



International Radiological Security Awareness and Response – WINS Tabletop Exercise

Office of Radiological Security
March 2024



Global
Material
Security



ORS

Office of Radiological Security
Protect - Remove - Reduce

TABLETOP EXERCISE

TTX PLAYER BRIEFING



DANGER



- This event will be a facilitated discussion-based exercise.
- Modules contain events that occur chronologically.
- This is an open, low-stress, **no-fault** environment.
- Decisions are not precedent setting; consider different approaches and suggest improvements.
- The scenario is realistic – while some events may seem implausible, the intent is to drive the exercise.



1. Discuss MOUs, mutual aid, regulations, procedures, and incident response plans
2. Discuss cross-agency collaboration while responding
3. Review the capability of response personnel involved
4. Discuss the current ability of response personnel involved to establish and maintain communication
5. Identify resources needed when responding to a radiological theft incident
6. Identify response priorities

Hypothetical Facility Details

- All entrances are unlocked except for the Irradiator Room door, which is secured by an access control system and an intrusion detection system
- The facility is equipped with an alarm system reporting to onsite monitoring
- There are 2 unarmed guards working at the facility:
 - 1 guard is assigned to monitoring the facility in the Central Alarm Station (CAS)
 - 1 guard makes routine rounds throughout the facility
- The guards have radios that allow them to communicate with each other and hospital staff, but they do not communicate with local law enforcement



Hospital Irradiator Details

- The hospital possesses a cesium-137 (Cs-137) chloride blood irradiator used for blood sterilization purposes
- As of today's date, the activity level of the irradiator's Cs-137 is 111 TBq (3,000 Ci)
- The irradiator is located in a central location in the hospital with floors above and below



- The adversary group is organized, technical, and trained. They use deceit, fraud, coercion, and extortion to compromise physical protection measures at facilities. The group has access to 2 vehicles and an insider has provided facility maps and hours the facility has the lowest staff onsite.
- Each of the men in this scenario are equipped with the following tools or weapons:
 - AK-47 rifle
 - Pistol
 - Explosives
 - Knife
 - Radio
 - Mechanical breaching tools

MODULE 1

- At 0200 hrs. on February 29, 2024, the emergency line [Dispatch] receives a call from an unarmed onsite security officer stating there has been an intrusion alarm at the hospital Irradiator Room door. He can see two males in the Irradiator Room with two large bags.

- How would this call typically be handled?
- What agency would be receiving the initial call?
 - Would this agency understand the threat posed by this incident?
- Does the location change the response priority?
 - Would the nature of the facility necessitate an alternative response?
 - How long would an average response take?
- What actions would the initial responders take?
 - Would any other notifications be made at this point?
 - Are there any specific instructions regarding the facility?



- At 0208 hrs. the emergency line [Dispatch] receives another phone call from the unarmed onsite security guard stating that two unknown males can be seen on security cameras removing a torch, pry bar, tools, handguns, and rifles from a bag. They have started to break into the irradiator using a torch.
 - The camera feeds stop working. A tamper alarm is received by security.
 - A small fire has been started in the Irradiator room while the suspects were using the torch and the fire alarm activated.



- What are your concerns at this point?
- How many responders would be dispatched?
- Would this call change the response priority?
- Would any other additional assets be involved?
- What role does fire play in this event?
- For a facility like this, what onsite resources may be available for responders?
 - Onsite security (facility access and knowledge)
 - PRDs, “go bags”, target folders, etc.
- What are the responders’ priorities?
 - Armed adversaries
 - Fire
 - Radiological material



- After a short standoff, the responders successfully interdict and arrest the suspects before the radiological source can be removed.
 - A third suspect was found by the loading dock door.
- The fire was easily extinguished.
- No other injuries have occurred as a result of the incident and the scene is secured.
- The suspects were found to have been part of a violent activist group intending to steal radioactive sources and detonate a dirty bomb in the capital.



MODULE 2

- At 0208 hrs. the emergency line [Dispatch] receives a phone call from an unarmed onsite security officer stating that he received a tamper alarm from the irradiator room in the Hospital. There are two unknown males in the secured room using a torch on the irradiator.

- At 0216 hrs. the emergency line [Dispatch] receives another phone call from an unarmed onsite security officer stating that they just received a high radiation alarm and can see through the hallway security cameras, two suspects walking down the hall toward the back loading dock with a bag.

- What does a high radiation alarm indicate?
- Do responders know what type and how strong the radiological source is?
- Would this call change the response priority?
- Are additional resources mobilized?
- How are communications and notifications handled?
- What are the responders' priorities?

- Officers arrive at the Hospital and find that the irradiator is damaged, and no one is in the irradiator room. The source appears to have been removed from the irradiator and there are concerns of possible contamination.

- How would responders know if the source was missing?
- What are the immediate concerns for responders, emergency management personnel, public health officials, and regulators?
- How does this affect operations at the hospital?
- Who would be in charge at this point?
- Does this shift the focus of response now that the source is gone?
- What agencies would be notified at this point?

- Additional responders arrive and successfully interdict and arrest the suspects in the parking lot behind the building.
- No injuries have occurred as a result of the incident however, the radiological source is damaged and small amounts of contamination are suspected.
 - How do you handle the contamination incident?
 - How do you verify where contamination has occurred?



What if...?



- At 0216 hrs. the emergency line [Dispatch] receives another phone call from an unarmed onsite security officer stating that they just received a high radiation alarm and can see through the hallway security cameras, two suspects walking down the hall toward the back loading dock with a bag.

- Officers arrive at the Hospital and find that the irradiator is damaged, and no one is in the room. The suspects were last seen leaving in a gray van.

- What are the immediate concerns for responders, emergency management personnel, public health officials, and regulators?
- Would the initial responders have a means of detecting radiation?
- Who would be in charge at this point?
- Who is mobilized once the source is missing?
- How would a search for the missing source occur?
- How are communications and notifications handled to responders, neighboring jurisdictions, and the media/public?

The next day the van is located driving at a high rate of speed and the suspects crash the van in a crowded area of the city. The crash resulted in 5 fatalities, 15 severely injured, and 20 wounded. The stolen source in the van has been compromised in the wreck and contaminated the area.

- How would responders remobilize in the area?
- How do arriving agencies integrate into the response?
- Who is the lead agency in this scenario?
- If explosives were suspected, how would responders proceed?
- If the crash resulted in a fire, how would responders proceed?



- What specialized equipment is needed?
- How will radiation limits be monitored?
- Is there a plan for medical response?
 - Notification to hospitals in the area?

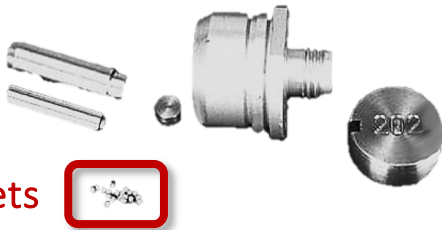
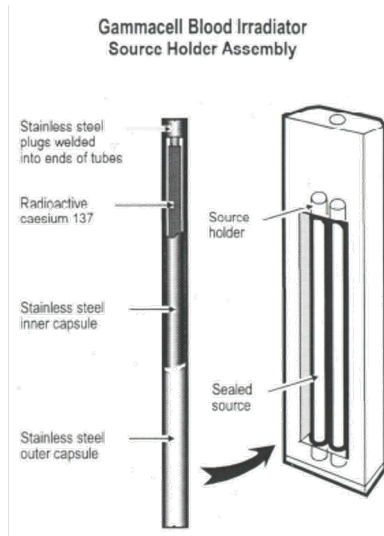


- What Role do agencies have in delivering messages for the public and the media?
 - Is there a lead agency for messaging
 - How would the organizations involved communicate messages to the public?
 - Are there plans in place for social media messaging?
- Is there a process for developing public messaging?
- How are messages prioritized and delivered to the public?
- What systems are used to distribute messages?



- Facility familiarization and walkdowns
- Early response and facility containment is vital
- Use the principals of time, distance, and shielding to minimize radiation effects
- Personal Radiation Detectors

Things to Remember (con't)



Co-60 Pellets



Thank You

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