

Radiological / Nuclear Attack

This section addresses the response to the detonation of a conventional explosive device incorporating nuclear materials (a so-called “dirty bomb” or radiological dispersal device). A “dirty bomb” would consist of radioactive material wrapped around a core of conventional high explosives, which, upon detonation, would spew radioactive particles into the environment.

These particles are capable of causing bodily harm or death. The danger from the blast effect of conventional explosive devices is similar to nuclear devices with a higher rate of survivability.

Inhalation is the primary route of entry for particulate radiation. Symptoms usually do not appear for 2-6 hours, even with high doses. Some symptoms may include nausea, vomiting, diarrhea, dizziness, fatigue and headache. Protection from the effects of radiation is based on the principle of time, distance and shielding (TDS).

Radiation is an invisible hazard. There are no initial characteristics or properties of radiation itself that are noticeable. Unless the nuclear/radiological material is marked to identify it as such, it may be some time before the hazard has been identified as radiological. The following signs may be the only indication of a nuclear or radiological incident prior to deployment of monitoring equipment:

1. A stated threat to deploy a nuclear or radiological device
2. The presence of nuclear or radiological equipment (e.g., spent fuel canisters or nuclear transport vehicles)
3. Nuclear placards or warning materials, along with otherwise unexplained casualties

Protective actions are determined by the location of the terrorist incident, known and potential hazards, and obvious property damage and casualties. The response must also anticipate the possibility of further terrorist attacks.

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Source

Federal Bureau of Investigation

U.S. Department of Homeland Security

More Information

<http://www.fbi.gov/>

<http://www.dhs.gov/index.shtm>

Prevention / Mitigation / Preparedness - Radiological / Nuclear Attack

Communicate with the Office of Emergency Preparedness and DPS to identify local hazards and assist with planning efforts.

Keep updated emergency response procedures for your area.

Post an evacuation route and conduct drills. Establish pre-determined meeting areas.

Response - Radiological / Nuclear Attack

If You Are Outdoors:

1. Call 911 immediately and provide the following information:
2. Location of incident
3. What happened
4. Is anyone injured
5. Stay calm.
6. Spend the shortest amount of time possible exposed to the radiological hazard.
7. Distance yourself from the hazard area, upwind and uphill, whenever possible. The greater the distance from the source of harm, the less the exposure.
8. Take advantage of any available shielding from radiation exposure, including vehicles, buildings, walls and Personal Protective Equipment (PPE).
9. Direct everyone to seek shelter.
10. Listen for official instructions and follow directions.
11. Continue with the indoor emergency response guidelines that follow.

If You Are Indoors:

1. Call 911 immediately and provide the following information:
2. Location of incident
3. What happened
4. Is anyone injured
5. Stay calm.
6. Listen for official instructions and follow directions.
7. Spend the shortest amount of time possible exposed to the radiological hazard.
8. Take advantage of any available shielding from radiation exposure; close windows and doors.
9. If possible, turn off any ventilation leading outdoors (i.e., heating, air conditioning, ventilation, etc.).
10. Ensure that no one chews gum, eats, drinks or places objects in their mouth.
11. Have everyone cover nose and mouth with handkerchief, paper towels or other materials. Inhalation is the primary route of entry for particulate radiation.
12. When directed, move everyone to specifically identified basement or lower level rooms, or interior hallways as an alternate.
13. Report those who may have been exposed to DPS

Contamination should be removed as soon as possible. Standard clothing provides some protection, although the longer radioactive material is allowed to remain on clothing or on the skin, the greater the level of exposure and risk of short- and long-term health effects.