
UNIT 7: DISASTER PSYCHOLOGY

In this unit you will learn about:

- **Disaster Psychology:** The psychological impact of a disaster on rescuers and victims and how to provide “psychological first aid.”
- **Caring for Yourself, Your Buddy, and Victims:** Steps one can take individually and as part of a CERT before, immediately following, and after a disaster.

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INTRODUCTION AND UNIT OVERVIEW

CERT members might see and hear things during a disaster that are unpleasant and uncomfortable.

CERT members prepare themselves for their role during and following a disaster by learning about the possible impact of disasters on them and others, emotionally and physically. This knowledge helps CERT members understand and manage their reactions to the event and to work better with others.

Remember what you have learned about team organization. Team organization concepts can help you both operationally and psychologically. Working together and looking out for each other are important aspects of successful teams.

Psychological first aid is not therapy; rather, it is a set of techniques to provide emotional intervention during field operations. The techniques covered in this unit will help you manage personal situations so that the needs of all survivors, including victims and CERT members, can be met.

UNIT OBJECTIVES

At the end of this unit, you should be able to:

- Describe the disaster and post-disaster emotional environment for victims and rescuers.
- Describe the steps that rescuers can take to relieve their own stress and that of other disaster survivors.

UNIT TOPICS

The unit will provide you with an understanding of the following components of psychological first aid:

- Disaster Trauma
- Team Well-Being
- Working with Survivors' Trauma

DISASTER TRAUMA

During a disaster, you may see and hear things that will be extremely unpleasant.

Direct psychological trauma could result from:

- Your own personal losses
- Working in your neighborhood
- Assisting neighbors, friends, coworkers who have been injured
- Not feeling safe and secure

Vicarious trauma, which is also referred to as compassion fatigue or secondary victimization, is a natural reaction to exposure to a survivor's trauma. A person who identifies too strongly with a survivor may take on that survivor's feelings. Vicarious trauma is an "occupational hazard" for helpers.

Taking on the survivors' feelings as your own can affect your ability to do your job as a rescuer and can also have longer term impact. Taking ownership of others' problems will compound your own stress and impact your overall effectiveness.

Be alert to signs of disaster trauma in yourself, as well as in disaster victims and other survivors, such as fellow CERT members, so that you can take steps to alleviate stress.

DISASTER TRAUMA (CONTINUED)

POSSIBLE PSYCHOLOGICAL SYMPTOMS

Some of the types of disaster-related psychological and physiological responses that you may experience or observe others experiencing are:

- Irritability or anger
- Self-blame or the blaming of others
- Isolation and withdrawal
- Fear of recurrence
- Feeling stunned, numb, or overwhelmed
- Feeling helpless
- Mood swings
- Sadness, depression, and grief
- Denial
- Concentration and memory problems
- Relationship conflicts/marital discord

POSSIBLE PHYSIOLOGICAL SYMPTOMS

- Loss of appetite
- Headaches or chest pain
- Diarrhea, stomach pain, or nausea
- Hyperactivity
- Increase in alcohol or drug consumption
- Nightmares
- The inability to sleep
- Fatigue or low energy

TEAM WELL-BEING

There is a range of actions that can be taken before, during, and after an incident to help manage the emotional impact of disaster response work.

Knowing in advance the possible psychological and physiological symptoms of disaster trauma that are covered in this unit is one step in managing the impact.

Some other aspects of stress management for CERT responders include actions that CERT members can take for themselves and actions that CERT leaders can take during a response.

WAYS TO REDUCE YOUR OWN STRESS

Only you know what reduces stress within yourself and expending the effort required to find personal stress reducers is worthwhile before an incident occurs.

You can take the following preventive steps in your everyday life:

- Get enough sleep.
- Exercise regularly.
- Eat a balanced diet.
- Balance work, play, and rest.
- Allow yourself to receive as well as give; you should remember that your identity is broader than that of a helper.
- Connect with others.
- Use spiritual resources.

In addition to preventive steps, you should explain to your loved ones and friends how to support you when you return from a disaster area.

- Listen when you want to talk.
- Don't force you to talk if you don't want to.

You may also want to share with your loved ones and friends the information on possible disaster-related psychological and physiological symptoms discussed earlier.

TEAM WELL-BEING (CONTINUED)

HOW TEAM LEADERS REDUCE STRESS DURING THE INCIDENT

There are steps that CERT leaders can take to reduce the stress on rescue workers before, during, and after an incident:

- Brief CERT personnel before the effort begins on what they can expect to see and what they can expect in terms of emotional response in the survivors and themselves.
- Emphasize that the CERT is a team. Sharing the workload and emotional load can help defuse pent-up emotions.
- Encourage rescuers to rest and regroup so that they can avoid becoming overtired.
- Direct rescuers to take breaks away from the incident area, to get relief from the stressors of the effort.
- Encourage rescuers to eat properly and maintain fluid intake throughout the operation. Explain that they should drink water or other electrolyte-replacing fluids and avoid drinks with caffeine or refined sugar.
- Arrange for a debriefing 1 to 3 days after the event in which workers describe what they encountered and express their feelings about it in a more indepth way.
- Rotate teams for breaks or new duties (i.e., from high-stress to low-stress jobs). Encourage team members to talk with each other about their experiences. This is very important for their psychological health.
- Phase out workers gradually. Gradually phase them from high- to low-stress areas of the incident. For example, do not stand down and send home a team member that has just completed a high-stress operation; instead, assign them a low-stress responsibility so they can decompress gradually.
- Conduct a brief discussion (defusing) with rescue workers after their shift during which they can describe what they encountered and express their feelings about it.

TEAM WELL- BEING (CONTINUED)

CRITICAL INCIDENT STRESS DEBRIEFING (CISD)

A critical incident stress debriefing, or CISD, is one type of intervention that may be helpful for a CERT. CISD is one of several components of critical incident stress management (CISM). CISM is a short-term healing process that focuses on helping people deal with their trauma one incident at a time. It is intended to lessen the chance of someone experiencing post-traumatic stress disorder and get them back to their daily lives as quickly as possible.

CERT leaders may invite a mental health professional trained in critical incident stress management (CISM) to conduct a critical incident stress debriefing (CISD).

CISD is a formal group process held between 1 to 3 days after the event. It is designed to help emergency services personnel and volunteers cope with a traumatic event.

CISD would not be used as a stand-alone intervention but would be used in conjunction with other types of intervention, such as defusing, debriefing, and following up with the individual.

A CISD has seven phases:

1. Introductions and a description of the process, including assurance of confidentiality
2. Review of the factual material about the incident
3. Sharing of initial thoughts and feelings about the incident
4. Sharing of emotional reactions to the incident
5. Review of the symptoms of stress experienced by the participants
6. Instruction about normal stress reactions
7. Closing and further needs assessment

Participation in a CISD should be voluntary.

Your agency may assist in arranging CISD services for the CERT. If CISD is unavailable through your agency, you should contact the Red Cross or a community mental health agency to schedule a CISD.

While it may be beneficial, pastoral counseling is not a substitute for disaster counseling from a professional.

WORKING WITH SURVIVORS' TRAUMA

Crisis survivors can go through a variety of emotional phases, and as a rescuer, you should be aware of what you may encounter

- In the impact phase, survivors generally do not panic and may, in fact, show no emotion.
- In the inventory phase, which immediately follows the event, survivors assess damage and try to locate other survivors. During this phase, routine social ties tend to be discarded in favor of the more functional relationships required for initial response activities (e.g., search and rescue).
- In the rescue phase, as emergency services personnel (including CERTs) respond, survivors are willing to take direction from these groups without protest. This is why CERT identification (helmets, vests, etc.) is important.
 - Survivors are likely to be very helpful and compliant during the rescue phase.
- In the recovery phase, the survivors appear to pull together against their rescuers, the emergency services personnel.
 - Survivors may express anger or blame to the rescuers as they transition to the recovery phase.
 - You should expect that survivors will show psychological effects from the disaster — and you should expect that some of the reaction will be directed toward you.

TRAUMATIC CRISIS

A crisis is an event that is experienced or witnessed in which people's ability to cope is overwhelmed:

- Actual or potential death or injury to self or others
- Serious injury
- Destruction of their homes, neighborhood, or valued possessions
- Loss of contact with family members or close friends

WORKING WITH SURVIVORS' TRAUMA (CONTINUED)

Traumatic stress may affect:

- Cognitive functioning. Those who have suffered traumatic stress may act irrationally, in ways that are out of character for them, and have difficulty making decisions. They may have difficulty sharing or retrieving memories.
- Physical health. Traumatic stress can cause a range of physical symptoms — from exhaustion to health problems.
- Interpersonal relationships. Those who survive traumatic stress may undergo temporary or long-term personality changes that make interpersonal relationships difficult.

MEDIATING FACTORS

The strength and type of personal reaction to trauma vary depending on:

- The person's prior experience with the same or a similar event; the emotional effect of multiple events can be cumulative, leading to greater stress reactions.
- The intensity of the disruption in the survivors' lives; the more the survivors' lives are disrupted, the greater their psychological and physiological reactions may become.
- The meaning of the event to the individual; the more catastrophic the victim perceives the event to be to him or her personally, the more intense his or her stress reaction will be.
- The emotional well-being of the individual and the resources (especially social) that he or she has to cope; people who have had other recent traumas may not cope with additional stresses.
- The length of time that has elapsed between the event's occurrence and the present; the reality of the event takes time to "sink in."

CERT members can't know — and should never assume to know — what someone is thinking or feeling. Keep the phases in mind.

You should not take the survivors' surface attitudes personally. Rescuers may expect to see a range of responses that will vary from person to person, but the responses they see will be part of the psychological impact of the event — and probably will not relate to anything that the CERTs have or have not done.

WORKING WITH SURVIVORS' TRAUMA (CONTINUED)

STABILIZING VICTIMS

The goal of onscene psychological intervention on the part of CERT members should be to stabilize the incident scene by stabilizing individuals. While any medical needs must be addressed first, you can provide psychological intervention in the following ways:

- Observe individuals to determine their level of responsiveness and whether they pose a danger to themselves or to others.
- Get uninjured people involved in helping. Engaging survivors in focused activity helps them cope, so give them constructive jobs to do such as organizing supplies. This strategy is especially effective for survivors who are being disruptive.
- Help survivors connect to natural support systems, such as family, friends, or clergy.
- Provide support by:
 - Listening to them talk about their feelings and their physical needs. Victims often need to talk about what they've been through — and they want someone to listen to them.
 - Empathizing. Caring responses show victims that someone else shares their feelings of pain and grief.

BEING AN EMPATHETIC LISTENER

Being an empathetic listener requires the listener to listen and to let the victim talk.
Good listeners will:

- Put him- or herself in the speaker's shoes in order to better understand the speaker's point of view. Draw upon past experiences, or try to imagine how the speaker is feeling. In order to limit the effects of vicarious trauma, be careful not to completely take on the speaker's feelings.
- Listen for meaning, not just words, and pay close attention to the speaker's nonverbal communication, such as body language, facial expressions, and tone of voice.
- Paraphrase the speaker periodically to make sure that you have fully understood what the speaker has said and to indicate to the speaker that you are listening. This reinforces the communication process.

WORKING WITH SURVIVORS' TRAUMA (CONTINUED)

Survivors that show evidence of being suicidal, psychotic, or unable to care for themselves should be referred to mental health professionals for support. (This will be infrequent in most groups of survivors.)

WHAT NOT TO SAY

When providing support, you should avoid saying the following phrases. On the surface, these phrases may be meant to comfort the survivors, but they can be misinterpreted.

- "I understand." In most situations we cannot understand unless we have had the same experience.
- "Don't feel bad." The survivor has a right to feel bad and will need time to feel differently.
- "You're strong" or "You'll get through this." Many survivors do not feel strong and question if they will recover from the loss.
- "Don't cry." It is okay to cry.
- "It's God's will." With a person you do not know, giving religious meaning to an event may insult or anger the person.
- "It could be worse," "At least you still have ...", or "Everything will be okay." It is up to the individual to decide whether things could be worse or if everything can be okay.

Rather than provide comfort, these types of responses could elicit a strong negative response or distance the survivor from the listener.

It is okay to apologize if the survivor reacts negatively to something that was said.

WORKING WITH SURVIVORS' TRAUMA (CONTINUED)

MANAGING THE DEATH SCENE

One unpleasant task that CERT members may face is dealing with a victim who dies while under the team's care. The guidelines below (T.W. Dietz, 2001; J.M. Tortorici Luna, 2002) are useful for dealing with this situation:

- Cover the body; treat it with respect. Wrap mutilated bodies tightly.
- If the person has died while at the treatment area, move the body to your team's temporary morgue. (If the person was tagged as "dead" during triage, do not remove from the incident area.)
- Follow local laws and protocols for handling the deceased.
- Talk with local authorities to determine the plan.

INFORMING FAMILY AND FRIENDS OF A DEATH

In some cases, family members or friends may not know of the death of their loved one, and CERT members may have to tell them. In this situation, CERT members should:

- Separate the family members and friends from others in a quiet, private place.
- Have the person(s) sit down, if possible.
- Make eye contact and use a calm, kind voice.
- Use the following words to tell the family members and friends about the death: "I'm sorry, but your family member has died. I am so sorry." It is okay to reference the deceased person's name or their relation to the survivor if you know it.
- Let the family and friends grieve.

UNIT SUMMARY

- During a disaster, rescuers may be exposed to things that are extremely unpleasant or uncomfortable. These experiences will be stressful and may be traumatic.
 - Over-identifying with survivors may subject rescuers to vicarious trauma.
 - There are both psychological and physiological symptoms of trauma that may be observed in victims and rescuers after a disaster.
 - CERT leaders can take steps to reduce stress on rescue workers before, during, and after an incident.
 - CERT members can take steps to personally reduce stress.
- The critical incident stress debriefing (CISD) is one component of critical incident stress management. CISD has seven phases and is an intervention for dealing with trauma.
- Research shows that survivors go through distinct emotional phases following a disaster.
 - Impact phase
 - Inventory phase
 - Rescue phase
 - Recovery phase
- Traumatic stress may affect cognitive functioning, physical health, and interpersonal reactions.
 - Different people react differently to traumatic stress based on a variety of mediating factors.
 - A traumatic crisis occurs when a person's ability to cope is overwhelmed.

UNIT SUMMARY (CONTINUED)

- The goal of onscene psychological intervention is to stabilize the incident by stabilizing individuals.
- Provide support for survivors by being an empathetic listener.

UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

In this module you will learn about:

- **Life-Threatening Conditions:** How to recognize and treat an airway obstruction, bleeding, and shock.
- **Triage:** Principles of triage and how to conduct triage evaluations.

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INTRODUCTION AND UNIT OVERVIEW

The need for CERTs to learn disaster medical operations is based on two assumptions:

- The number of victims could exceed the local capacity for treatment.
- Survivors will attempt to assist others. As CERT members you will need to know lifesaving first aid or post-disaster survival techniques.

CERT medical operations can play a vital role in limiting deaths from trauma. The phases of death from trauma are:

1. Phase 1: Death within minutes as a result of overwhelming and irreversible damage to vital organs
2. Phase 2: Death within several hours as a result of excessive bleeding
3. Phase 3: Death in several days or weeks as a result of infection or multiple-organ failure (i.e., complications from an injury)

These phases underlie why disaster medical operations are conducted as they are (by identifying those with the most serious injuries as soon as possible and treating those with life-threatening injuries first). Some disaster victims in the second and third phases of death could be saved by providing simple medical care.

In a disaster there may be more victims than rescuers, and assistance from medical professionals may not be immediately available. CERT personnel are trained to be part of disaster medical operations and to provide:

- Treatment for life-threatening conditions — airway obstruction, bleeding, and shock — and for other, less urgent conditions
- The greatest good for the greatest number of people by conducting simple triage and rapid treatment

INTRODUCTION AND UNIT OVERVIEW (CONTINUED)

START

Simple Triage And Rapid Treatment (START) is a critical concept for initially dealing with casualties in a disaster.

History has proven that 40% of disaster victims can be saved with simple (rapid!) medical care. START is based on the premise that a simple medical assessment and rapid treatment based on that assessment will yield positive — often lifesaving — results.

STart = Simple Triage: The first phase of START is the process by which victims are sorted based on injury and priority of treatment.

stART = And Rapid Treatment: The second phase of START consists of rapid treatment of the injuries assessed and prioritized in the first phase.

All CERT participants are encouraged to take basic first aid and CPR training; however, if you have taken first aid courses you will need to understand that CERT covers disaster medical operations where time is critical to conduct triage and treat many victims. CPR is not taught in this course because it is labor intensive and not appropriate when there are many victims and professional help will be delayed.

UNIT OBJECTIVES

At the end of this unit, you should be able to:

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

Remember, the goal of disaster medical operations is to do the greatest good for the greatest number. In a disaster with many victims, time will be critical. CERT members will need to work quickly and efficiently to help as many victims as possible.

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

INTRODUCTION AND UNIT OVERVIEW (CONTINUED)

UNIT TOPICS

This session will introduce you to the principles of triage, including treating the “three killers”: airway obstruction, excessive bleeding, and shock.

Throughout the unit, you will have opportunities to practice the treatment techniques and, at the end of the unit, you will have the opportunity to conduct triage evaluations in a simulated disaster.

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

TREATING LIFE-THREATENING CONDITIONS

In emergency medicine, airway obstruction, bleeding, and shock are “killers” because without treatment they will lead to death. The first priority of medical operations is to attend to those potential killers by:

- Opening the airway
- Controlling excessive bleeding
- Treating for shock

This section will train you to recognize the “killers” by recognizing their symptoms and their effects on the body.

APPROACHING THE VICTIM

Rescuers must first ensure that they are wearing safety equipment:

- Helmet
- Goggles
- Gloves
- N95 mask
- Sturdy shoes or boots
- Non-latex exam gloves

A good time-saving technique is to wear non-latex exam gloves under your work gloves. Then, when you find a victim, you can remove your work gloves and are ready to work with the victim.

Remember to use non-latex exam gloves to prevent potential reaction by individuals who are allergic to latex.

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

There are several steps to take when approaching a victim. When ready to approach a victim:

1. If the victim is conscious, be sure he or she can see you.
2. Identify yourself by giving your name and indicating the organization with which you are affiliated.
3. ALWAYS request permission to treat an individual. If the individual is unconscious, he or she is assumed to have given “implied consent,” and you may treat him or her. Ask a parent or guardian for permission to treat a child, if possible.
4. Whenever possible, respect cultural differences. For example, in some Muslim traditions it is customary to address the male when requesting permission to treat a female member of his family.
5. Remember, all medical patients are legally entitled to confidentiality (HIPAA). When dealing with victims, always be mindful and respectful of the privacy of their medical condition.

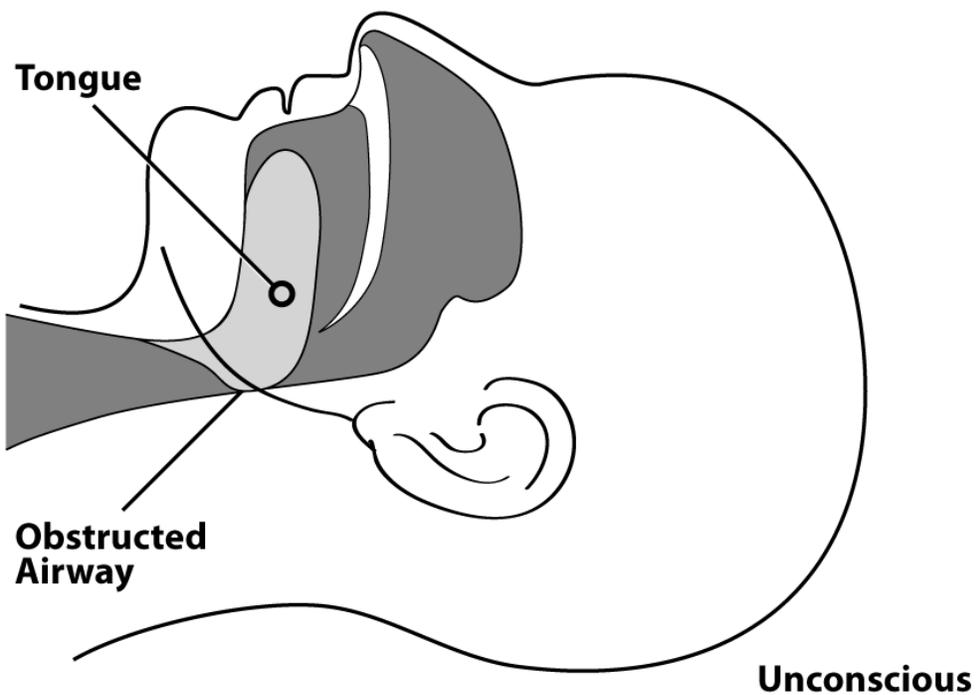
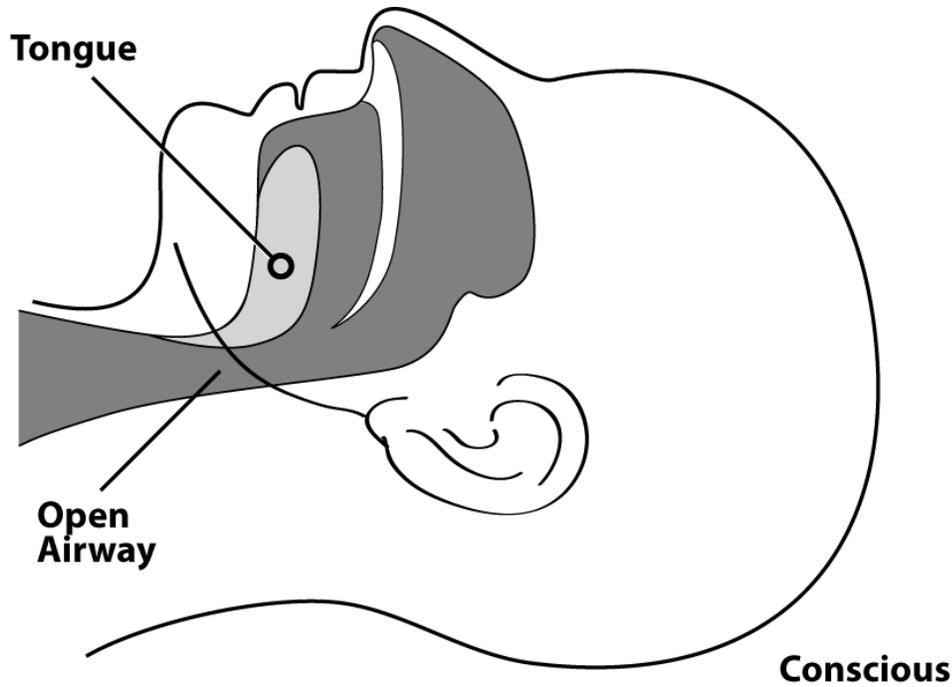
OPENING THE AIRWAY

The respiratory system includes the following components:

- Lung
- Bronchus
- Larynx
- Pharynx
- Nasal Cavity
- Trachea

In an unconscious or semiconscious victim, especially one positioned on his or her back, the most common airway obstruction is the tongue. The tongue — which is a muscle — may relax and block the airway. A victim with a suspected airway obstruction must be checked immediately for breathing and, if necessary, the airway must be opened.

Airway Obstructed by the Tongue



COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

THE HEAD-TILT/CHIN-LIFT METHOD

When an airway obstruction is suspected because a victim is unconscious or semiconscious, CERT members should clear the airway using the Head-Tilt/Chin-Lift method.

In addition to opening the airway, this method causes little or no cervical-spine manipulation because only the head is manipulated.

Proper technique is always important in opening an airway, but so is speed.

Head-Tilt/Chin-Lift Method for Opening an Airway

Step	Action
1	At an arm's distance, make contact with the victim by touching the shoulder and asking, "Can you hear me?" Speak loudly, but do not yell.
2	If the victim does not or cannot respond, place the palm of one hand on the forehead.
3	Place two fingers of the other hand under the chin and tilt the jaw upward while tilting the head back slightly.
4	Place your ear close to the victim's mouth, looking toward the victim's feet, and place a hand on the victim's abdomen.
5	<i>Look</i> for chest rise.
6	<i>Listen</i> for air exchange. <ul style="list-style-type: none">▪ Document abnormal lung sounds (wheezing, gasping, gurgling, etc.).
7	<i>Feel</i> for abdominal movement.
8	If breathing has been restored, the clear airway must be maintained by keeping the head tilted back. If breathing has not been restored, repeat steps 2-7.

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

EXERCISE: OPENING THE AIRWAY

Purpose: Practice using the Head-Tilt/Chin-Lift method of opening the airway.

Be sure to use the steps in the Head-Tilt/Chin-Lift method.

MAINTAINING THE AIRWAY

If breathing has been restored, the clear airway still must be maintained by keeping the head tilted back. One option is to ask another person to hold the head in place; even another victim with minor injuries could do this. The airway also can be maintained by placing soft objects under the victim's shoulders to elevate the shoulders slightly and keep the airway open.

Remember that part of your mission is to do the greatest good for the greatest number of people. For that reason, if breathing is not restored on the first try using the Head-Tilt/Chin-Lift method, CERT members should try again using the same method. If breathing cannot be restored on the second try, CERT members must move on to the next victim.

You should always be concerned with head, neck, or spinal injuries (all of which are common in structural collapses). Used properly, the Head-Tilt/Chin-Lift method for opening an airway causes little spinal manipulation because the head pivots on the spine.

Remember the importance of opening the airway as quickly as possible. When treating the three killers, checking for airway obstruction is always first.

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

CONTROLLING BLEEDING

Uncontrolled bleeding initially causes weakness. If bleeding is not controlled, the victim will go into shock within a short period of time and finally will die. An adult has about 5 liters of blood. Losing 1 liter can result in death.

There are three types of bleeding and the type can usually be identified by how fast the blood flows:

- Arterial bleeding. Arteries transport blood under high pressure. Blood coming from an artery will spurt.
- Venous bleeding. Veins transport blood under low pressure. Blood coming from a vein will flow.
- Capillary bleeding. Capillaries also carry blood under low pressure. Blood coming from capillaries will ooze.

There are three main methods for controlling bleeding:

- Direct pressure
- Elevation
- Pressure points

Direct pressure and elevation will control bleeding in 95% of cases.

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

Procedures for Controlling Bleeding

Method	Procedures
Direct Pressure	<ul style="list-style-type: none">▪ Place direct pressure over the wound by putting a clean dressing over the wound and pressing firmly.▪ Maintain pressure on the dressing over the wound by wrapping the wound <u>firmly</u> with a pressure bandage and tying with a bow.
Elevation	<ul style="list-style-type: none">▪ Elevate the wound above the level of the heart.
Pressure Points	<ul style="list-style-type: none">▪ Put pressure on the nearest pressure point to slow the flow of blood to the wound. Use the:<ul style="list-style-type: none">• Brachial point for bleeding in the arm• Femoral point for bleeding in the leg• Popliteal point for bleeding in the lower leg

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

DIRECT PRESSURE

This is the procedure for controlling bleeding through direct pressure:

- Step 1: Place direct pressure over the wound by putting a clean dressing over it and pressing firmly.
- Step 2: Maintain pressure on the dressing over the wound by wrapping firmly with a bandage.

Direct pressure and elevation can take 5 to 7 minutes to stop the bleeding completely. The use of a dressing and pressure bandage allows the rescuer to move on to the next victim.

A pressure bandage should be tied with a bow, so that it can be loosened — rather than cut — to examine the wound, and then retied. This procedure helps to conserve supplies and saves time. The bandage maintains the direct pressure needed to stop the bleeding. CERT members continue to assess the victim's status. If the victim's limb is turning blue or becoming numb below the bandage, then it should be loosened.

ELEVATION

Elevation can be used in combination with direct pressure. Elevate the wound above the level of the heart.

The body has great difficulty pumping blood against gravity; therefore, elevating a wound above the heart will decrease blood flow and loss of blood through the wound.

PRESSURE POINTS

There are also pressure points that can be used to stem the flow of bleeding.

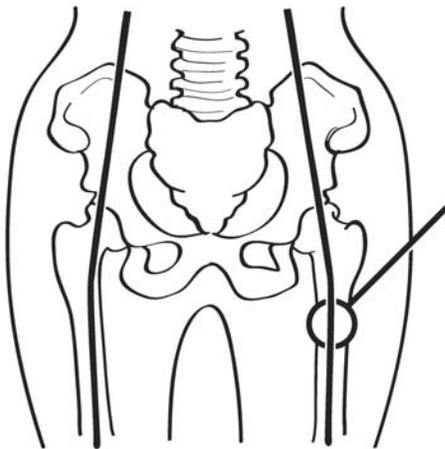
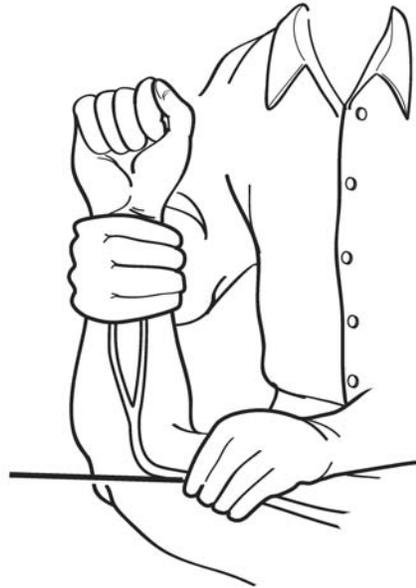
The pressure points most often used are the:

- Brachial point in the arm
- Femoral point in the leg
- Pressure point behind the knee

The pressure point to use depends on the location of the wound. The correct pressure point is between the wound and the heart.

METHODS FOR CONTROLLING BLEEDING

Brachial Pressure Point
just above the elbow



Femoral Pressure Point
in the Upper thigh

Popliteal Pressure Point
behind the knee



TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

EXERCISE: CONTROLLING BLEEDING

Purpose: This exercise will provide a chance to practice using the techniques for controlling bleeding.

Instructions:

1. After breaking into pairs, identify one person to take the role of the victim.
2. Respond as if the victim has an injury on the right forearm, just below the elbow.
3. Apply a pressure bandage and elevate the arm.
4. Repeat the process twice.
5. Swap roles and have the new rescuer complete the above steps.

TOURNIQUETS (OPTIONAL)

CERTs will use direct pressure on pressure points and elevation to manage most bleeding. However, if bleeding cannot be stopped using these methods and professionals are delayed in responding, a tourniquet may be a viable option to save a person from bleeding to death. However, a tourniquet is absolutely a last resort (life or limb) when other preferred means have failed to control bleeding in an arm or a leg.

While the use of a tourniquet is extremely rare, it may have a use when part of an extremity is amputated or crushed and bleeding cannot be stopped by any other preferred means.

- A tourniquet is a tight bandage which, when placed around a limb and tightened, cuts off the blood supply to the part of the limb beyond it.
- A tourniquet can do harm to the limb, but it can halt severe blood loss when all other means have failed and professional help will not arrive in time to help stop the bleeding before the person dies.
- Use any long, flat, soft material (bandage, neck tie, belt, or stocking). Do not use materials like rope, wire, or string that can cut into the patient's flesh.

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

- To tie a tourniquet:
 1. Place the tourniquet between the wound and the heart (for example, if the wound is on the wrist, you would tie the tourniquet around the forearm).
 2. Tie the piece of material around the limb.
 3. Place a stick, pen, ruler, or other sturdy item against the material and tie a knot around the item, so that the item is knotted against the limb.
 4. Use the stick or other item as a lever to twist the knot more tightly against the limb, tightening the bandage until the bleeding stops.
 5. Tie one or both ends of the lever against the limb to secure it and maintain pressure.
 6. Mark the patient in an obvious way that indicates that a tourniquet was used and include the time it was applied.
 7. Do not loosen a tourniquet once it has been applied.
 8. Only proper medical authorities should remove a tourniquet.

CONTROLLING BLEEDING REVIEW

The three main ways to control excessive bleeding:

- Direct pressure
- Elevation
- Pressure points

Bleeding must be controlled as quickly as possible so as not to endanger the victim's life from blood loss.

You should always wear your non-latex exam gloves, goggles, and an N95 mask as a protection against blood-borne pathogens, such as hepatitis and HIV.

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

Shock is a condition that occurs when the body is not getting enough blood flow. When blood doesn't circulate, oxygen and other nutrients are not carried to tissues and organs. Blood vessels begin to close and organs are damaged and, if left untreated, will shut down completely. Shock can worsen very rapidly.

Remaining in shock will lead to the death of:

- Cells
- Tissues
- Entire organs

The main signs of shock that CERT members should look for are:

- Rapid and shallow breathing
- Capillary refill of greater than 2 seconds
- Failure to follow simple commands, such as "Squeeze my hand"

EVALUATE BREATHING

Note if the victim's breathing is rapid and shallow, i.e., more than 30 breaths per minute.

EVALUATE CIRCULATION

One way to test for circulation is the blanch test. A good place to do the blanch test is the palm of one hand. Sometimes, a nail bed is used. The blanch test is used to test capillary refill. You should see the color return to the tested area within 2 seconds.

Because the blanch test is not valid in children, mental status should be used instead as the main indicator.

Another way to check for circulation is the radial pulse test. This is an alternative to the blanch test and can be used in the dark or where it is cold.

To perform the radial pulse test, place your middle and ring finger over the interior of the victim's wrist where the thumb meets the arm. A normal pulse rate is 60-100 beats per minute.

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

EVALUATE MENTAL STATUS

There are several ways to evaluate mental status.

- Ask, “Are you okay?”
- Give a simple command such as “Squeeze my hand.”

If you are concerned that there might be a language barrier or hearing impairment, reach out with both hands and squeeze one of the victim’s hands. The person will squeeze back if they can.

TREATING FOR SHOCK

The body will initially compensate for blood loss and mask the symptoms of shock; therefore, shock is often difficult to diagnose. It is possible — and, in fact, common — for an individual suffering from shock to be fully coherent and not complaining of pain. Pay attention to subtle clues, as failure to recognize shock will have serious consequences.

Avoid rough or excessive handling. It is important to maintain the victim’s body temperature. If necessary, place a blanket or other material under and/or over the victim to provide protection from extreme ground temperatures (hot or cold). Position the victim on his or her back and elevate the feet 6 to 10 inches above the level of the heart to assist in bringing blood to the vital organs.

Although victims who are suffering from shock may be thirsty, they should not eat or drink anything initially because they may also be nauseated.

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

Procedures for Controlling Shock

Step	Action
1	<ul style="list-style-type: none">▪ Maintain an open airway.
2	<ul style="list-style-type: none">▪ Control obvious bleeding.
3	<ul style="list-style-type: none">▪ Maintain body temperature (e.g., cover the ground and the victim with a blanket if necessary).
Notes	<ul style="list-style-type: none">▪ Avoid rough or excessive handling.▪ Do not provide food or drink.

TREATING LIFE-THREATENING CONDITIONS (CONTINUED)

EXERCISE: TREATING SHOCK

Purpose: This exercise offers you a chance to practice the steps for treating shock.

Instructions:

1. Break into the previous groups.
2. The person who was the victim first in the previous exercise will now be the rescuer first.
3. Pretend that you are in the following situation:
 - You have come upon an unconscious victim who has been bleeding profusely from a wound of the upper arm for an undetermined period of time. You have controlled the bleeding.
 - What do you need to do next?
4. Switch places and have the victim become the rescuer.

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

TRIAGE

In mass casualty events, medical personnel:

- Identify the dead and those who are too severely injured to be saved
- Send those with relatively minor injuries and wounds to a holding area to await treatment
- Identify those who would die from life-threatening injuries and treat them immediately

The term for this is triage — a French term meaning “to sort.”

During medical triage, victims’ conditions are evaluated and the victims are prioritized into four categories:

- Immediate (I): The victim has life-threatening injuries (airway, bleeding, or shock) that demand immediate attention to save his or her life; rapid, lifesaving treatment is urgent. These victims are marked with a red tag or labeled “I.”
- Delayed (D): Injuries do not jeopardize the victim’s life. The victim may require professional care, but treatment can be delayed. These victims are marked with a yellow tag or labeled “D.”
- Minor (M): Walking wounded and generally ambulatory. These victims are marked with a green tag or labeled “M.”
- Dead (DEAD): No respiration after two attempts to open the airway. Because CPR is one-on-one care and is labor intensive, CPR is not performed when there are many more victims than rescuers. These victims are marked with a black tag or labeled “DEAD.”

TRIAGE (CONTINUED)

From triage, victims are taken to the designated medical treatment area (immediate care, delayed care, or the morgue).

CERT members do not rescue those tagged DEAD. If the scene is deemed safe and it is appropriate to do so, CERT members may move the DEAD to the morgue.

It is crucial to the physical and mental well-being of disaster survivors that the morgue be placed away from the other groups. Traditionally, blue tarps are used to identify and conceal the morgue area.

RESCUER SAFETY DURING TRIAGE

If hazardous materials are present, rescuer safety is paramount. CERT members should leave the scene to avoid harm to themselves and to reduce the risk of spreading the contamination.

Rescuer safety is crucial during triage. Rescuers must wear all safety equipment, including non-latex exam gloves, goggles, a helmet, and an N95 mask when examining victims and should try to change gloves between victims. Because of limited supplies, it may not be possible to use a new pair of gloves for every victim. If this is the case, gloves may be sterilized between treating victims using 1 part bleach to 10 parts water. Your disaster kit should have a box of non-latex gloves. Bleach and potable water should also be available at the CERT's medical treatment area.

EXERCISE: REMOVING EXAM GLOVES

Purpose: This exercise will allow you to practice proper technique for removing soiled exam gloves without spreading contaminants.

Instructions:

1. Put on a pair of gloves.
2. Remove and dispose of your gloves as instructed.

TRIAGE (CONTINUED)

TRIAGE IN A DISASTER ENVIRONMENT

Here is the general procedure for CERTs to conduct triage:

- Step 1: Stop, Look, Listen, and Think. Before your team starts, stop and size up the situation by looking around and listening. Think about your safety, capability, and limitations, and decide if you will approach the situation. If you decide to proceed, quickly make a plan about your approach that all members understand.
- Step 2: Conduct voice triage. Begin by calling out, “Community Emergency Response Team. If you can walk, come to the sound of my voice.” Speak loudly and firmly. If there are survivors who are ambulatory, tag them M and direct them to a designated location. If rescuers need assistance and there are ambulatory survivors, then these survivors should be asked to provide assistance. These persons may also provide useful information about the location of the victims.
- Step 3: Start where you stand, and follow a systematic route. Start with the closest victims and work outward in a systematic fashion.
- Step 4: Evaluate each victim and tag them “I” (immediate), “D” (delayed), “M” (minor), or DEAD. Remember to evaluate the walking wounded. Remember to ASK for permission to treat if the individual is conscious.
- Step 5: Treat I victims immediately. Initiate airway management, bleeding control, and/or treatment for shock for Category I victims.
- Step 6: Document triage results for:
 - Effective deployment of resources
 - Information on the victims’ locations
 - A quick record of the number of casualties by degree of severity.

Remember that your safety is paramount during triage. It is important to wear proper protective equipment so as not to endanger your own health.

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

EVALUATING A VICTIM DURING TRIAGE

Step	Procedures
1	<p>Check airway/breathing. At an arm's distance, make contact with the victim and speak loudly. If the victim does not respond:</p> <ul style="list-style-type: none">▪ Position the airway.▪ Look, listen, and feel.▪ Check breathing rate. Abnormally rapid respiration (above 30 per minute) indicates shock. Maintain the airway and treat for shock and tag "I."▪ If below 30 per minute, then move to Step 2.▪ If the victim is not breathing after two attempts to open airway, then tag "DEAD."
2	<p>Check circulation/bleeding.</p> <ul style="list-style-type: none">▪ Take immediate action to control severe bleeding.▪ Check circulation using the blanch test (for capillary refill) or a radial pulse test.<ul style="list-style-type: none">• Press on an area of skin until normal skin color is gone. Time how long it takes for normal color to return. Treat for shock if normal color takes longer than 2 seconds to return, and tag "I."• Or check the radial pulse.<ul style="list-style-type: none">• If present, continue to step 3.• Note if the pulse is abnormal (rapid, thready, weak, etc.)• If absent, tag "I" and treat for bleeding and shock.
3	<p>Check mental status. Inability to respond indicates that immediate treatment for shock is necessary. Treat for shock and tag "I."</p>

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

Sample Triage Documentation

Status	Location			
	A	B	C	D
I	1	2	0	1
D	0	2	5	3
M	10	11	7	15
Dead	3	7	1	0

EVALUATING A VICTIM DURING TRIAGE (CONTINUED)

Time will be critical in a disaster. You will not be able to spend very much time with any single victim. Remember that you want to do the greatest good for the greatest number of victims.

In order to respond effectively in a mass casualty event CERT members must:

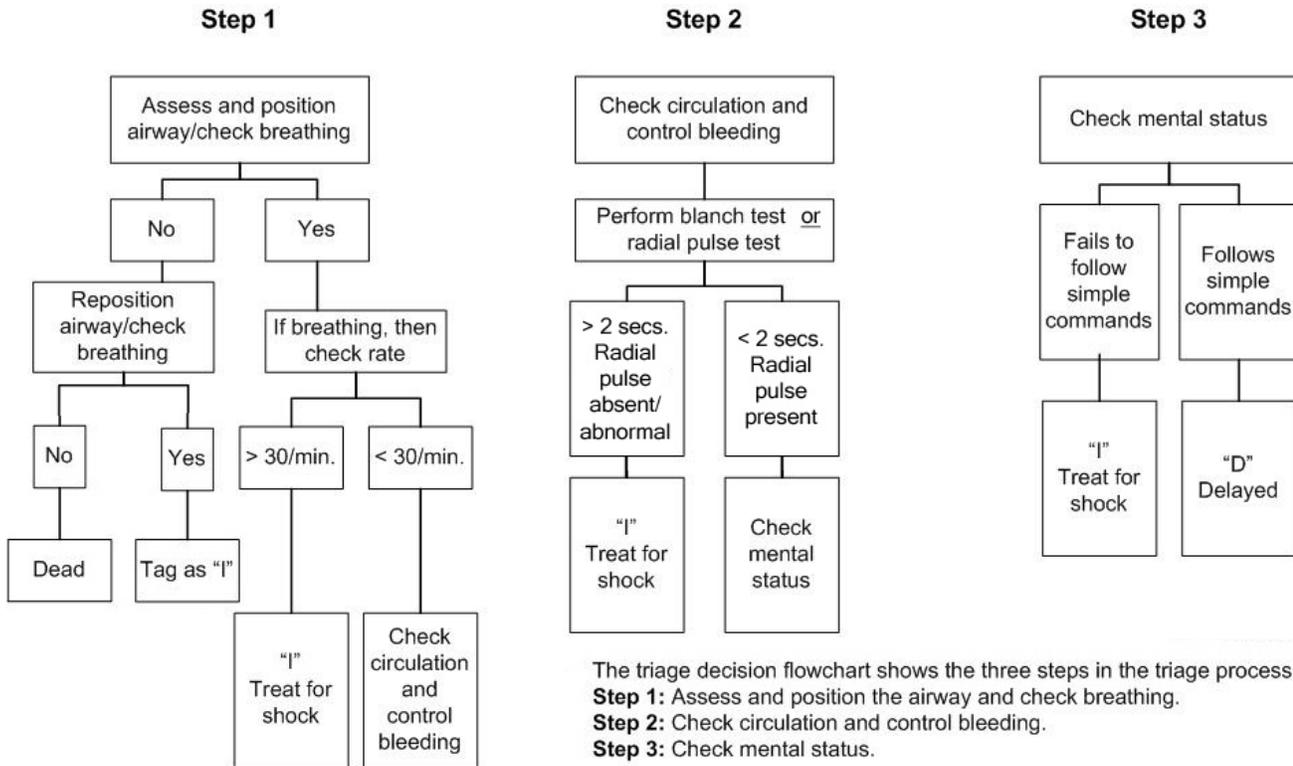
- Have a plan based on a thorough sizeup
- Follow that plan
- Document actions throughout

Triage must be practiced to avoid triage pitfalls. Triage pitfalls include:

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

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

Triage Decision Flowchart



EVALUATING A VICTIM DURING TRIAGE (CONTINUED)

EXERCISE: CONDUCTING TRIAGE

Purpose: This exercise will allow you to practice conducting triage in a high pressure situation.

Instructions:

1. Divide into three groups. Tape your medical status card to your shirt.
2. There will be three rounds. In each round, one group will be rescuers and the other two will be victims.
3. The rescuers will have a limited amount of time to:
 - Size up the situation and develop a plan of action
 - Conduct triage and tag each victim for treatment
 - Document the number of victims in each category of triage (Immediate, Delayed, Minor, Dead)

UNIT SUMMARY

- CERT members' ability to open airways, control bleeding, and treat shock is critical to saving lives.
 - Use the Head-Tilt/Chin-Lift method for opening airways.
 - Control bleeding using direct pressure, elevation, and/or pressure points.
 - If there is a question about whether a victim is in shock, treat for shock as a precaution.
- Triage is a system for rapidly evaluating victims' injuries and prioritizing them for treatment.
 - There are 4 triage categories:
 1. Immediate
 2. Delayed
 3. Minor
 4. Dead
- Triage in a disaster environment consists of 6 important steps:
 1. Stop, Look, Listen and Think, and make a quick plan.
 2. Conduct voice triage.
 3. Begin where you stand and work systematically.
 4. Evaluate and tag all victims.
 5. Treat those tagged "I" immediately.
 6. Document your findings.

COMMUNITY EMERGENCY RESPONSE TEAM
UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

UNIT SUMMARY (CONTINUED)

- The procedure for conducting triage evaluations involves checking:
 - The airway and breathing rate
 - Circulation and bleeding
 - Mental status

HOMEWORK ASSIGNMENT

Read and become familiar with Unit 4: Disaster Medical Operations — Part 2 before the next session.