



FACT SHEET

Nuclear Terrorism and Health Effects

Q: Is the United States in danger of a terrorist nuclear attack? Is the Centers for Disease Control and Prevention (CDC) prepared to respond to such an attack?

A: CDC is not able to assess the level of threat of a terrorist nuclear attack. However, for many years CDC has participated regularly in emergency-response drills where we have worked closely with other federal, state, and local agencies to develop, test, and implement extensive national radiological emergency-response plans.

Q: What are the potential adverse health consequences from a terrorist nuclear attack?

A: The adverse health consequences of a terrorist nuclear attack vary according to the type of attack and the distance a person is from the attack. Potential terrorist attacks may include a small radioactive source with a limited range of impact or a nuclear detonation involving a wide area of impact.

In the event of a terrorist nuclear attack, people may experience two types of exposure from radioactive materials: external exposure and internal exposure. External exposure occurs when a person comes in contact with radioactive material outside the body. Internal exposure occurs when people eat food or breathe air that is contaminated with radioactive material. Exposure to very large doses of external radiation may cause death within a few days or months. External exposure to lower doses of radiation and internal exposure from breathing or eating radioactive contaminated material may lead to an increased risk of developing cancer and other adverse health effects. These adverse effects range from mild, such as skin reddening, to severe effects such as cancer and death, depending on the amount of radiation absorbed by the body (the dose), the type of radiation, the route of exposure, and the length of time of the exposure.

If there is a nuclear detonation, bodily injury or death may occur as a result of the blast itself or as a result of debris thrown from the blast. People may experience moderate to severe skin burns, depending on their distance from the blast site. Those who look directly at the blast could experience eye damage ranging from temporary blindness to severe retinal burns.

Q: How can I protect my family and myself from a terrorist nuclear attack?

A: In the event of a terrorist nuclear attack, a national emergency-response plan would be activated and would include federal, state, and local agencies. You should seek shelter in a stable building and listen to local radio or television stations for national emergency-alert information. Your local emergency-response organizations, police agencies, and public health facilities may be able to supply you with additional information. You should follow the protective-action recommendations that are made by your state or local health department in accordance with this plan. As a general rule, you can reduce the potential exposure and subsequent health consequences by limiting your time near the radiation source, increasing your distance from the source, or keeping a physical barrier (such as the wall of a building) between you and the source.

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You can find out your state radiation control director by contacting The Conference of Radiation Control Program Directors (CRCPD) at (502) 227-4543 or you may visit the [CRCPD Web site](#).

Q: What should I do if there is a terrorist attack on a nuclear power plant near my home?

A: A terrorist attack on a nuclear power plant will initiate a national emergency response that has been carefully planned and rehearsed by local, state, and federal agencies for more than 20 years. If you live near a nuclear power plant and you have not received information that describes the emergency plan for that facility, you can contact the plant and ask for a copy of that information. Your local emergency-response organizations, police agencies, and public health facilities have been actively involved in this emergency plan, and they may be able to supply you with additional information. You and your family should study these plans and be prepared to follow the instructions that local and state public health officials provide in the event of a terrorist incident involving the nuclear power plant near your home.

Q. Where can I go to find more information about radiation health effects and emergency response?

[The Environmental Protection Agency counterterrorism programs](#)

[The Nuclear Regulatory Commission](#) can be reached at (301) 415-8200.

The Federal Emergency Management Agency ([FEMA](#)) can be reached at (202) 646-4600.

The Radiation Emergency Assistance Center/Training Site ([REAC/TS](#)) can be reached at (865) 576-3131 (ask for REAC/TS).

[The U.S. National Response Team](#).

The U.S. Department of Energy ([DOE](#)) can be reached at 1-800-dial-DOE.

For information on other radiation emergency topics, visit www.bt.cdc.gov/radiation, or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)