## MEDICAL RESPONSE SURGE EXERCISE

**DIALYSIS** 





## Medical Response Surge Exercise

- Does your facility have a medical surge plan? When and how is it activated? Have staff been trained in medical surge operations?
- Does your facility have a Command Center? If so, are your staff trained in the Incident Command System (ICS)? What would the ICS structure look like at your facility for this type of incident?

# Medical Response Surge Exercise MCI-Radiological Device

#### **Scenario**

A dirty bomb explosion has occurred at a mass gathering event near your facility resulting in a large-scale multi-casualty incident (MCI). Many victims self-transported from the scene to local hospitals. Multiple other patients will be transported to hospital emergency departments throughout the county due to injuries related to a radiologic incident. HAZMAT and Public Health's Radiation Management team confirmed the detonation and release of Caesium-137.

Hospital emergency departments are receiving a large influx of self-transport victims and patients arriving by EMS with radiation and other injuries. The patients arriving by EMS have been triaged by personnel in the field in the Immediate, Delayed, and Minor categories.



### **Dirty bomb**

- Dirty bomb is a RDD (radioactive dispersal device) that combines a conventional explosive, such as dynamite, with radioactive material.
- a dirty bomb's radiation could be dispersed within a few blocks or miles of the explosion.
- weapon of mass disruption," where explosion could create fear and panic, contaminate property and require potentially costly cleanup.
- It is the conventional explosive itself would be more harmful to people than the radioactive material.





#### **Impact of Dirty Bombs**

The extent of local contamination would depend on several factors:

- size of the explosive
- the amount and type of radioactive material used,
- o the means of dispersal, and
- weather conditions.

Those closest to the RDD would be the most likely to be injured by the explosion. As radioactive material spreads, it becomes less concentrated and less harmful.



#### **Immediate Health Effects**

- The effects of radiation exposure would be determined by:
  - The amount of radiation absorbed by the body;
  - The type of radiation (gamma, beta, or alpha);
  - The distance from the source of radiation to an individual;
  - The means of exposure external or internal (absorbed by the skin, inhaled or ingested); and
  - The length of time exposed.
- The health effects of radiation tend to be directly proportional to radiation dose. In other words, the higher the radiation dose, the higher the risk and severity of injury



#### **Protective Measures**

Prompt detection of the type of radioactive material used will greatly assist local authorities in advising the community on <u>protective measures</u>, such as

- A. Minimizing the time exposed to radioactive materials, e.g.,
  - □ If people are near the site of a dirty bomb or release of radioactive material, they should: 1. Stay away from any obvious plume or dust cloud. 2. Cover their mouth and nose with a tissue, filter, or damp cloth to avoid inhaling or ingesting the radioactive material. 3. Walk inside a building with closed doors and windows as quickly as can be done
- B. Shielding from external exposure and inhaling radioactive material
  - sheltering in place
  - Evacuation\*
- C. Maximizing the distance from the source of radiation

<sup>\*</sup>Evacuation as a plume is passing could result in greater exposures than sheltering in place. The best course of action will be provided by emergency officials who may use computations from models of plume travel and potential radiation health effects.



# Dialysis Exercise Objectives (Capability 2)



MAINTAIN APPROPRIATE COMMUNICATIONS



SHELTER IN PLACE



**RESOURCE SHARING** 



## **Objective 1 Maintain Appropriate Communications**







## **Maintain Appropriate Communication**





**Group Text** 









Breaking News Dirty Bomb in Carson







# **Objective 2 Shelter in Place (or Evacuation)**











# **Objective 2 Shelter in Place**



**EP-0022** = A means to Shelter-in-place for patients, staff, and volunteers who remain in the facility if an evacuation cannot be facilitated.



Implement the facility's shelter in place (SIP) plan upon notification that the facility is within the affected area within allowed timeframe



Operationalize strategies and tactics for the implementation of the SIP plan



Ensure supplies for SIP are available and adequate for number of staff, patients, and MDs



## Objective 2 Evacuation if not SIP

**EP- 0020** Safe evacuation from the ESRD facility, which includes consideration of care and treatment needs of evacuees; staff responsibilities; transportation; identification of evacuation location(s); and primary and alternate means of communication with external sources of assistance.

- Facilitate transferring of patients to alternate settings as needed
- Identify available relocation sites
- Staff responsibilities and the need of patients
- Identify transportation resources needed for evacuation
- Collect and organize appropriate medical records to accompany relocated patient while maintaining Health Insurance Portability and Accountability Act (HIPAA) compliance
- Identify resources (e.g., medication, supplies, staff, etc.) that will be needed to accompany evacuated patients





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- Conduct a coordinated evacuation effort with ERSD Network 18, local emergency management officials and state survey agencies to ensure the safe evacuation and transfer of patients
- Triage Designate who could be tasked with making triage decision. Considerations
  for prioritization may be based on, acuity, mobility status (stretchbound/wheelchair/ambulatory), location of the facility and availability of a known
  transfer destinations
- Outline primary and alternate means for communication with external sources for assistance.



# Objective 3 Resource Sharing





Assess for demand/ability to share/expand space for non-traditional care to offload hospital surge

Activate plans and mutual aid agreements as needed to obtain, share, and/or return Health Care Coalition resources as appropriate

Assess regional health care resources to potentially develop an alternate care system to ensure care for patients in impacted areas

Serve as a charging station for power-dependent patients unable to get medical care in a timely manner

Share emergency supplies with impacted health care partners

Ensure operations are maintained-extend/adjust operating hours

# Other contact information

A number of federal agencies have responsibilities for dealing with RDDs. Their public affairs offices can answer questions on the subject or provide access to experts in and out of government. Their websites are: •

**Department of Homeland Security: DHS Radiological Attack Fact Sheet.** 

**Environmental Protection Agency: EPA Radiological Emergency Response** 

County of Los Angeles Public Health Environmental Health-Radiation Management (213) 351-7897

**Federal Emergency Management Agency: FEMA Dirty Bomb Fact Sheet** 



#### Additional Resources

- Radiation Emergency Assistance Center/Training Site
  - 24/7 response capability for advice and consultation on radiological emergencies
  - General information 865-576-3131, General email reacts@orau.org
  - After-hours number 865-576-1005 (Ask for REAC/TS)
- U.S Department of Health & Human Services Radiation Emergency Medical Management
  - Guidance for health care providers, about clinical diagnosis and treatment of radiation injury during radiological and nuclear





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