



CERT Basic Training

Unit 4: Disaster Medical Operations – Part 2



FEMA

Unit 3 Review



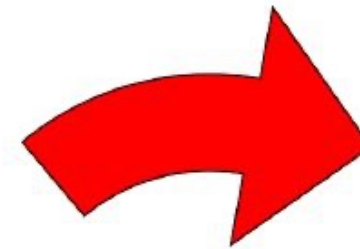
- Life-threatening conditions:
 - Severe bleeding
 - Low body temperature
 - Airway obstruction



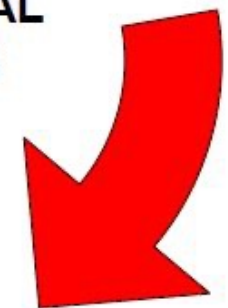
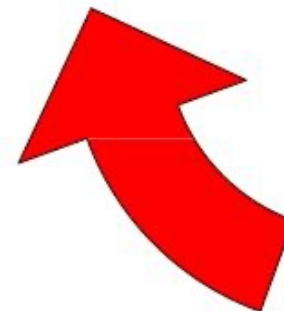
CERT Size-up



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



REMEMBER:
CERT SIZE-UP IS
A CONTINUAL
PROCESS



PM 2-8



Unit 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., tornadoes)



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 survivors with relatively minor injuries to a holding area to await treatment
 - Identify survivors who require life-saving interventions and treat them immediately



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



- Put on PPE and any CERT affiliated gear
- Locate the nearest first responder and identify yourself/give them your local agency affiliation
- If a first responder is not available, assess the situation and determine whether you can provide life-saving interventions



PM 4-2



Role of CERT Volunteers



- Once responders have arrived, provide them with detailed information from your size-up. Ask how you may be of assistance
 - For your safety, first responders may ask you to leave the area. Report the incident and your role to your CERT Team Leader and local agency CERT affiliation
- Communication is key for supporting first responders



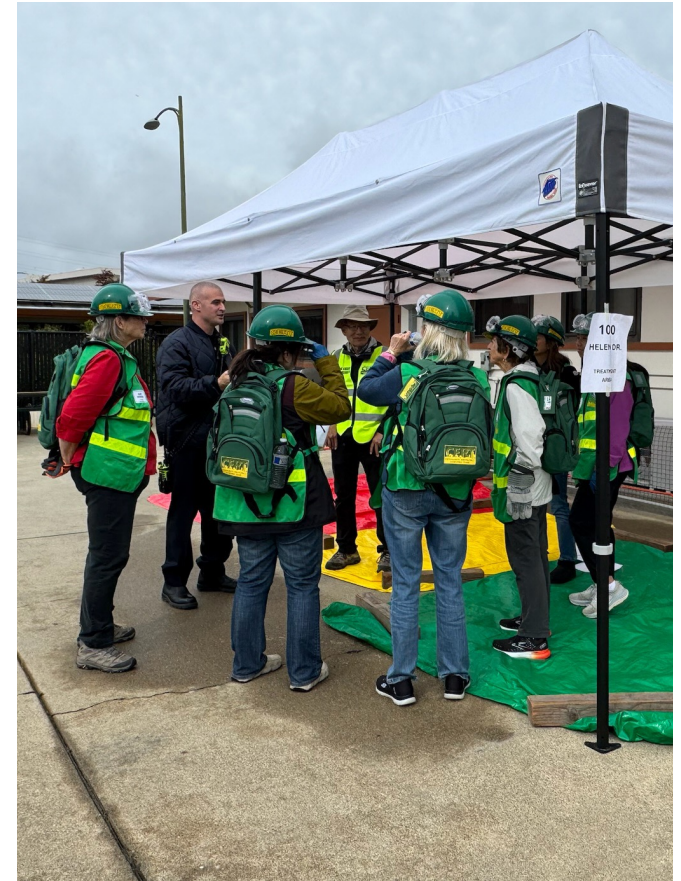
PM 4-2



Functions of Disaster Medical Operations



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



Triage



- Triage comes from the French word:
 - Trier = to sort
 - Triage literally means: “to sort” victims by severity
- Sorting patients by priority to ensure that limited resources are directed where they will have the greatest impact.
- CERT members are not likely to be first on scene at an MCI, but this knowledge helps to reinforce patient assessment and treatment.



START Overview



- START: “Simple triage and rapid assessment”
 - 30–60 seconds per patient
 - No detailed assessments
 - No treatment during triage (besides controlling severe bleeding and opening airway)
 - Move on once tagged
 - Goal: assess as many patients as possible, as quickly as possible
 - **We move quickly so limited resources can have the greatest overall impact.**



RPM



- “RPM-30-2-Can Do” is a mnemonic device for the criteria of the START triage system
- We assess:
 - **R**: Respirations
 - **P**: Perfusion
 - **M**: Mental Status



Step 1: Call Out



- Before assisting anyone: “If you can walk, come to the sound of my voice!”
- These victims who come to you are tagged:
 - MINOR (Green)
- They likely do not have a life-threatening condition
 - Often called “walking wounded”

R: Respirations



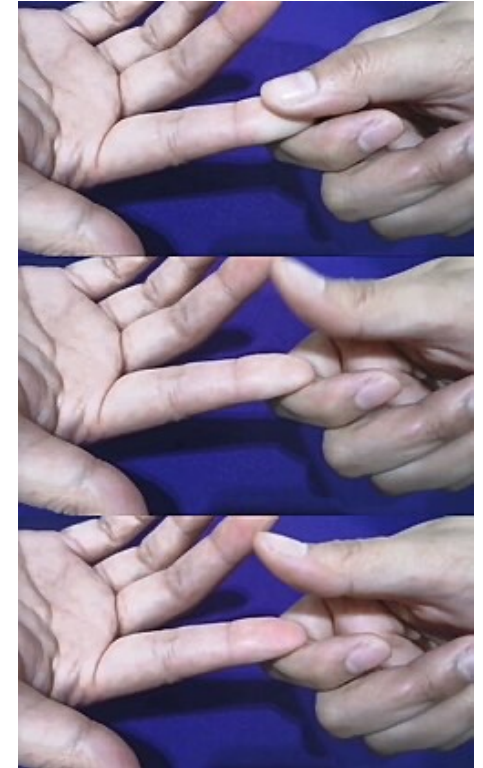
- We now assess RPM
- Is the victim breathing?
 - If NOT breathing: Open airway (head tilt/chin lift or jaw-thrust maneuver)
 - Now reassess:
 - Still NOT breathing → ● DECEASED
 - Starts breathing → ● IMMEDIATE
 - Count respirations.
 - Over 30 breaths per minute → ● IMMEDIATE
 - Under 30 → move to P: Perfusion



P: Perfusion



- Check circulation:
 - Option 1: Capillary refill > 2 seconds
 - Option 2: No radial pulse
- If either is true → ● IMMEDIATE
- If normal → move to M: Mental Status



M: Mental Status



- Can the victim:
 - Follow simple commands?
Example: “Squeeze my hand.” or “Open your eyes.”
 - If CANNOT follow commands → ● IMMEDIATE
 - If CAN follow commands → ● DELAYED

30-2-Can Do



- **GREEN** (Minor): "Walking wounded" who can move on their own.
- **YELLOW** (Delayed): Passes all three criteria, meaning respirations < 30 , perfusion $< 2s$, and follows commands.
- **RED** (Immediate): Fails any of the three criteria (RPM).
- **BLACK** (Deceased): Not breathing even after airway repositioning.

Establish a Medical Treatment 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



PM 4-5



Medical Treatment Areas



- To help meet the challenge of limited resources, CERT may need to establish:
 - Decentralized Treatment Areas (more than one location)
 - Centralized Treatment Areas (one location)



PM 4-5



Medical Treatment Areas



Red -
Immediate

Yellow -
Delayed

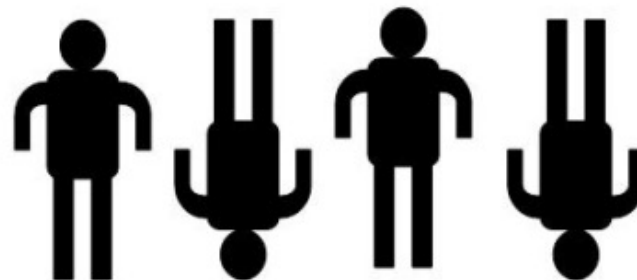
Green -
Minor

Black -
Deceased

When arranging the victim treatment/staging area, follow these steps:

1. Set up the area with the RED tagged victims closest to the road/entranceway so they are the first victims treated by the Fire Department/Rescue Squad.
2. Next, position the YELLOW tagged victims.
3. Position the GREEN tagged victims
4. Lastly, position the BLACK tagged victims. Place them further away and if possible screen the area off so others do not see them.

This setup aids the Fire Department/Rescue Squad in performing triage.



When arranging the victims for treatment, follow these steps:

Line them up in a row, alternating Head Up/Feet Up orientation (see picture at left).

This aids the Fire Department or Rescue Squad in performing triage.

Safety for Rescuers and Survivors



- In structures with light damage:
 - Assess survivors as they are found
 - Further medical treatment is performed in a safe location inside the designated treatment area
- In structures with moderate damage:
 - Assess survivors as they are found
 - Survivors are sent to a medical treatment area a safe distance from the incident

Individual safety is the number one priority



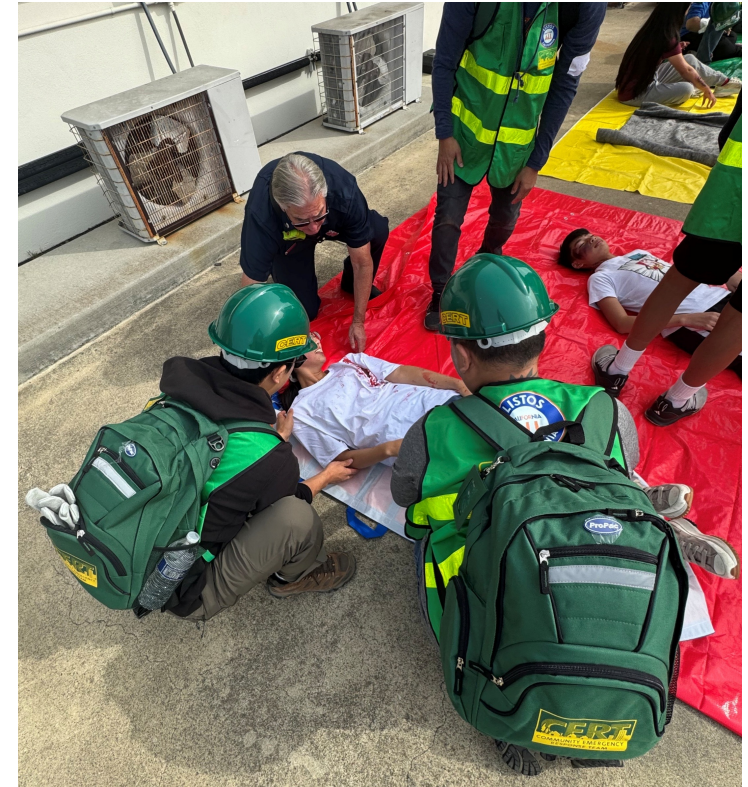
PM 4-5



Head-to-Toe Assessment



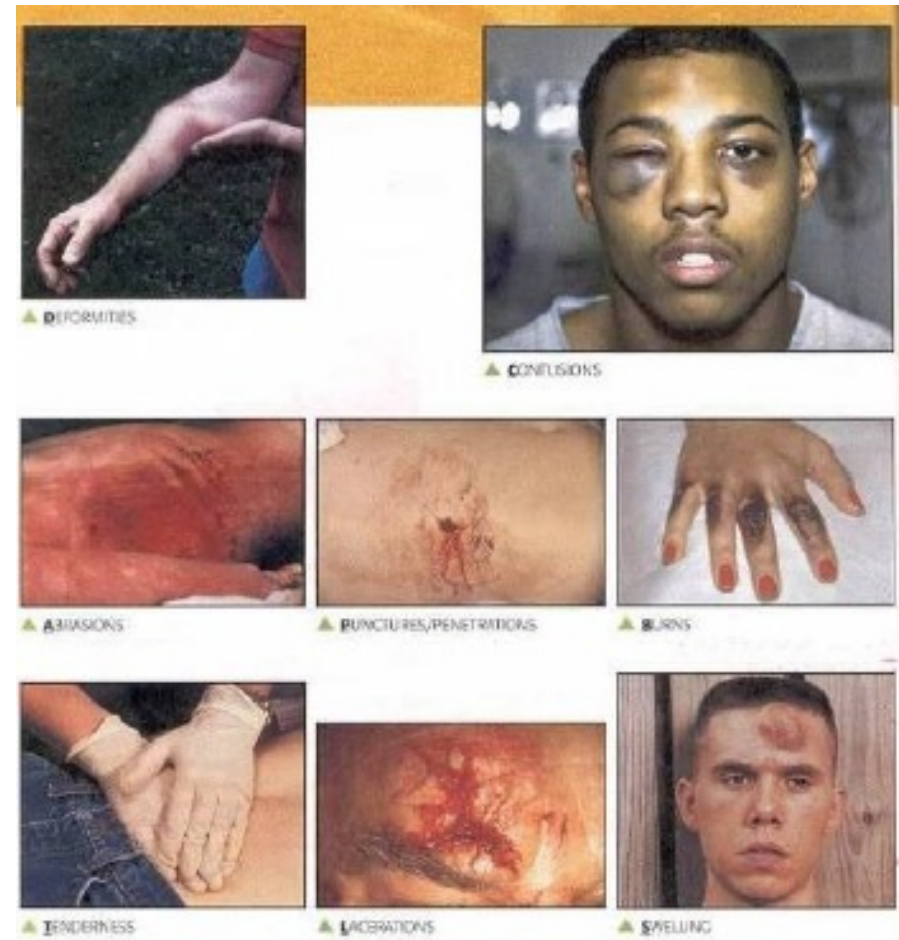
- Objectives of head-to-toe assessment:
 - Determine extent of injuries
 - Determine type of treatment needed
 - Document injuries



DCAP-BTLS



- Deformities
- Contusions
- Abrasions
- Punctures
- Burns
- Tenderness
- Lacerations
- 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



PM 4-8



Order of Assessment



1. Head
2. Neck
3. Shoulders
4. Chest
5. Arms
6. Abdomen
7. Pelvis
8. Legs
9. Back (if no suspected neck/spinal injury)



PM 4-8



Closed-Head, Neck, Spinal Injuries



- If injuries to the head or spine are suspected, **do no harm**
 - Minimize movement of head and neck while treating life-threatening conditions
- If survivors exhibit signs or are found under heavy debris, treat them as having a closed-head, neck, or spinal injury



PM 4-8



Documentation



CERT Medical Treatment Area Patient Tracking Log



Incident Name:		Date:	Scribe / Team:	Treatment Area Name / Location:			Page #: of
Time In:	Name/Description:	Triage Color:	Condition/Injuries:	Treatment Provided:	Brought By:	Disposition:	Time Out:
		☐ RED ☐ YELLOW ☐ GREEN ☐ BLACK					
		☐ RED ☐ YELLOW ☐ GREEN ☐ BLACK					
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Record each patient upon arrival to the Treatment Area. Update triage, condition, treatment, and disposition as changes occur.
Transfer this record to responding Fire/EMS during handoff. Direct questions to your Team Leader or the CERT Coordinator.

FOR OFFICIAL USE ONLY



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
- Keep dressings sterile
- Wash areas that come in contact with body fluids



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



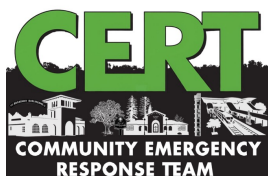
- Boil water for 1 minute
- Water purification tablets
- Non-perfumed liquid bleach
 - 8 drops/gal of water
 - 16 drops/gal if water is cloudy
 - Let stand for 30 minutes before use



Unit Summary



- During a mass casualty incident, CERT volunteers should:
 - Identify self as CERT volunteer and give agency affiliation
 - Assess and provide life-saving interventions
 - Provide responders with detailed informationCommunication is key
 - First responders may establish a central treatment location or multiple at different incident sites
- Treatment areas will take into consideration safety and access to resources



PM 4-13



Unit Summary Cont'd



- Head-to-toe assessments should be:
 - Hands-on and verbal
 - Conducted in the same way each time
- To safeguard public health, maintain proper hygiene and sanitation, and purify water



Homework Assignment



- Read unit to be covered in next session
- Practice complete head-to-toe assessment on friend or family member



PM 4-13

