ARRIVAL & DECONTAMINATION

Scene Arrival and Pre-Entry Considerations

If you are the first arriving unit, utilize your procedures and/or the ERG to conduct a scene size-up and establish control zones.

Notify hospital as soon as possible of a potentially radiologically contaminated patient.

If Incident Command has been established, EMS care providers should report to the Incident Commander for a scene size-up briefing.

If response actions are being initiated by EMS and the scene size-up has been completed, care providers should wear PPE and only carry essential medical equipment into the hot zone.

Protective Clothing

- Multiple pairs of disposable gloves
- Respiratory protection if available (such as self-contained breathing apparatus, air purifying respirator, or N95 particulate mask)

Prepare the Rescue Immobilization Device (RID)

- Spread a protective barrier (blanket, sheet, etc.)
- Spread a second protective barrier on top of the first barrier
- Place the RID in the center of the protective barriers
- Roll edges of the protective barriers until only the remaining unrolled portion can be placed on top of the RID
- Place essential medical response equipment on top of the RID. Unless needed, avoid taking ALS equipment into the hot zone
- Place protective barrier covering the gurney that will be used for transport of the patient to the hospital

Gross Decontamination

- Enter the hot zone and place the RID adjacent to the patient
- Deploy/unroll the protective barriers adjacent to the patient
- Place the medical equipment on the barrier

Note: Contact with the patient may result in cross contamination, change gloves as necessary. Use proper contamination control techniques.

- Cut clothing from head to toe and roll outer clothing away from body



- Carefully lay cut clothing open, exposing the patient's body
- To avoid cross-contamination, carefully remove the outer pair of disposable gloves
- Load the patient onto the RID using standard medical protocols and wrap an inner protective barrier around the patient
- Leave all removed items in the hot zone
- Move patient to the hot zone boundary
- Pass the patient across the control line to EMS
- Place patient on gurney that has been covered with a third protective barrier
- Load patient into ambulance for transport
- Notify the hospital that they are receiving a potentially radiologically contaminated patient
- Provide patient report
- Inquire whether the hospital has any special instructions or procedures for receiving contaminated patients
- Keep patient wrapped as much as possible to minimize the spread of contamination
- Avoid exposing covered wounds; only expose the patient's injuries for assessing and treating

Entry and Treatment Considerations

Medical treatment always has priority over radiological concerns. Additional decontamination may be necessary if the patient was exposed to additional hazardous materials.

Note: The entry team should remain in the hot zone unless also providing transport. If so, consider removing entry PPE and replace with new PPE.



PATIENT CONSIDERATIONS & TRANSPORT

Life-Threatening Conditions

Initiate ALS care as necessary. Radiation and/or contamination will not affect the operation of ALS equipment. All equipment used must be surveyed for contamination prior to returning to service.

Airway Control and Oxygen Administration

- Administer oxygen via mask, non re-breather preferably
- Put oxygen mask on patient as soon as possible
- Never withhold oxygen regardless of the patient's location

Invasive Airway Treatment

- Realize intubation may result in internal contamination
- Maintain endotracheal tube sterility if possible
- Hospital should be informed if intubation occurred in the hot zone

Bleeding Control

- Control life-threatening hemorrhage immediately
- Cover wounds as quickly as possible to avoid internal contamination
- If irrigation is necessary, irrigate distally and laterally to the wound

Cardiac/Respiratory Arrest

- Initiate CPR if necessary
- To avoid introducing internal hazards, utilize adjunct equipment such as bag-valve mask, pocket mask, or microshield

Spinal Immobilization

- If the medical situation indicates the need, a full spinal immobilization should be incorporated
- Gross decontamination should be performed prior to spinal immobilization
- Immobilized patients may have contaminants trapped between the RID and their skin

Needles (Intravenous Cannulation, EpiPen®, etc.)

- Intravenous cannulation should be avoided in the hot zone
- Cleanse selected IV site
- Change gloves prior to venipuncture

Medications

- Administration should follow local protocol



Non-Life-Threatening Conditions

- Conduct a head-to-toe assessment
- As available, to limit inhalation of airborne contamination, consider placing mask over the patient's mouth and nose (e.g., N95, non-rebreather, etc.)
- Perform gross decontamination
- Extricate patient to the cold zone

This Quick Reference Sheet was produced by the U.S. Department of Energy Transportation Emergency Preparedness Program

For additional information, visit the TEPP website at: www.em.doe.gov/otem or phone (208) 528-8895

Transport Considerations

If time permits, prepare the ambulance prior to transport to minimize the spread of contamination.

- Avoid using internal/external compartments
- Close all inside ambulance compartments prior to loading the patient
- Cover radio communication microphones
- Cover the floor of ambulance
- Avoid using the compartment exhaust system
- Bag any clothing removed in the ambulance
- EMS care providers will cover the patient with the protective barrier

When necessary/available, air transport of a patient may be an option. As stated in the ERG, radiation presents minimal risk to emergency response personnel and medical problems take priority over radiological concerns.

Hospital Arrival Considerations

Follow hospital's radiological control protocol and instructions for patient transfer to hospital care.

- Provide patient report
- Unless needed back at the incident scene, the ambulance should not be returned to regular service until the care providers, vehicle, and equipment have been surveyed for radiological contamination by qualified radiological personnel: local or state Radiation Authority, hazmat team, radiation safety officer, or the hospital's nuclear medicine department personnel