## CERT Basic Training

**Unit 4: Disaster Medical Operations – Part 2** 







#### Unit 3 Review

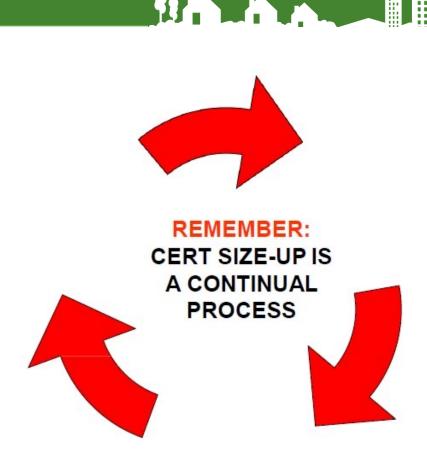


- Identify life-threatening conditions resulting from trauma
  - Airway blockage Respiration
  - Severe bleeding Perfusion
  - Low body temperature/shock Mental Status
- Apply correct life saving techniques
- Provide basic first-aid care for non-life threatening injuries



## CERT Size-up

- Gather Facts
- Assess Damage
- Consider Probabilities
- Assess Your Situation
- Establish Priorities
- Make Decisions
- Develop Plan of Action
- Take Action
- Evaluate Progress







## Unit 4 Objectives



- Explain the role of the CERT volunteer during a mass casualty incident
- Describe the functions of disaster medical operations
- Describe how to set up survivor treatment areas
- Perform head-to-toe patient assessments
- Take appropriate sanitation and hygiene measures to protect public health



## Mass Casualty Incidents



- Incidents in which the number of casualties overwhelms the local resources
  - Commuter train derailment
  - Multi-car accident
  - Bus accident
  - Building collapse
  - Natural disasters (e.g., earthquakes)



### Role of First Responder Personnel



- During mass casualty events, first responder personnel will:
  - Establish command and control of the incident area
  - Conduct a scene size-up and set-up
  - Send walking wounded to a holding area to await treatment – minor injuries
  - Identify survivors who require life-saving interventions and treat them immediately - triage



### Role of First Responder Personnel



- During mass casualty events, first responder personnel will also:
  - Identify deceased victims as well as survivors too severely injured to save
  - Manage medical transportation for survivors who require additional treatment
  - Secure the area to protect first responders, survivors, and evidence for law enforcement investigations
  - Remove debris and other safety or health threats



#### Role of CERT Volunteers



#### If First Responders Present:

- Put on PPE and any CERT affiliated gear
- Locate the nearest first responder and identify yourself/give them your local agency affiliation
- Ask how you may be of assistance
  - For your safety, first responders may ask you to leave the area.



#### Role of CERT Volunteers



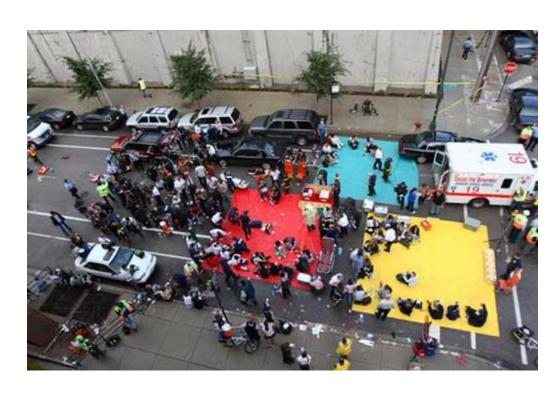
#### If No First Responders Present:

- Scene size-up
- Call 911
- Put on PPE and CERT Vest
- Perform triage and perform life-saving treatments
- Once responders arrive, provide them with detailed information. Ask how you may be of assistance.
  - Communication is key for supporting first responders



# Functions of Disaster Medical Operations

- Triage/Assessment
- Treatment
- Transport
- Morgue
- Supply





#### Establish a Medical Treatment Area

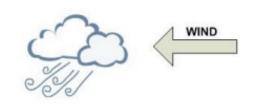
- Area
- Select site and set up treatment area as soon as injured survivors are confirmed
- When determining best location(s) for treatment area, consider:
  - Safety of rescuers and survivors
  - Ease of access to resources



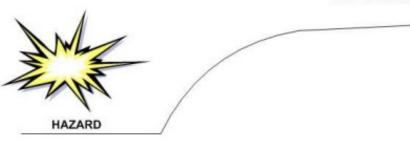


#### Treatment Area Site Selection

- The site selected should be:
  - In a safe area, free of hazards and debris
  - Upwind, uphill, and upstream (if possible) from hazard zone(s)
  - Accessible by transportation vehicles
  - Expandable



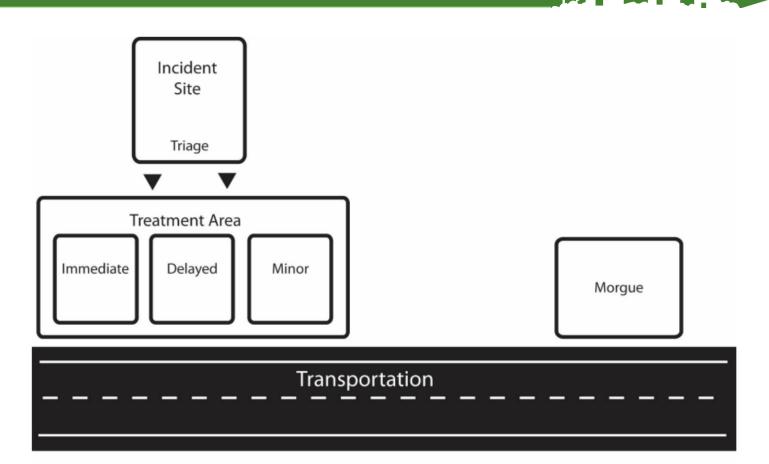
TREATMENT SITE



The treatment site should be uphill and upwind from the hazard.



## Treatment Area Layout





## Treatment Area Organization

- Assign treatment leader to each treatment area
- Document thoroughly
  - Available identifying information
  - Description (age, sex, body build, estimated height)
  - Clothing
  - Injuries
  - Treatment
  - Transfer location
  - -2 copies with patient, for records





#### Head-to-Toe Assessment

- Objectives of head-to-toe assessment:
  - Determine extent of injuries
  - Determine type of treatment needed
  - Document injuries





#### Head-to-Toe Assessment

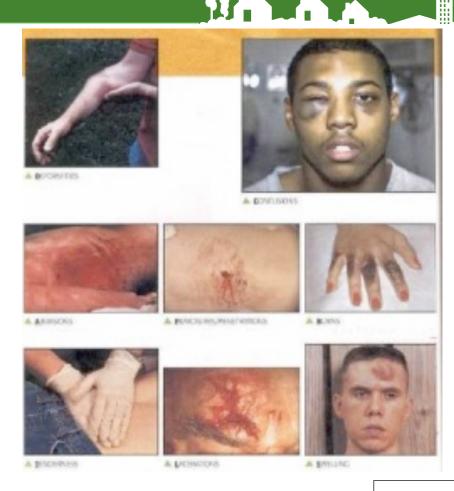


- Assess and treat life-threatening injuries first
- Light damage: Head-to-Toe in place
- Moderate damage: Move to treatment area first
- Assess and document everyone (immediate, delayed, minor)
- Both verbal and hands on



#### DCAP-BTLS

- Deformities
- Contusions (bruising)
- Abrasions (scrape)
- Punctures
- Burns
- Tenderness
- Lacerations (cut)
- Swelling





## Conducting Head-to-Toe Assessment



- Pay careful attention
- Look, listen, and feel
- Suspect a spinal injury in unconscious survivors and treat accordingly
- Check own hands for patient bleeding
- Check PMS (pulse, movement, sensation) in all extremities
- Look for medical identification



#### Order of Assessment

- 1. Head
- 2. Neck
- 3. Shoulders
- 4. Chest
- 5. Arms
- 6. Abdomen
- 7. Pelvis
- 8. Legs





## Closed-Head, Neck, Spinal Injuries



- If injuries to the head or spine are suspected, do no harm
  - Minimize movement of head and neck
  - Keep spine in straight line
  - Stabilize head



#### Head-to-Toe Assessment





## Exercise – Head-to-Toe Assessment



**Approach Conscious Patient** 

Perform Head-to-Toe Assessment



#### Public Health Considerations

- Maintaining proper hygiene
- Maintaining proper sanitation
- Purifying water (if necessary)
- Preventing spread of disease





## Maintaining Hygiene

- Wash hands frequently
  - Or use alcohol-based hand sanitizer
- Wear non-latex exam gloves
- Wear N95 mask and goggles
- Keep dressings sterile
- Wash areas that come in contact with body fluids
  - "If it is warm, wet, and not yours, don't touch it!"





#### Maintain Sanitation



- Control disposal of bacterial sources
- Put waste products in plastic bags
  - Tie off bags and mark them as medical waste
- Bury human waste



## Water Purification Methods



- Boil water for 1 minute preferred
- Water purification tablets
- Non-perfumed liquid bleach
  - 12 drops per gallon
  - Stir, then wait 30 minutes
  - Check for the smell of chlorine
  - If no chlorine smell, add 12 more drops
  - Stir, then wait 30 minutes
  - Still no chlorine smell, throw it out!





## **Unit Summary**



- Explain the role of the CERT volunteer during a mass casualty incident
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