Patient and Facility Decontamination

1. Decontamination Key Principles

a. Contamination is easy to detect and most of it can be removed
b. It is highly unlikely that radiological contamination poses a significant risk to care providers
c. Provision of life-saving treatment should take priority over radiological decontamination
   - Hospitals should have a policy and procedure for performing radiological decontamination inside the facility
d. Patients without life-threatening injury should be decontaminated prior to treatment
e. Patient segmentation considerations:
   - Contaminated and uncontaminated
   - Ambulatory and non-ambulatory
   - Male and female
   - Families

2. Protecting Staff from Contamination

a. Standard precautions PPE (with N-95, if available)
b. Change outer gloves frequently
c. Personal dosimeters recommended
d. Full body survey when exiting warm zone

3. Embedded Radioactive Fragments

a. Although highly unlikely, metallic shrapnel from a highly radioactive source may become imbedded in wounds
b. A radiation survey identifies a high radiation field
c. Remove radioactive fragments with forceps; seal in lead container (work with Radiation Safety Officer)
d. Use additional staff protection measures
   - Time (decrease time spent near radioactive source)
   - Distance (increase distance between you and source)
   - Shielding (increase physical shielding between you and source)

4. Facility Recovery after Decontamination

a. Coordinate with Radiation Safety Officer
b. Remove waste from the Emergency Department and triage area
c. Survey facility for contamination
d. Decontaminate as necessary

5. SUMMARY

a. Contamination is easy to detect and most of it can be removed

b. Provision of life-saving treatment should take priority over radiological decontamination

c. Complete a radiation survey to rule out highly radioactive fragments that may be embedded

Source: "Radiological and Nuclear Terrorism: Medical Response to Mass Casualties," a self-study training program for clinicians, developed by the Centers for Disease Control and Prevention, 2006.

For copies of this product, email cdcinfo@cdc.gov.

To learn more about responding to a radiological incident, visit http://www.bt.cdc.gov/radiation