

Week 1: Chemical Hazards

A chemical attack is the deliberate release of a toxic liquid, solid, or gas. These can poison people and/or the environment. Signs of a chemical threat are people suffering from watery eyes, twitching, choking, trouble breathing, or losing coordination. May fish and birds and other small animals may be affected. Large numbers of sick or dead animals are cause for suspicion. The most common chemical threats are VX gas (military weapon), sarin gas (insecticide), and mustard gas (military weapon).

If you see signs of a chemical attack: find clean air quickly. Try to determine the source of the chemical, if possible, then get away quickly!

If you think you have been exposed: quickly remove all your clothes and immediately wash with a clean source of water and soap. Be careful not to rub the chemical into the skin! Seek emergency medical attention.



What to add to your emergency kit: clean bar of soap (still in the box) and the following hand out from the Department of Homeland Security:

<http://www.ready.gov/america/downloads/chemical.pdf>

For more information:

<http://www.ready.gov/america/beinformed/chemical.html>

Week 2: Biological Hazards

Biological attacks are the intentional release of germs or other biological substances. These can make you sick through inhalation, entering of the substance through cuts in your skin, or ingestion (accidentally eating the substance). Common biological threats are [anthrax](#), [botulism](#), [ricin](#), and [smallpox](#). In the event of a biological attack it may take time for public health officials to know the cause of and treatment for the agent, so check the TV, radio, and Internet for current updates and information. Make sure to follow the Department of Homeland Security's steps to keep you and your family safe.ⁱ



What to add to your emergency kit: A dust mask for each member of the household, and the following safety plan:

<http://www.ready.gov/america/beinformed/biological.html>

For more information:

<http://www.ready.gov/america/downloads/biological.pdf>

Week 3: Radiological Hazards

Radiological threats come from the use of common explosives to spread radioactive materials. These are usually referred to as “dirty bombs.” This is different from a nuclear blast and the radioactive material will be much more localized. Since the source and presence of radiation will not be clear until inspection by health experts, it is important to limit exposure by staying indoors with windows, doors, and ventilation systems closed off. Listen to updates from health authorities. If you think you have been exposed to radiation, remove all your clothing and wash with a clean source of water. Symptoms of radiation poisoning depend on the exposure. Mild cases are nausea, vomiting, and fatigue. More severe symptoms include fever, hair loss, infection, vomiting of blood, bloody stools, and systems found in less severe cases. Very severe cases might also include dizziness, disorientation, and low blood pressureⁱⁱ. Agents used in dirty bombs are usually cesium-137, iridium-192, and cobalt-60.



What to add to your emergency kit: these plans:

<http://www.ready.gov/america/downloads/radiation.pdf>

For more information:

<http://www.ready.gov/america/beinformed/radiation.html>

Week 4: Nuclear Hazards

A nuclear explosion (whether from terrorist activity or an accident at a nuclear power plant) releases radioactive materials that can contaminate the air, water, and soil for miles. It is important to avoid nuclear materials if possible. If possible, evacuate the area. Otherwise seek shelter (as far underground as possible) and close all doors and windows. Also turn off any ventilation systems (air conditioning, heat, etc.) and listen to news updates and the advice of local health officials. Also, take potassium iodide (KI) pills if you have them in your emergency kit (see KI information on our website).



What to add to your emergency kit: Potassium iodide if you live within a 10 mile radius of the Enrico Fermi Nuclear Power Plant, and the following plans:

<http://www.ready.gov/america/downloads/nuclear.pdf>

For more information:

<http://www.ready.gov/america/beinformed/nuclear.html>

ⁱ Department of Homeland Security. Ready America. www.ready.gov

ⁱⁱ Mayo Clinic. Radiation Sickness. <http://www.mayoclinic.com/health/radiation-sickness/ds00432/dsection=symptoms>