right amounts and in the right sequence. It is debatable how easy it is for the layperson to synthesize sarin. It is somewhat complicated and dangerous to produce.


(Sources: CDC, U.S. Army, WHO)

Treatment: There are antidotes to sarin, but they must be provided very soon after exposure to be effective. Clothing can retain sarin, so it must be removed. The victim should move quickly to fresh air. As quickly as possible after exposure, the victim should wash thoroughly with soap and water.