



CHEMICAL TERRORISM

The deliberate release of certain chemicals could poison people, animals, plants or the environment. Chemical “agents” can be delivered in various forms—vapors, aerosols, liquids and solids— and by a wide variety of methods, including sprays and bombs. A variety of chemical may be dangerous including—nerve agents, mustard gases and choking agents. Others are used in industry, or made from natural or everyday household materials. Some chemical agents are difficult to produce, but the potential for release by terrorist attack exists anywhere hazardous industrial or military chemicals are stored.



Chemical agents can produce effects quickly (within a few seconds) or slowly (as much as two days after exposure), and some are odorless and tasteless. It is difficult to deliver chemical agents in lethal concentrations, and—outdoors—agents often dissipate rapidly.

Hazardous chemicals can be categorized by type or effect. The Centers for Disease Control and Prevention describes the following categories:

- Anticoagulants—cause uncontrolled bleeding
- Biotoxins—come from plants or animals
- Blister agents (vesicants)—blister the eyes, skin or throat and lungs
- Blood agents—absorbed into the blood
- Caustics (acids)—burn on contact
- Choking, lung and pulmonary agents
- Incapacitating agents—alter consciousness or thinking
- Metallic poisons
- Nerve agents—prevent nervous system from working properly
- Organic solvents—damage living tissues by dissolving fats and oils
- Tear gas and riot control agents
- Toxic alcohols
- Vomiting agents

How to Prepare

A chemical attack could come without warning, and there are few advance precautions:

- Vigilance against terrorism is important.
- Get an **emergency supply kit**, and be sure to include duct tape, scissors and plastic sheeting to seal the room in which you will shelter.
- Make a **family emergency plan**.
- Choose an internal room for sheltering in place, preferably on the top level and windowless.
- Learn about the potential benefits of sealing doors, windows and vents during a chemical emergency.

How to Recognize Chemical Attack

People exposed to hazardous chemicals may experience eye irritation; become nauseated; lose coordination; or have difficulty breathing or a burning sensation in the nose, throat and lungs. The presence of many dead or ailing birds or insects may also indicate a chemical agent release. Your first warning may be an emergency broadcast or some other signal used in your community.



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What to Do

If you are caught in or near an area contaminated by chemical attack or see signs of one—

- Try to define the source or impacted area, and find clean air quickly.
- If the chemical is inside a building where you are, try to exit the building without passing through the contaminated area. If there is no safe path out, move as far away as possible and shelter in place.
- If you are outside, quickly decide the fastest way to find clean air—move away upwind of the contamination or enter the closest building for shelter.
- If you decide or are instructed to remain inside (shelter in place)—
 - Close doors, windows and vents. Turn off all air-handling equipment. (Conventional building filters and cloth breathing filters are ineffective against chemical agents.)
 - Take an emergency supply kit, and go to an internal, upper-level room.
 - If directed, seal the room with tape and plastic covering several inches larger than the opening you want to cover.
 - Monitor radio, TV or the Internet for official information and instructions.
 - Do not go outdoors until authorities announce it is safe to do so.

If your eyes water, your skin stings or you have trouble breathing, you may have been exposed to a hazardous chemical. To minimize health consequences, decontaminate yourself and others as soon as possible—every minute counts:

- Remove as much clothing as possible, and double-seal it in plastic. Cut it away if necessary to avoid contact with the eyes, nose and mouth. Remove contact lenses or glasses. (Seal lenses with clothes; wash glasses in household bleach or soap and rinse before wearing again).
- Find any source of water and flush the eyes, but do not rub them.
- Wash face, hair and other affected body parts with soap, gently so as not to scrub the chemical into the skin. (Washing is less critical if the chemical agent is a vapor instead of a liquid or solid.)
- Seek immediate medical attention.
- Avoid recontamination by later touching affected areas and bagged items. Use and decontaminate or safely discard gloves and tools.

Where to Find Additional Information

- Live radio and TV broadcasts may have the most current information on chemical terrorism events and the appropriate actions to take.
- Federal Emergency Management Agency (FEMA)—
 - <https://www.ready.gov/chemical-threats>
 - https://www.dhs.gov/xlibrary/assets/prep_chemical_fact_sheet.pdf
 - <http://www.cdc.gov/niosh/npg/default.html>
- Centers for Disease Control and Prevention (CDC)—<http://www.bt.cdc.gov/chemical/>
- American Red Cross—<http://www.redcross.org/prepare/disaster/terrorism>
- Ready Army—www.ready.army.mil

It's up to you. Prepare strong. Get an emergency supply kit with enough supplies for at least three days, make an emergency plan with your family and be informed about what might happen.

