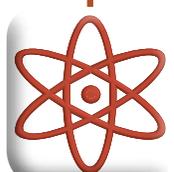




# NUCLEAR EXPLOSION



## WHAT IS A NUCLEAR WEAPON?

A device that uses a nuclear reaction to create an explosion. Nuclear devices range from a small portable device carried by an individual to a weapon carried by a missile.

## WHAT IS A NUCLEAR EXPLOSION?

It is an explosion that occurs as a result of the rapid release of energy from a nuclear device detonation. Nuclear explosions can cause significant damage and casualties from blast, heat, and radiation but you can keep your family safe by knowing what to do and being prepared if it occurs.

## WHAT IS THE MOST DANGEROUS PART OF A NUCLEAR EXPLOSION BESIDES THE BLAST ZONE?

Fallout is most dangerous in the first few hours after the detonation when it is giving off the highest levels of radiation. It takes time for fallout to arrive back to ground level, often more than 15 minutes for areas outside of the immediate blast damage zones.

## KNOW THE TERMS

**BLAST ZONE** - (aka blast radius) a region or area where an explosion or detonation has occurred; inside the blast wave is hardest hit with fire and heat.

**BLAST WAVE** - can cause death, injury, and damage to structures several miles out from the blast.

**DETONATION** - the action of causing a bomb or explosive device to explode.

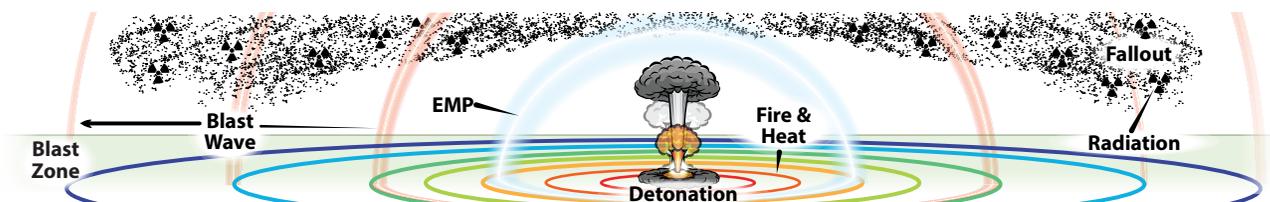
**ELECTROMAGNETIC PULSE (EMP)** - can damage electronics several miles out from the detonation and cause temporary disruptions further out.

**FALLOUT** - is radioactive, visible dirt and debris raining down that can cause sickness to those who are outside.

**FIRE AND HEAT** - can cause death, burn injuries, and damage to structures several miles out.

**FLASH BLINDNESS** - is caused by the initial bright flash of light produced by the nuclear detonation which can cause temporary blindness for less than a minute.

**RADIATION** - can damage cells of the body. Large exposures can cause radiation sickness.



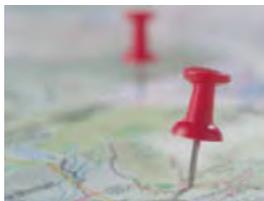
## ACTIONS TO CONSIDER

### BEFORE

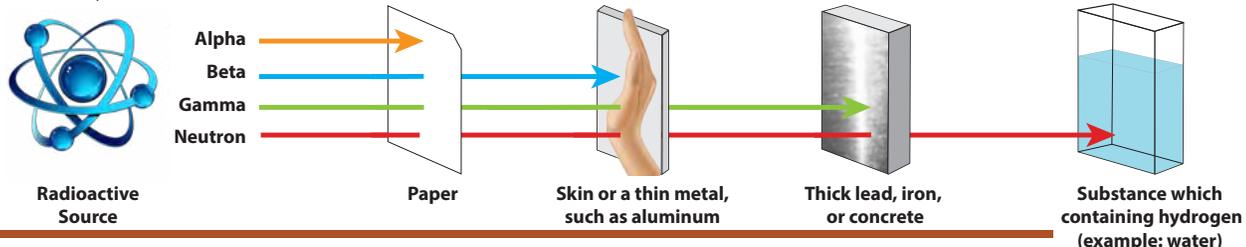
- Determine the best place in your home to shelter and determine the best shelter locations when not at home like:
  - Find a room that is below ground, storm cellar, basement, if possible or to a windowless, interior room that has the fewest openings to the outside.
- Find out from local authorities if any public buildings in your community have are designated as fallout shelters.
- Build an Emergency Supply Kit.
- Make a family communication plan and ensure all family members know how to use it if you are separated.
- Determine evacuation routes should an incident occur and your told to evacuate.
- Know steps on **Minimizing Exposure to Radiation**:
  - Time:** The less time you spend exposed to the source of radiation, the better.



- Distance:** The more distance between you and the source of the radiation, the better.



- Shielding:** The more dense material between you and the source of the radiation, the better.



### DURING

- If there is advanced warning of an attack, listen to authorities for actions to take. Promptly, evacuate or take shelter based on authorities' instructions.

#### If you are advised to evacuate:

- Listen for information on evacuation routes, shelters, and other procedures to follow.
- If there is time, close and lock all windows and doors and turn off the ventilation system in your home.
- Do not return to the area until authorities say it is safe to do so.

#### If you shelter-in-place:

- Get to the lowest level and most interior room of the building.
- Make sure you are inside before arrival of fallout.
- Shut off ventilation systems and close all vents and windows.
- Use stored food and drinking water.
- Listen to radio broadcasts for official information. Be aware broadcast disruptions may occur.
- Stay inside until authorities say it is safe to venture outside.

#### If you are outdoors when the detonation occurs:

- Immediately take cover finding anything that can offer protection from the blast.
- Lie face down on the ground and protect exposed skin. Remain lying flat until the heat and blast wave have past.
- Cover your nose and mouth with a cloth or piece of clothing to filter the air you breathe.
- Seek shelter after blast wave passes.

### AFTER

- If you were possibly exposed to fallout:
  - Remove outer layer of clothing as soon as reasonable.
  - Shower with soap and water if possible. If showering is not an option, use a wipe or wet cloth. Pay particular attention to skin or hair that was not covered but do not scrub harshly or scratch skin.
- Only consume foods or liquids that were packaged or were inside a building.
- Do not consume any food or liquids that may be contaminated from fallout.
- If you are injured or have any unusual symptoms, listen for instructions on how and when it is safe to seek medical treatment.
- Continue to listen to local broadcasts for official information. Keep in mind these broadcasts may be disrupted; however, local authorities will continue to disseminate information as often as possible.
- Do not try to cope alone. Talk to others about your experiences and encourage others to do the same.

Contact your Installation Office of Emergency Management for further information.

