Our Glowing Population
Population Monitoring for Radiological Contamination

Discussion of Planning and Response

Issues for Locating a Community Population Monitoring Center

Operating a Community Population Monitoring Center

Equipping a Community Population Monitoring Center
RDD / IND Attack
Types of Radiological Dispersal Devices (RDD)

1. Explosive

2. Unsealed material introduced into air handling systems or public water supplies

3. Sealed source used to deliver radiation dose
Improvised Nuclear Device
Pre Planning is Extremely Important
Purpose

- State/local emergency response and public health authorities can use this Guide to:
  - Evaluate their emergency response plans
  - Identify/prioritize staffing needs, training requirements, and necessary material assets.
  - Further develop mutual assistance programs
  - Be better prepared to prioritize allocation of existing resources in actual response
Guiding Principles

- The first priority is to save lives: respond to and treat the injured first.

- Contamination with radioactive materials is not immediately life-threatening.

- Initial population monitoring activities should focus on preventing acute radiation health effects.
  - Cross contamination issues are a secondary concern.
Community Reception Centers (CRC)
Local response strategy for conducting population monitoring

- Multi-agency effort, public health lead
- Staffed by government officials and organized volunteers
- Opened 24-48 hours post incident
- Located outside of hot zone
- Comparable to PODs, NEHCs
Community Reception Center (CRC)

- **Basic services include:**
  - external contamination screening
  - external decontamination
  - prioritizing people for further care
- **Benefits include:**
  - providing needed services to affected and concerned people
  - reducing burden on hospitals
  - managing scarce medical resources
  - supporting shelters
    - CRC may be co-located with public shelters (Congregate Care Center)
CRC Modular Approach to Providing Range of Services

- Monitoring for external and internal Contamination
- External decontamination
- Bioassays
- Medical intervention for decorporation
- Registration
- Counseling
- Assessing need for short-term medical follow up
- Relocation services
- Pet monitoring

Add modules as resources allow.
Community Reception Center
Process Flow

7 Stations:
- Initial Sorting
- First Aid
- Contamination Screening
- Wash

Contamination Control Zone
- Registration
- Radiation Dose Assessment
- Discharge

Clean Zone
vCRC Demo

Virtual Community Reception Center

My View: Initial Sorting

Information

Area Description

Initial Sorting
The Initial Sorting Station is where people enter the community reception center (CRC). Staff here welcome and direct people where they need to go in the CRC.

Info Spots

Resources

Flow Chart

Floor Plan

Greet Arrivals

Continue

Greet Arrivals

Urgent Medical Need?

YES
vCRC available online:
www.emergency.cdc.gov/radiation/crc/vcrc.asp

Or to request a complimentary copy:
cdcinfo@cdc.gov or 800-CDC-INFO
What now?

- Public Information (for potential radiation exposure)
- Protective Actions
  1. Immediately following event cover mouth and nose, shower, wash, change clothes if possible.
  2. Continuous updates
     What are responders doing?
     What is the current hazard?
  3. When and where are radiation monitoring resources available?
Location, Location, Location

To process 1000 persons/hr, CDC Recommends:

- 5000 square feet of covered space
- 8000 square feet of uncovered space
Controlling Reception Center Traffic
Security

- CRC Site security management:
  - Traffic
  - Public
Example 1: External Set-up

STP Reception Center, Matagorda County
Example 2: Internal Set-up

STP Reception Center, Matagorda County
Contamination Control

1. Cover detectors
2. Wear gloves and booties
3. Avoid contact with contaminated articles
4. Instruct monitored individuals not to touch detectors
5. Provide clothing for decontaminated individuals
Procedures
Initial Radiological Monitoring

- **Procedures**
  - Evacuees will be escorted from Parking to Initial Monitoring.
  - Evacuees will be monitored with portal monitors. The hand held radiation meters with pancake probe will be used as a back-up to the portal monitor.
  - Contaminated evacuees will be given a red wristband and directed to Decontamination and Final Monitoring.
  - Clean evacuees will be given a blue wristband and directed to the Commercial Events building.
Paperwork for evacuees

- Monitoring, Decontamination, and Personal Property Form. (Start filling out at Monitoring Station)
- If non-contaminated, give evacuee Copy of form.
- If contaminated, put all copies in plastic bag and send them to Decontamination Station.
Decontamination and Final Monitoring

- **Objective**
  - Used for the decontamination of exposed individuals and to ensure that the individuals are no longer contaminated.

- **Procedures**
  - If skin contamination is minor, a damp cloth/wipe may be used to remove contamination.
  - If skin contamination is major, a shower may be necessary.
  - Use tepid water with moderate flow
  - Use soap and water, avoiding contact with the mouth and nose.
Decontamination and Final Monitoring

Procedures

- Survey the entire body.
- If skin remains contaminated, repeat procedures a maximum of two more times.
- If still contaminated after three decontamination attempts, refer to radiation dose assessment.
- If evacuee is no longer contaminated, issue a blue wristband and direct to the Commercial Exhibits Building.
State Resources
Radiological Emergency Response Team

100 trained members
50 trained radiation monitors
DSHS RADIATION EMERGENCY/INCIDENT HOTLINE

24 Hour
512 458-7460
Emergency Response Team Organization (ERT)

Incident Commander
(Chief of Field Operations)

Department of State Health Service (DSHS) Radiation Control Program (RCP) Emergency Response Team

Command Staff

Public Information (PIO/JIC)

Command Liaison Officer

Safety Officer

Emergency Operations Coordinator

Operations Section
Operations Section Chief
(Field Team Leader)

Planning Section
Planning Section Chief
(Accident Assessment)

Logistics Section
Logistics Section Chief
(Staging Area Coordinator)

Financial Section
DSHS Austin

SOC Liaison

County EOC Liaison

Disaster District Liaison

Licensee/Company Liaison
<table>
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<tr>
<th>Instrument Type and Frisk time</th>
<th>EPZ Population</th>
<th>20% of Population</th>
<th>Monitoring Period (hrs)</th>
<th>Monitoring Rate (ppl per hour)</th>
<th>Monitoring time per person</th>
<th>Time needed to monitor 20% (hrs)</th>
<th>Time to complete (1 team)</th>
<th>2 teams</th>
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<td>626</td>
<td>12</td>
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<td>Modern Pancake (5 min)</td>
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ZUMRO Medical Surge Shelter, Model 860

Ideal for Medical Surge Capacity and Negative Pressure capable when connected to a ZUMRO Isolation Shelter with integral Ante-Room entrance and Ventilation Control.
CBRNE Enhanced Response Force Package (CERFP)

Major Pike Word
(6th CERFP Task Force Commander, Austin, Tx)

- Medical Triage
- Non Ambulatory Decontamination
- Ambulatory Decontamination
Additional Things to Consider

How many require monitoring?

Staff time to conduct monitoring?

Capacity of facilities

Volunteers to conduct monitoring?

Training

Drills
Additional Things to Consider

Public Information (for potential radiation exposure)

Protective Actions

1. Continuous updates
   - What are responders doing?
   - What is the current hazard?
   - Where is the hazard?

2. When and where are radiation monitoring resources available?

3. Provide locations for reentry
QUESTIONS?

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