

Nuclear Blast & EMP

Version1 – 09 April 2022

Surviving an initial attack

A nuclear blast or explosion comprises initially an explosive fireball, followed rapidly by a heat wave then shockwave.

To survive a nuclear attack the best advice is to seek shelter immediately. Most likely the first sign of an attack will be a bright light from the blast itself. You then have around 10 to 15 seconds before the heat wave arrives, then a further 20 to 30 seconds to the shock wave. Under no circumstances should you look directly at the fireball as on a clear day this could cause temporary blindness. If out in the open, seek a depressed area, lay face down exposing as little skin as possible.

Of course, the potential damage caused by an atomic blast will vary depending on the size of the bomb, whether detonated at ground level or above the target (including its height of detonation) and the prevailing meteorological conditions. Your distance from the epicenter of the blast will also be critical.

If heading indoors, only do so if you are sure, your shelter will not suffer significant heat or blast damage. Also stay away from windows or preferably head for a room without windows. Atomic blasts blow out windows many miles away from ground zero. Also avoid rooms with potential easily combustible or flammable materials such as nylon or oil-based products.

If you have a nuclear bunker, head there immediately.

Surviving the electromagnetic pulse (EMP)

All nuclear blasts produce a strong electromagnetic pulse (EMP) which in turn can severely disrupt or even destroy electronic circuit boards (chips) and electrical devices (the EMP washing over devices induces voltage flow). At the very least, unplug all devices from electrical sockets and antennas. Placing computers, radios, flashlights etc., in a sealed metal container (a "Faraday cage") may protect from the EMP, providing the items being protected are not in contact with the enclosure. The metal shield must surround the protected item completely and be grounded.

You can make a Faraday Cage by wrapping a cardboard box in aluminium foil. Place all items to be protected in the box and again make sure it is grounded.

The next step is to protect oneself from the radiation and radioactive fallout that will accompany any atomic/nuclear blast.

References

<https://www.wikihow.com/Survive-a-Nuclear-Attack>