

**TAB N**  
**RADIOLOGICAL DISPERSION DEVICE**

**1. PURPOSE:** To establish an operational procedure for the Joint Force Headquarters in Salem, Oregon as used in implementing an Emergency Action Plan (EAP) for the assigned facility.

**2. RESPONSIBLE DIRECTORATE:** The Director of State Personnel (AGP) and Director of Installations (AGI) are responsible for the maintenance of this Emergency Action Plan.

**3. REFERENCES:** FEMA, <http://www.fema.gov/hazard/terrorism/rad/index.shtm>

**4. GENERAL INFORMATION:** terrorist use of an RDD—often called “dirty nuke” or “dirty bomb”—is considered far more likely than the use of a nuclear explosive device. An RDD combines a conventional explosive device such as a bomb with radioactive material. It is designed to scatter dangerous and sub-lethal amounts of radioactive material over a general area. Such RDDs appeal to terrorists because they require limited technical knowledge to build and deploy, compared to a nuclear device. Also, the radioactive materials in RDDs are widely used in medicine, agriculture, industry, and research, and are easier to obtain than weapons grade uranium or plutonium.

There is no way of knowing how much warning time there will be before an attack by terrorists using a Radiological Dispersion Device (RDD), so being prepared in advance and knowing what to do and when, is important.

A. To prepare for an RDD event, you should do the following:

(1) 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 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.

(2) During periods of increased threat, increase your disaster supplies to be adequate for up to two weeks.

B. Taking shelter during an RDD event is absolutely necessary. There are two kinds of shelters, blast and fallout. The following describes the two kinds of shelters:

- (1) Blast shelters are specifically constructed to offer some protection against blast pressure, initial radiation, heat, and fire. However, even a blast shelter cannot withstand a direct hit from a nuclear explosion.
- (2) 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.

The primary purpose of terrorist use of an RDD is to cause psychological fear and economic disruption. Some devices could cause fatalities from exposure to radioactive materials. Depending on the speed at which the area of the RDD detonation was evacuated or how successful people were at sheltering-in-place, the number of deaths and injuries from an RDD might not be substantially greater than from a conventional bomb explosion.

The size of the affected area and the level of destruction caused by an RDD would depend on the sophistication and size of the conventional bomb, the type of radioactive material used, the quality and quantity of the radioactive material, and the local meteorological conditions primarily wind and precipitation. The area affected could be placed off-limits to the public for several months during cleanup efforts.

- C. While the explosive blast will be immediately obvious, the presence of radiation will not be known until trained personnel with specialized equipment are on the scene. Whether you are indoors or outdoors, home or at work, be extra cautious. It would be safer to assume radiological contamination has occurred particularly in an urban setting or near other likely terrorist targets and take the proper precautions. As with any radiation, you want to avoid or limit exposure. This is particularly true of inhaling radioactive dust that results from the explosion. As you seek shelter from any location (indoors or outdoors) and there is visual dust or other contaminants in the air, breathe through the cloth of your shirt or coat to limit your exposure. If you manage to avoid breathing radioactive dust, your proximity to the radioactive particles may still result in some radiation exposure.

If the explosion or radiological release occurs inside, get out immediately and seek safe shelter. Otherwise, if you are:

<b>Outdoors</b>	<b>Indoors</b>
Seek shelter indoors immediately in the nearest undamaged building.	If you have time, turn off ventilation and heating systems, close windows, vents, fireplace dampers, exhaust fans, and clothes dryer vents. Retrieve your disaster supplies kit and a battery-powered radio and take them to your shelter room.
If appropriate shelter is not available, move as rapidly as is safe upwind and away from the	

<p>location of the explosive blast. Then, seek appropriate shelter as soon as possible.</p> <p>Listen for official instructions and follow directions.</p>	<p>Seek shelter immediately, preferably underground or in an interior room of a building, placing as much distance and dense shielding as possible between you and the outdoors where the radioactive material may be.</p> <p>Seal windows and external doors that do not fit snugly with duct tape to reduce infiltration of radioactive particles. Plastic sheeting will not provide shielding from radioactivity nor from blast effects of a nearby explosion.</p> <p>Listen for official instructions and follow directions.</p>
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- D. After a Radiological Dispersion Device (RDD) Event, find a safe shelter. Those who may have been exposed to radioactive material should decontaminate themselves. To do this, remove and bag your clothing (and isolate the bag away from you and others), and shower thoroughly with soap and water. Seek medical attention after officials indicate it is safe to leave shelter.
- E. Contamination from an RDD event could affect a wide area, depending on the amount of conventional explosives used, the quantity and type of radioactive material released, and meteorological conditions. Thus, radiation dissipation rates vary, but radiation from an RDD will likely take longer to dissipate due to a potentially larger localized concentration of radioactive material.

**Follow these additional guidelines after an RDD event:**

- (1) Continue listening to your radio or watch the television for instructions from local officials, whether you have evacuated or sheltered-in-place.
- (2) Do not return to or visit an RDD incident location for any reason.