

ARE YOU READY?



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How to get ready for a nuclear or radiological event



It's difficult to imagine a more devastating emergency than that of a nuclear blast. While it may seem like a far-off possibility, the risk of a nuclear emergency, whether from a terrorist attack or a nuclear power plant malfunction, is real. Fortunately, there are steps you can take to help stay safe from both a nuclear blast and its radioactive fallout.

What's the risk?

The extent and type of nuclear and radiation emergencies that can happen are hard to predict and can come in different forms. Nuclear devices can range from a weapon mounted on a missile to a device small enough to be carried by a single person. A nuclear blast is deadly to those in the area, resulting in blinding light, intense heat, nuclear radiation and fires, among other effects.

Depending on weather conditions, the harmful effects of a nuclear blast can travel hundreds of miles in the form of radioactive fallout. In simplest terms, radioactive fallout is the radioactive dust created during a nuclear blast. Blasts that happen close to the Earth's surface can create more radioactive fallout than blasts that happen at higher levels. Exposure to radiation can cause cancer as well as other adverse health effects, such as burns and radiation poisoning, which can be fatal.

A radiation emergency can also happen after an accident occurs at a nuclear power plant. Another possible source is a terrorist attack that involves the intentional radiological contamination of food and water supplies or the release of a "dirty bomb," which is a device that disperses radioactive materials.



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Preparing for a nuclear or radiological threat



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Getting ready for a nuclear or radiation emergency is not entirely unlike preparing for other emergencies. First, familiarize yourself with designated shelters in your community. There are two specific types of shelters you should learn about: a blast shelter and a fallout shelter.

A blast shelter is specially constructed to give protection against the blast of a nuclear explosion, the initial radiation, heat and fire, though such a shelter would not withstand a direct hit. A fallout shelter is a space in which the walls and roof are thick enough to absorb radiation from the fallout and protect those sheltering inside. If your community does not have a designated fallout shelter, do some research and pinpoint such shelters near your home, workplace and school. A fallout shelter can include basements as well as windowless areas on the middle floors of high-rise buildings.

Put together an emergency stockpile kit, as you may be instructed to stay inside for several days or even weeks. Make sure to include a flashlight, extra batteries, bottled water and non-perishable foods, a manual can opener, a first aid kit and needed medications. Also consider putting together a portable kit you can take with you if you're ordered to evacuate.

It's also very important to include a battery-operated radio so you can stay abreast of updates from local officials. Keep in mind that nuclear radiation cannot be seen or smelled and can only be detected with special monitoring devices – this makes it even more important to listen to official updates before deciding to leave your shelter. Officials will also keep you up-to-date on issues of food and water contamination. In the event that a nuclear or radiological event releases radioactive iodine, potassium iodide can be used to protect the thyroid gland. If you decide to purchase potassium iodide, only take it on the advice of local officials and talk with a health care provider about how to take it correctly.



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Sheltering in place

In a radiation emergency or in the event of radioactive fallout, officials may also tell residents to shelter in place, which means taking immediate shelter wherever you are. Remember that depending on your proximity to the emergency, you may have to shelter in place for many weeks. While radioactive fallout becomes less dangerous with time, it can take two or more weeks for a contaminated environment to become safe again.

If you hear orders to shelter in place, immediately close and lock all doors and windows, shut off air conditioners and other equipment that bring air in from the outside, and move to an inner room with no windows or a basement. Consider including scissors, duct tape, towels and plastic sheeting in your emergency stockpile kit to further prevent contamination of your shelter.



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