

A radiation emergency could occur if radioactive materials are released into the environment as the result of an accident, a natural event, or an act of terrorism. During a radiation emergency, you may be asked to get inside a building and take shelter. The walls of a building can block much of the harmful radiation. Radioactive materials become weaker over time, so staying inside can protect you and your family until you're told that it is safe to leave. Staying inside a building is called "sheltering in place."

### **PREPARE for a radiation emergency**

The basic preparation for a radiation emergency is the same as for other emergencies. Ready.gov has the information you need to protect yourself and your family.

- **Be informed:** The power company that operates your local nuclear power plant or your local emergency services office may have emergency information materials. If you live within 10 miles of a U.S. nuclear power plant, you should receive the materials yearly from the power company or your state or local government. <http://www.ready.gov/be-informed>
- **Build an kit:** <http://www.ready.gov/build-a-kit>
- **Make a plan:** Choose an internal room to shelter in, preferably one without windows. <http://www.ready.gov/make-a-plan>

### **More information**

**CDC - Radiation Emergencies** <http://www.bt.cdc.gov/radiation/>

**Ready.gov – Nuclear Power Plants** <http://www.ready.gov/nuclear-power-plants>

**Ready.gov – Radiological Dispersion Device (RDD)**

<http://www.ready.gov/radiological-dispersion-device-rdd>

**World Health Organization - Ionizing radiation, health effects and protective measures** <http://www.who.int/mediacentre/factsheets/fs371/en/>

**EPA - Radiation Doses in Perspective**

<http://www.epa.gov/radiation/understand/perspective.html>

**Ventura County Public Health - Nuclear Safety**

[http://vchca.org/docs/public-health/ventura-county-public-health---nuclear-safety-pre-incident-education-campaign---18-page-nuclear-safety-educational-guide-\(english\)---final---8-29-2013.pdf](http://vchca.org/docs/public-health/ventura-county-public-health---nuclear-safety-pre-incident-education-campaign---18-page-nuclear-safety-educational-guide-(english)---final---8-29-2013.pdf)

**HHS/CDC - Types of Ionizing Radiation and Shielding Required**

<http://www.remm.nlm.gov/video/Ionizing.wmv>

# **RADIATION PROTECTION**

## **Preparation and response for a radiation emergency**



U.S. Army Public Health Command  
<http://phc.amedd.army.mil>  
1-800-222-9698

TA-221-0214

Approved for public release, distribution unlimited

## In a radiation emergency, take actions to protect yourself

Get out of the immediate area quickly but remain calm. While you may not notice the immediate effects of radiation exposure, this exposure may cause an increased risk of cancer later in life. Eating contaminated food and drinking contaminated water contribute to your overall radiation exposure.

## To protect yourself, GET INSIDE, STAY INSIDE, and STAY TUNED

### GET INSIDE

- » Move indoors as soon as possible. Bring pets inside.
- » A basement or a room in the middle of the building away from doors and windows will provide better protection.
- » If you must be outdoors, use a handkerchief to cover your nose and mouth.
- » Being inside a car with the windows up is safer than being outside but you should move indoors as soon as you can.

### STAY INSIDE

- » Stay indoors with the windows closed and locked.
- » If possible, turn off fans, air conditioners, and forced-air heating units that bring in air from the outside. Close fireplace dampers.

- » Take a shower or wipe exposed parts of your body with a wet cloth. See the Decontaminate section.
- » Drink bottled water and eat food that comes in sealed containers.
- » Nursing mothers should consider temporarily stopping breastfeeding and switch to either breast milk that was pumped and stored before the exposure or formula until they can be seen by a health care professional.  
<http://emergency.cdc.gov/radiation/prenatal.asp>

### STAY TUNED

- » Remain calm.
- » Follow instructions from local authorities and your chain-of-command. Local authorities may urge evacuation, sheltering indoors, or taking iodine pills.
- » Stay tuned to the television, radio, internet, or social media for updated information from emergency response officials.
- » Do not go outside until you are told it is okay by emergency response officials.
- » To communicate with your friends and family, send text messages. This will free up phone lines for emergency calls and for use by emergency responders.

## Decontaminate

The sooner you decontaminate, the lower your exposure will be.

- » Remove the outer layer of your clothing and place in a sealed bag. Avoid touching your face or mouth with your hands.
- » Avoid removing clothes over your head. If you must, hold your breath to prevent inhalation.
- » Remove shoes before going inside to avoid tracking in contaminated material.
- » Shower in lukewarm water. Use soap and shampoo but not conditioner. If no shower is available, wash your hands, face, and parts of your body that were uncovered. Use soap and plenty of water. If you do not have a faucet, use wet cloths to clean the parts of your body that were uncovered.
- » Pay close attention to your ears, eyes, nostrils and hair.
- » Cover any cuts or abrasions.
- » Avoid eating, drinking, and smoking until after you've decontaminated yourself.
- » Wash yourself first. If you have infants or children who are too young for showering, use damp cloths to wash them. Do not bathe them in the tub: sitting in bathwater will increase their exposure. [http://emergency.cdc.gov/radiation/selfdecon\\_helpothers.asp](http://emergency.cdc.gov/radiation/selfdecon_helpothers.asp)
- » Wash your pet carefully with shampoo or soap and water and rinse completely. [http://emergency.cdc.gov/radiation/selfdecon\\_pets.asp](http://emergency.cdc.gov/radiation/selfdecon_pets.asp)

If a small amount of contamination is left in the house, your health is not in danger.

To learn more: [http://emergency.cdc.gov/radiation/selfdecon\\_wash.asp](http://emergency.cdc.gov/radiation/selfdecon_wash.asp)