

Disaster Medical Operations — Part 1



CERT Basic Training Unit 3

Assumptions

- Need for CERT members to learn disaster medical operations is based on two assumptions:
 - Number of survivors could exceed local capacity for treatment
 - Survivors will assist others
 - They will do whatever they know how to do
 - They need to know lifesaving first aid or post-disaster survival techniques

Importance of Quick Action

- Phase 1: Death within minutes, result of severe trauma
- Phase 2: Death within several hours, result of excessive bleeding
- Phase 3: Death in several days or weeks, result of infection

CERT Training

- Treatment for life-threatening conditions
 - Airway obstruction, bleeding, shock
- Treatment for other, less urgent conditions

*Provide greatest good for greatest number
by conducting simple triage
and rapid treatment*

START

- S**T**art = Simple Triage
 - Survivors sorted based on priority of treatment

- s**t**ART = And Rapid Treatment
 - Rapid treatment of injuries assessed and prioritized in first phase

Unit Objectives

- Identify “killers”
- Apply techniques for opening airway, controlling bleeding, and treating for shock
- Conduct triage under simulated disaster conditions

Unit Topics

- Treating life threatening injuries
- Triage



Three “Killers”

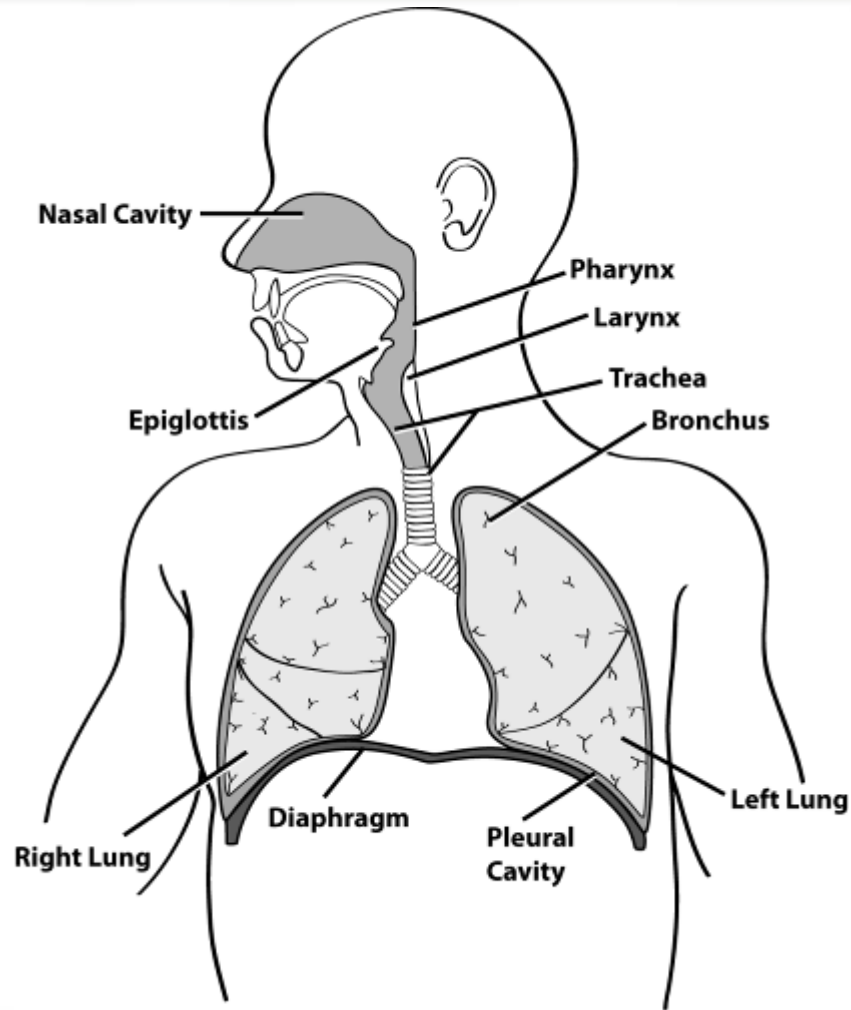
- Emergency medicine “killers”
 - Airway obstruction
 - Bleeding
 - Shock
- First priority of medical operations:
 - Open airway
 - Control excessive bleeding
 - Treat for shock

How to Approach a Survivor

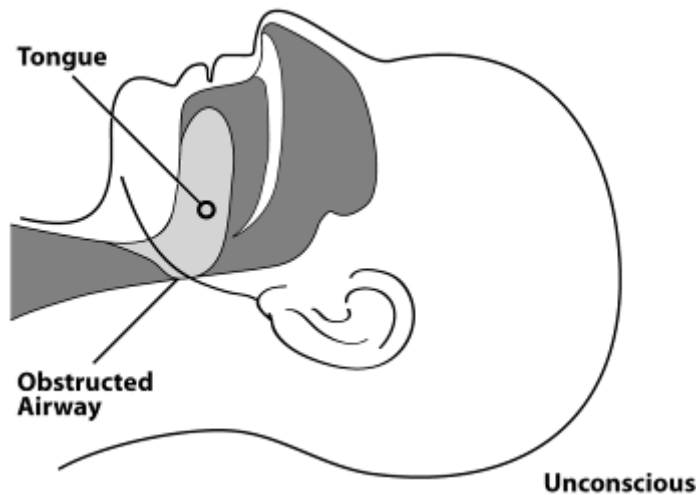
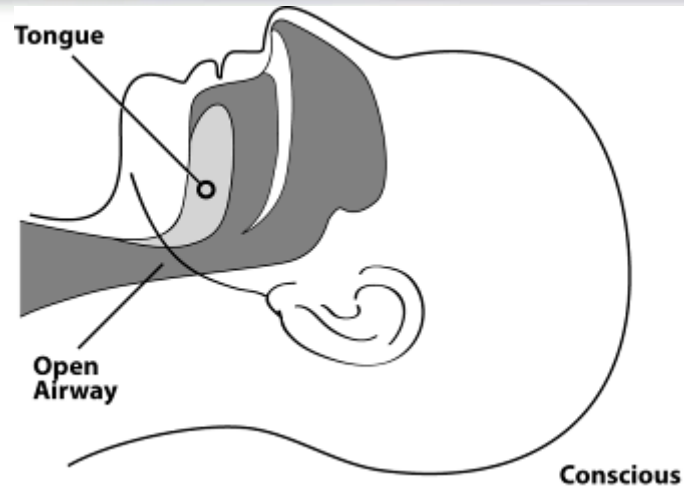
- Be sure survivor can see you
- Identify yourself
 - Your name and name of your organization
- Request permission to treat, if possible
- Respect cultural differences



Open the Airway



Open vs. Obstructed Airway



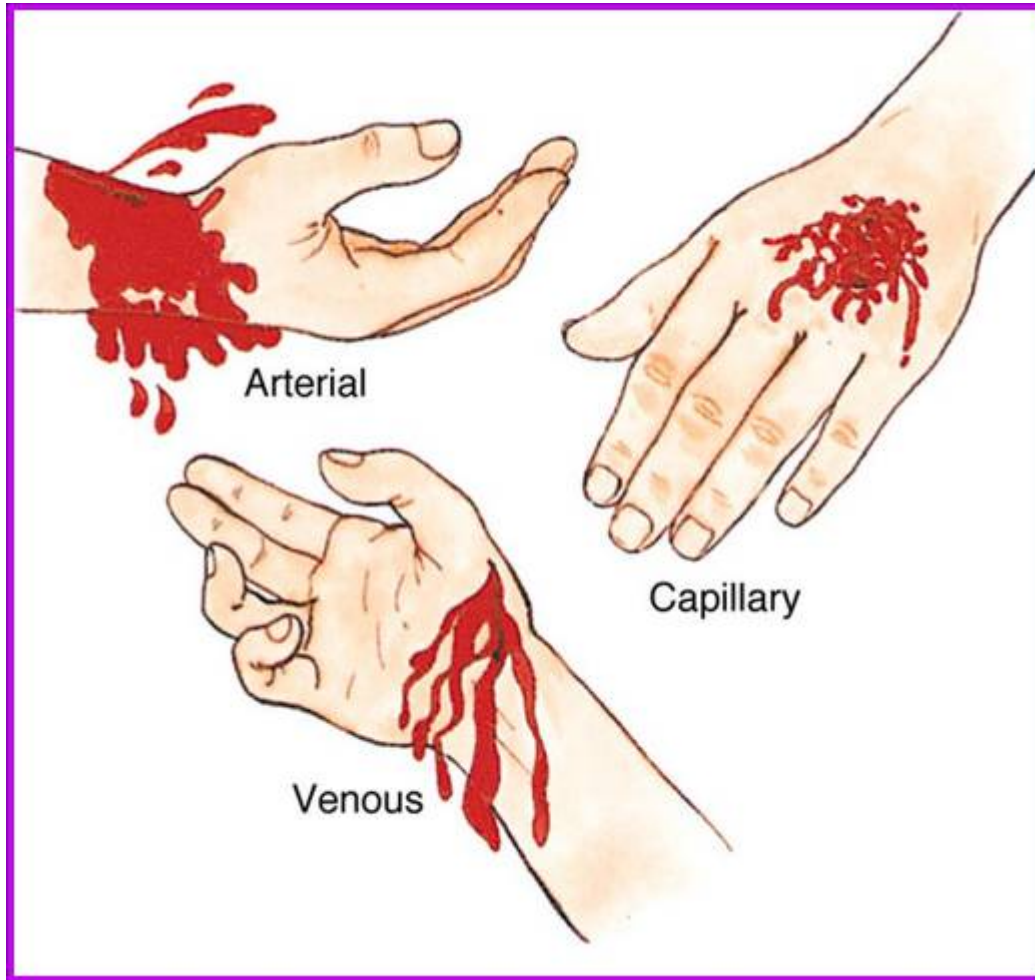
Head-Tilt/Chin-Lift Method



Types of Bleeding - 1

- Arterial bleeding
 - Bleeding from artery spurts
- Venous bleeding
 - Bleeding from vein flows
- Capillary bleeding
 - Bleeding from capillaries oozes

Types of Bleeding - 2



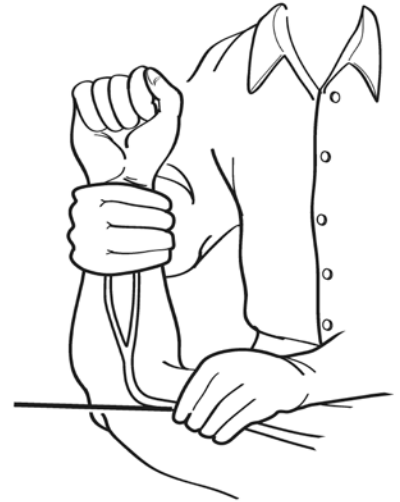
Control Bleeding

- 3 main methods for controlling bleeding:
 - Direct pressure
 - Elevation
 - Pressure points

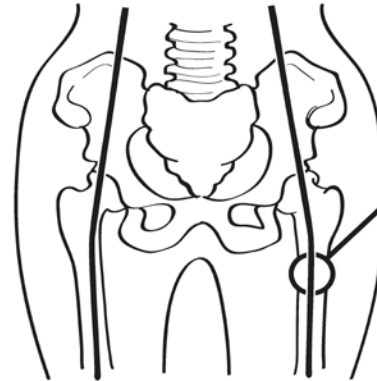


Pressure Points

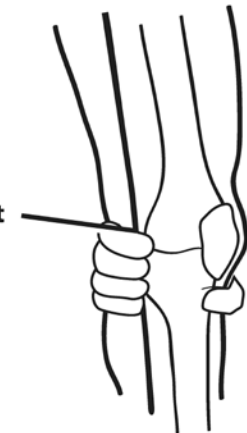
Brachial Pressure Point
just above the elbow



Femoral Pressure Point
in the Upper thigh



Popliteal Pressure Point
behind the knee



Shock

- Result of ineffective circulation of blood
- Remaining in shock will lead to death of:
 - Cells
 - Tissues
 - Entire organs

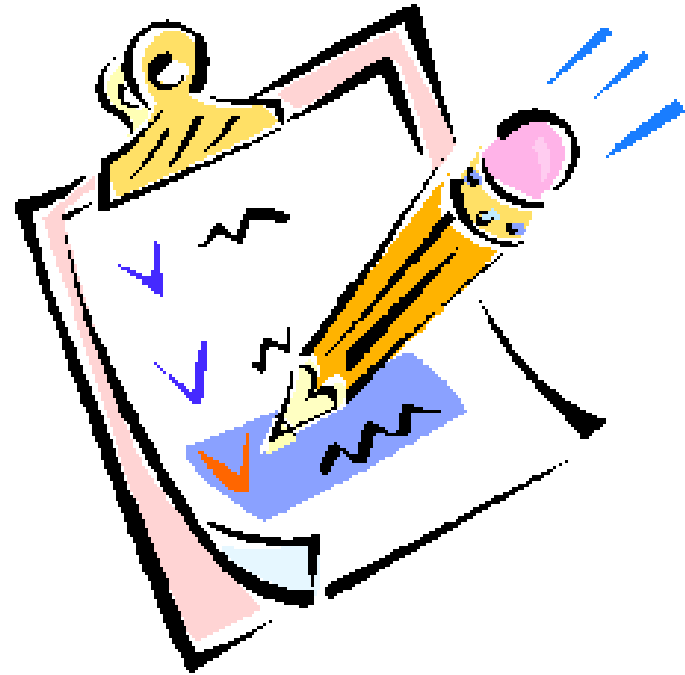


Recognizing Shock

- Main signs of shock
 - Rapid and shallow breathing
 - Capillary refill of greater than 2 seconds
 - Failure to follow simple commands, such as “Squeeze my hand”
- Symptoms of shock are easily missed...
pay careful attention to your patient!

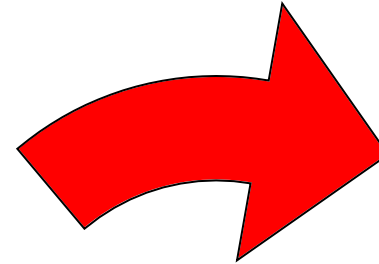
Responding to Mass Casualty Event

- Have a plan
- Follow that plan
- Document your actions throughout

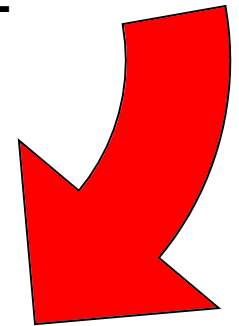
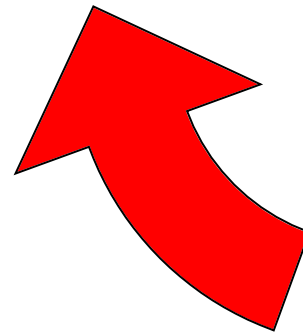


CERT Sizeup

1. Gather Facts
2. Assess Damage
3. Consider Probabilities
4. Assess Your Situation
5. Establish Priorities
6. Make Decisions
7. Develop Plan of Action
8. Take Action
9. Evaluate Progress



REMEMBER:
CERT SIZEUP IS A
CONTINUAL
PROCESS



What Is Triage?

- Process for managing mass casualty event
 1. Survivors are evaluated
 2. Survivors are sorted by urgency of treatment needed
 3. Survivors are set up for immediate or delayed treatment

Triage

- Immediate (I): Survivor has life-threatening injuries (airway, bleeding, or shock)
- Delayed (D): Injuries do not jeopardize survivor's life; treatment can be delayed
- Minor (M): Walking wounded and generally ambulatory
- Dead (DEAD): No respiration after two attempts to open airway



Rescuer Safety During Triage

- If hazmat or terrorist event is suspected, CERT members DO NOT respond
 - Evacuate as safely as possible
- ALWAYS wear PPE:
 - Helmet
 - Goggles
 - N95 mask
 - Work gloves
 - Sturdy shoes or boots
 - Non-latex exam gloves

Triage Process

- Step 1: Stop, Look, Listen, and Think
- Step 2: Conduct voice triage
- Step 3: Start where you stand; follow systematic route
- Step 4: Evaluate each survivor and tag
- Step 5: Treat “I” survivors immediately
- Step 6: Document triage results

Step 4: Triage Evaluation

- Check airway and breathing
- Check circulation and bleeding
- Check mental status

Triage Pitfalls

- No team plan, organization, or goal
- Indecisive leadership
- Too much focus on one injury
- Treatment (rather than triage) performed



Unit Summary

- You should now be able to:
 - Identify 3 “killers”
 - Apply techniques for opening the airway, controlling bleeding, and treating for shock
 - Conduct triage under simulated disaster conditions



Homework Assignment

1. Read unit to be covered in next session
2. Bring necessary supplies for the next session
3. Wear appropriate clothes for the next session