

# ORS

Office of Radiological Security

*Protect • Remove • Reduce*



**NNSA**  
National Nuclear Security Administration



## **RDD/RED Threats: Adversary Motivation and Capabilities**

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# Weapon of Mass Destruction (WMD)

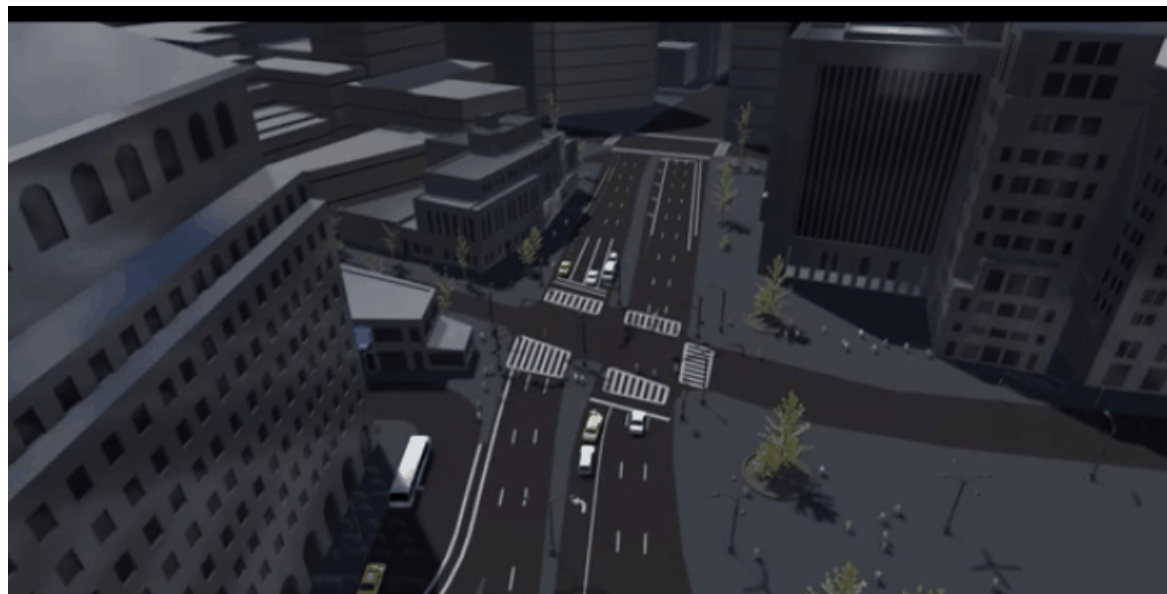
- A WMD is defined by U.S. law as any weapon designed to cause death or serious bodily injury through the release, dissemination, or impact of:
  - Toxic or poisonous chemicals
  - A disease organism
  - An explosive or incendiary device
  - Release of **radiation** or **radioactivity** at a level dangerous to humans



# Radiological Dispersal Device (RDD)

Any device that causes the purposeful dissemination of radioactive material without a nuclear detonation

- Material Form
  - *Solid*
  - *Liquid*
  - *Gas*
- Dispersal
  - *Explosively*
  - *Air*
  - *Water*
- Contamination
- Exposure





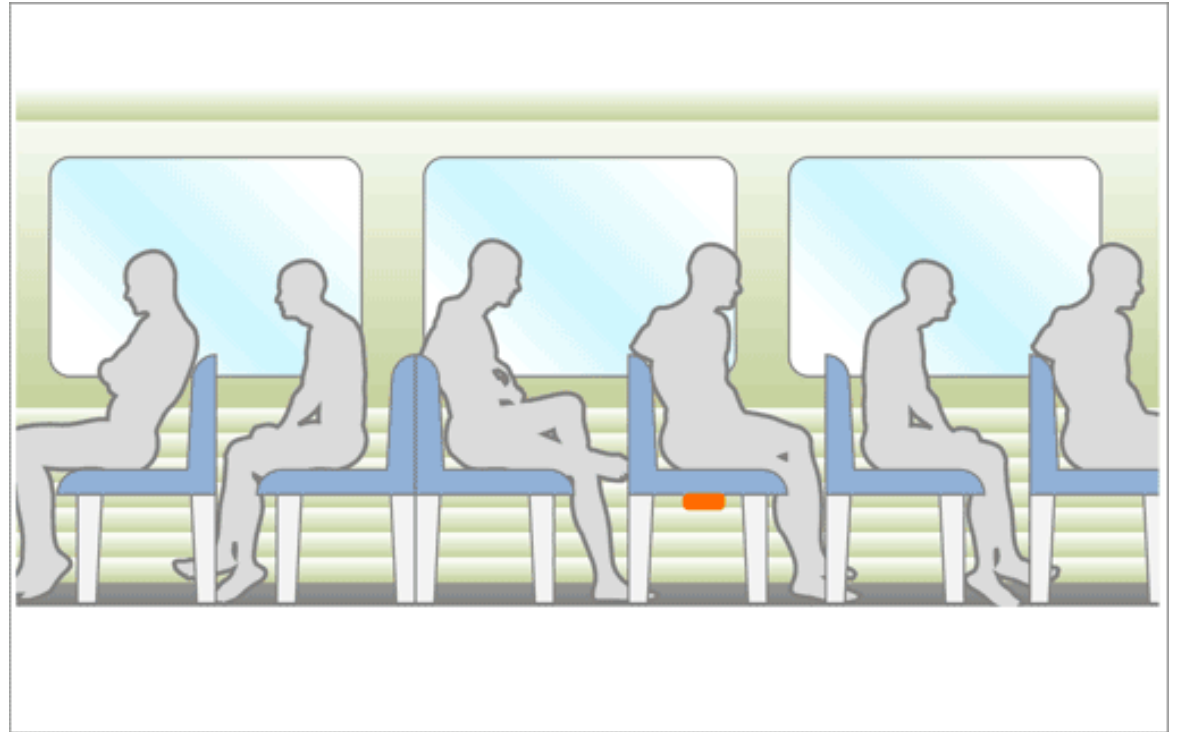
# Radiological Exposure Device (RED)

Radioactive material that may be hidden from sight with the intention of exposing people to radiation without their knowledge



Radiography Sources

+



Cs-137 "pencil"



# Potential RDD/RED Targets

- Sporting Events
- Transportation Hubs
- Shopping Malls
- Historic Sites
- Individuals/Groups of People
- Others?





# Adversary Motivations

- International Terrorists
- Homegrown Violent Extremists
- Domestic Terrorists
- Criminals or Criminal Organizations

Fear, panic, global attention,  
embarrassment, extortion

Financial gain or other  
material benefit





# November 13<sup>th</sup>, 2015



# Tihange Nuclear Power Plant Brussels, Belgium

Terrorist group conducted surveillance on Senior  
Nuclear Industry Official with access and information

- 10 hours of video surveillance of Plant Employee





# Tihange Nuclear Power Plant Brussels, Belgium

- Planned to make a dirty bomb and disburse it over a populated area
- Tried to recruit insiders from the plant
- Police raids in Brussels disrupted this plot



# Airport and Metro Station Bombings Brussels, Belgium

“They rushed their operations because they were under pressure. “

“The magnitude could have been much bigger if the terrorists had been able to implement their original plan and not opted for easier targets.”

- Belgian Police Official

- 32 people killed 270+ injured





# Jose Padilla

- Born October 18, 1970 in Brooklyn, New York, USA
- Latin Kings Gang Member
- Numerous arrests
- Plotted Dirty Bomb Attack in U.S.
- At 14 years old he was convicted of manslaughter
- Radicalized in Prison
- Training in Afghanistan and Pakistan







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