



PUBLIC FACT SHEET

SOMAN

What is soman?

Soman is a man-made chemical that is colorless and tasteless. It has a slight odor that may resemble camphor (the smell of Vicks Vapor Rub) or the odor of rotting fruit. The properties of soman are similar to those of certain pesticides, but soman is more poisonous and faster acting than most pesticides.

The liquid form of soman can be turned into a gas when heated. In the vapor form it is heavier than air and will settle in low-lying areas. It can be used as a weapon of bioterrorism in the vaporized form, as well as in the liquid form. Because the liquid is colorless, it can be easily go undetected if mixed with food or water.

What are possible methods of exposure?

- release of soman into the air
 - by breathing the gas
 - by skin or eye contact
 - by absorbing into clothing (clothing can release the vapor gas for about 30 minutes after exposure)
- release of soman liquid into water or food
 - by eating foods that have been contaminated by the chemical
 - by drinking water or other liquids that have been contaminated by the chemical

What are possible symptoms of soman exposure?

Symptoms of soman often depend on the amount, duration, and route of exposure. Symptoms can occur from a few seconds up to 18 hours or more after exposure. The symptoms for soman can include:

Skin contact (small droplets):

- sweating
- muscle twitching

Inhalation:

- low to moderate dose
 - runny nose
 - watery eye
 - eye pain/blurred vision
 - drooling/excessive sweating
 - cough
 - chest tightness
 - rapid breathing
 - diarrhea
 - increased urination
 - drowsiness
 - weakness
 - headache
 - nausea/vomiting
 - stomach pain
 - low or high blood pressure
- high dose
 - loss of consciousness
 - convulsions
 - paralysis
 - respiratory failure which may lead to death

How is soman detected?

Soman is difficult to diagnose. The diagnosis is usually based on the clinical symptoms, especially if there is a mass casualty situation where all the victims display symptoms of soman exposure.

What is the treatment for exposure to soman?

The following precautions should be taken as soon as possible after exposure:

- leave exposure area immediately and seek fresh air
- contact emergency medical authorities
- wash off any liquid or fumes of soman with large amounts of water and soap
- remove and contain clothing in multiple sealed plastic bags
- once decontaminated seek immediate medical treatment
- if soman is swallowed do not induce vomiting

For more information on soman contact:

Ottawa County Health Department

www.miOttawa.org

Center for Disease Control and Prevention

www.bt.cdc.gov/agent/soman/

Phone: (888) 246-2675