MODULE 9:
SPECIAL CONSIDERATIONS IN HAZARDOUS MATERIALS SITUATIONS

OBJECTIVES

- Discuss special circumstances and considerations in hazardous materials situations.
- Discuss the differences in meeting the needs of responder/entry teams and other patients.

ROLE OF INCIDENT COMMANDER IN HAZARDOUS MATERIALS SITUATIONS

Incident Commander (IC) Role

- Identify relationship between emergency and roles of Emergency Medical Services (EMS) personnel.
- Identify and manage EMS personnel at incident.
- Able to use various means of recognition and identification of hazardous materials.
  - Not identifying presence of hazardous material
- Use Department of Transportation (DOT) Emergency Response Guidebook at incident.

EVOLVING HAZARDOUS MATERIALS INCIDENT

A hazardous materials emergency may be dispatched/initiated as an EMS call …

… but may evolve into a full-blown hazardous materials incident.

EMS HAZARDOUS MATERIALS RESPONSE

Responder Safety

Plan of Action

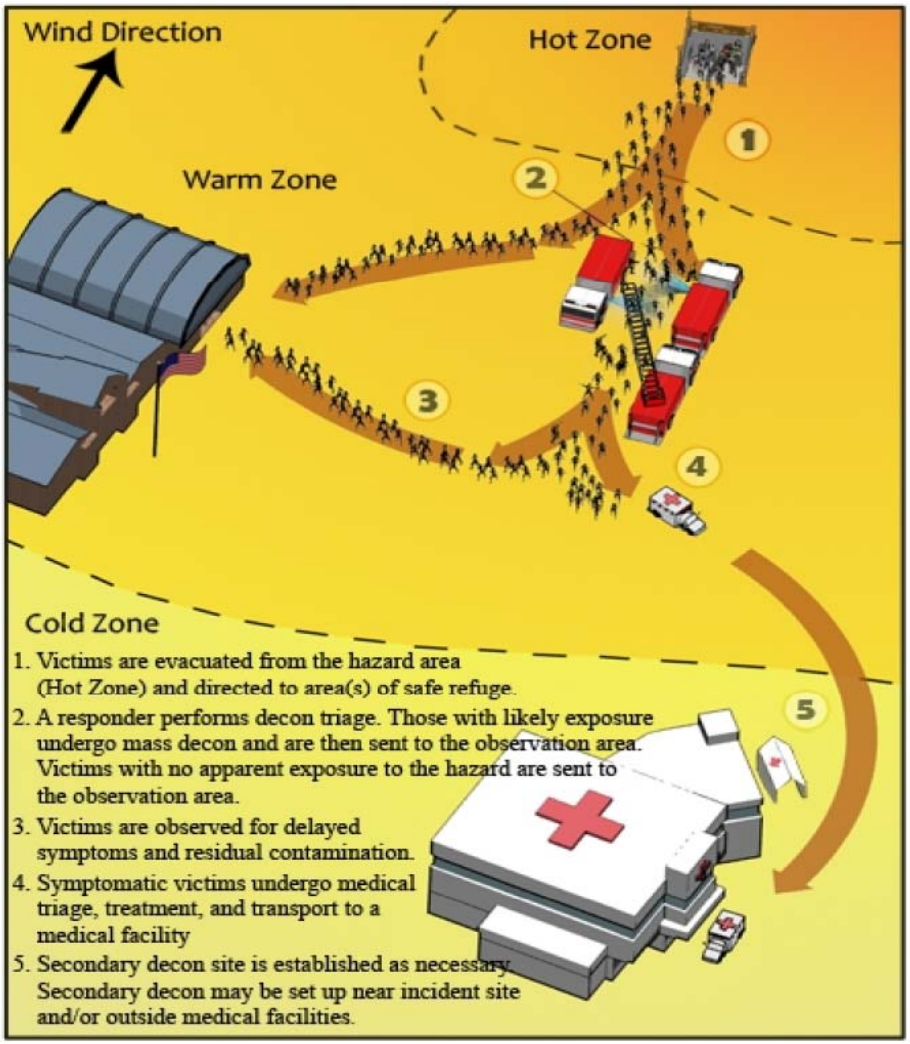
Personal Protective Equipment (PPE)

Special Monitoring Equipment

SECONDARY EXPOSURE

- Perform gross decontamination at same time the patient is stabilized.
- Emergency personnel should avoid contact with any potentially hazardous substances, clothing or other materials.

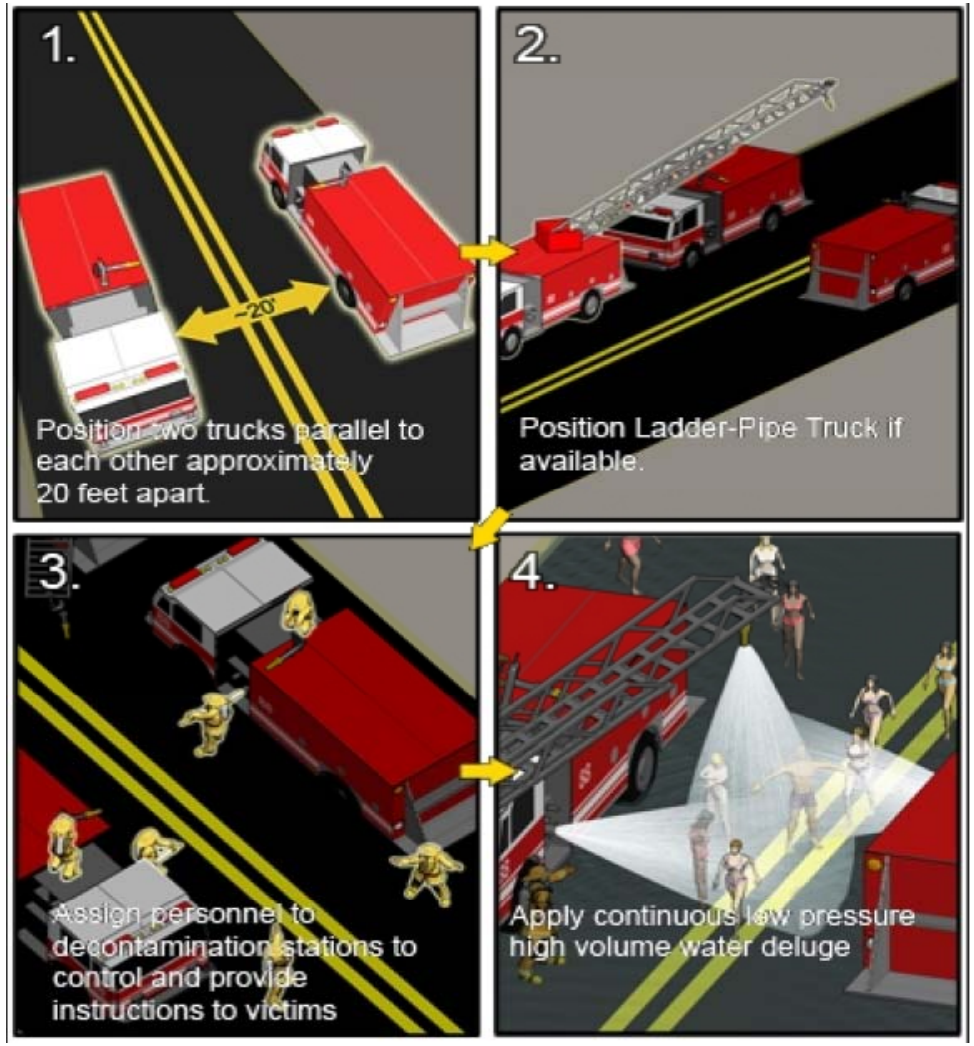
CONTROL ZONES



- Classified by safety and the degree of hazard:
  - Hot Zone.
  - Warm Zone.
  - Cold Zone.

Source: U.S. Army Chemical, Biological, Radiological and Nuclear School. *Guidelines of Mass Casualty Decontamination During a HAZMAT/Weapon of Mass Destruction Incident*

DECONTAMINATION



- Various decontamination setups and methods:
  - Clothing removal.
  - Water shower.
  - Dry decontamination.

Source: U.S. Army Chemical, Biological, Radiological and Nuclear School. *Guidelines of Mass Casualty Decontamination During a HAZMAT/Weapon of Mass Destruction Incident*

MANAGING PATIENT NEEDS

- Primary goals of managing a patient:
  - Terminate patient exposure.
  - Remove patient from danger.
  - Decontaminate.
  - Initiate treatment.
  - When transporting contaminated patient, responder should wear appropriate PPE.

ASSIGNING PERSONNEL

- Incident Commander (IC) must ensure that individuals assigned to work the incident have appropriate training.
- Hazardous materials response personnel classification:
  - EMS Level 1.
  - EMS Level 2.

RESPONDER SAFETY

- IC should:
  - Ensure medical monitoring is provided based on incident type/environmental conditions.
  - Evaluate vital signs, examine responders, and make disposition recommendations.
  - Make go/no-go decision for responders involved in hazardous materials entries or decontamination assignments.

MEDICAL MONITORING AND REHABILITATION

- Medical monitoring should be provided:
  - For all incidents of extended duration.
  - During incidents requiring high level of exertion.
  - When individuals have to wear PPE.
- Rehabilitation should consist of:
  - Additional monitoring of vital signs.
  - Rest.
  - Fluids for rehydration.
  - Ongoing physical assessment.

MEDICAL MONITORING EVALUATIONS

- PPE/Self-contained breathing apparatus (SCBA) operations:
  - Monitor vital signs.
  - Conduct physical assessment and monitor temperature.
  - Conduct pre- and post-entry exams.

MEDICAL MONITORING EVALUATIONS (cont'd)

- Brief physical exam.
- Hydration.
- Documentation.

DEALING WITH FRIENDS/FAMILY AND CHILD SAFETY/PICK-UP

- The Public Information Officer (PIO) should handle all communications and inquiries.
- Arranging secondary location for child pick-up **may not** be an EMS function.
  - Depends on incident factors, jurisdiction and agency protocols.

DEALING WITH FRIENDS/FAMILY AND CHILD SAFETY/PICK-UP (cont'd)

- Emergency Operations Plan (EOP) must consider ways to minimize disruption to child's routine during and after incident.

SUMMARY

- Discuss special circumstances and considerations in hazardous situations.
- Discuss the differences in meeting the needs of responder/entry teams and other patients.