

BLISTER (VESICANT) AGENTS

What are blister agents?

Blister agents or vesicants are chemicals which have severely irritating properties that produce fluid filled pockets on the skin and damage to the eyes, lungs and other mucous membranes. Symptoms of exposure may be immediate or delayed until several hours after exposure.

What are the different forms of blister agents and their properties?

Sulfur Mustards are clear to yellow or brown oily liquids with a slight garlic or mustard odor. Although volatility is low, vapors can reach hazardous levels during warm weather. Nitrogen Mustards are colorless to yellow, oily liquids with variable odors.

Lewisite contains arsenic and is a dark oily liquid with a slight odor of geraniums.

Phosgene Oxime is one of the most common halogenated oximes, is a colorless solid or liquid, with an intense irritating odor.

How do blister agents affect people?

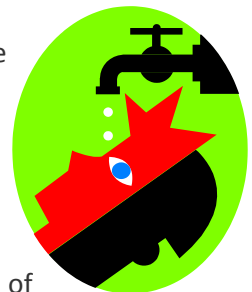
Blister agents burn and blister the skin or any other part of the body they contact. Blister agents (*whether as a gas, aerosol, or liquid*) enter the body primarily through inhalation and topical contact. They may act on the eyes, mucous membranes, lungs and skin. Mustard agent symptoms are *delayed - with little or no pain at the time of exposure*. In some cases, signs of injury may not appear for several hours or days depending on the concentration; whereas Lewisite and Phosgene Oxime *cause immediate, severe pain*.

What should I do if I have been exposed to a blister agent?

If possible, immediately leave the area where the blister agent was released and get to fresh air as quickly as possible to prevent further contamination. *Keep in mind that blister agents are heavier than air, so they will sink to the ground or to lower building levels.* If possible move to higher ground.

Then Self-decontaminate to get the blister agent off your body as quickly as possible.

- Carefully remove contaminated clothing and avoid contact with your skin. Place clothes in a double plastic bag. Disposal sites will be set up for these bags. Wash your skin with soap and tap water. Rinse your eyes with plenty of tap water for 5-10 minutes. Do not make yourself vomit if you have swallowed a blister agent. This may cause more injury than having the chemical settle in your stomach. Drink a small cup of water or milk to dilute any remaining chemicals.
- Call the Poison Control Center 1-800-222-1222 if you experience symptoms of exposure to a blister agent.



Pets exposed to blister agents are likely to have the same reaction as people. If your pet is exposed to blister agents, wear gloves and protective clothing to wash your pet with soap and tap water. After washing your pet and cleaning the area, put clothing, gloves, towels and sponges in a double plastic bag and wait for instructions from local officials for proper handling of the contaminated items. For more information about how to care for your exposed pet, contact your veterinarian or the ASPCA Animal Poison Control Hotline (888) 426-4435.

What does it mean to shelter-in-place?



Shelter-in-place means to go indoors, close up the building, and wait for the danger to pass. If you are advised to shelter-in-place, close all doors and windows; turn off fans, air conditioners, and forced-air heating units that bring in fresh air from the outside. Move to an upper level inner room. Keep your radio turned to the emergency response network or local news to find out what else you need to do.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co

CENTERS FOR DISEASE CONTROL AND PREVENTION www.cdc.gov

POISON CONTROL CENTER (800) 222-1222

ASPCA ANIMAL POISON CONTROL HOTLINE (888) 426-4435