



# ORS

Office of Radiological Security

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**Radiological Terrorism Threat Briefing**  
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Global  
Material  
Security



# Radiological Materials in the U.S.

- Cesium-137
- Cobalt-60
- Americium-241
- Iridium-192



- Located in heavily populated cities
- Open by their nature
- Many sites have unarmed guards
- Subject to outsider and insider threats

## Vulnerable Targets



# Threat of Radiological Terrorism

- Non-State Actors
- Homegrown Violent Extremists
- Insiders
- Lone Wolves



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**Only a few curies of radioactive materials, such as high-activity cesium-137, could result in a significant RDD. A salt shaker could hold several thousand curies of material.**



# Methods of Radiological Terrorism

- Radiological Dispersal Device (RDD)
  - Any Device that causes the purposeful dissemination of radioactive material



- Radiological Exposure Device (RED)
  - Exposes people to radiation without their knowledge



# Radiological Exposure Device

## RED Uniqueness

- Terrorist weapon to expose people to radiation
- Victims are unaware of exposure
- Easily hidden in a public place
- May go undetected
- No dispersal or contamination



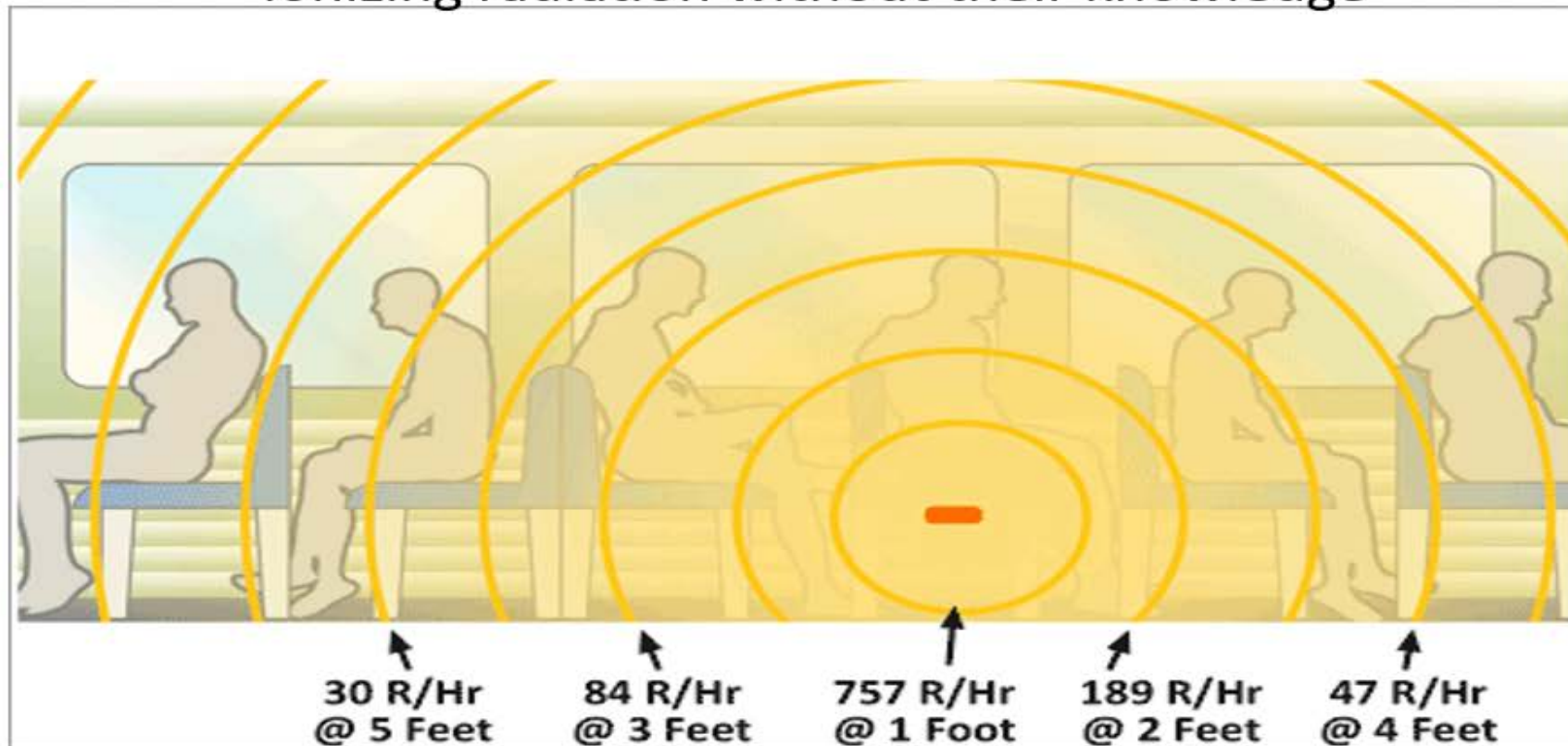


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## Radiological Exposure Device

Any device intended to expose people to significant doses of ionizing radiation without their knowledge



**150 Ci Iridium-192 Source Under Seat**



# Radiological Dispersal Device

- **Target Area**
  - Economic Importance
  - Population Density
  - Transportation Hubs



# Consequences of Radiological Terrorism

