

## Factors for Protection From Radioactive Fallout

The three factors for protecting oneself from radioactive fallout are **distance, shielding, and time**.

- **Distance**—the more distance between you and the fallout particles, the better. An underground area, such as a home or office building basement, offers more protection than the first floor of a building. A floor near the middle of a high-rise may be better, depending on what is nearby at that level on which significant fallout particles would collect. Flat roofs collect fallout particles, so the top floor is not a good choice, nor is a floor adjacent to a neighboring flat roof.
- **Shielding**—the heavier and denser the shielding materials—thick walls, concrete, bricks, books, and earth—between you and the fallout particles, the better.
- **Time**—fallout radiation loses its intensity fairly rapidly. In time, you will be able to leave the fallout shelter. Radioactive fallout poses the greatest threat to people during the first two weeks, after which time it has declined to only about one percent of its initial radiation level.

**Remember** that any protection, however temporary, is better than none at all; and the more shielding, distance, and time you can take advantage of, the better.

### *Taking Protective Measures*

#### **Before a Nuclear Explosion**

**To prepare for a nuclear explosion, you should:**

- Modify your [Disaster Supplies Kit](#) so it is adequate for up to two weeks.
- Find out from officials if any public buildings in your community have been designated as fallout shelters. If none have been designated, make your own list of potential fallout shelters near your home, workplace, and school. These places would include basements or the windowless center area of middle floors in high-rise buildings, as well as subways and tunnels.
- If you live in an apartment building or high-rise, talk to the manager about the safest place in the building for sheltering and about providing for building occupants until it is safe to go out.

**Taking shelter before a nuclear explosion is absolutely necessary.** There are two kinds of shelters—blast and fallout.

- **Blast shelters** are specifically constructed to offer some protection against blast pressure, initial radiation, heat, and fire; but even a blast shelter could not withstand a direct hit from a nuclear explosion.
- **Fallout shelters** do not need to be specially constructed for protecting against fallout. They can be any protected space, provided that the walls and roof are thick and dense enough to absorb the radiation given off by fallout particles.

(See "[Terrorism](#).")