# COMMUNITY EMERGENCY RESPONSE TEAM

# Basic Training Instructor Guide

### **Developed For:**

National CERT Program
Federal Emergency Management Agency
Department of Homeland Security
Washington, D.C.

Developed By: PerformTech Inc. Alexandria, Virginia

#### **ACKNOWLEDGEMENTS**

The Community Emergency Response Team (CERT) concept was developed and implemented by the City of Los Angeles Fire Department (LAFD) in 1985. They recognized that citizens would very likely be on their own during the early stages of a catastrophic disaster. Accordingly, LAFD decided that some basic training in disaster survival and rescue skills would improve the ability of citizens to survive and to safely help others until responders or other assistance could arrive.

The training model that the LAFD initiated was adopted by other fire departments around the country, including communities where the major threat is hurricanes rather than earthquakes. Building on this development, in 1994 the Federal Emergency Management Agency (FEMA) expanded the CERT materials to make them applicable to all hazards and made the program available to communities nationwide. Since that time, thousands of dedicated trainers, organizations, and citizens have embraced the responsibility to learn new skills and become prepared to execute safe and effective emergency response. We salute you.

The National CERT Program and the Individual and Community Preparedness Division in FEMA would like to thank the following people who participated in a focus group to review and update the *CERT Basic Training* material:

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We would also like to thank those many individuals from local and State CERT programs who reviewed the draft of the updated *CERT Basic Training* material.

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### COMMUNITY PREPAREDNESS

Following the events of September 11, 2001, Citizen Corps was launched as a grassroots strategy to strengthen community safety and preparedness through increased civic participation. Since then, the importance of preparedness education, training, and involving the whole community has become increasingly recognized as critical to successful community preparedness and resilience.

Citizen Corps is administered by the Federal Emergency Management Agency, within the Department of Homeland Security, but is implemented locally. Communities across the country have created Citizen Corps Councils as effective partnerships between government and community leaders to focus on the following objectives: engaging the whole community in collaborative community planning and capacity building; integration of community resources; outreach and localized preparedness education and training; emergency communications to all population segments; drills and exercises; and, volunteer programs.

CERT is a critical program in the effort to engage everyone in America in making their communities safer, more prepared, and more resilient when incidents occur.

Community-based preparedness planning allows us all to prepare for and respond to anticipated disruptions and potential hazards following a disaster. As individuals, we can prepare our homes and families to cope during that critical period. Through preevent planning, neighborhoods and worksites can also work together to help reduce injuries, loss of lives, and property damage. Neighborhood preparedness will enhance the ability of individuals and neighborhoods to reduce their emergency needs and to manage their existing resources until professional assistance becomes available.

Studies of behavior following disasters have shown that groups working together in the disaster period perform more effectively if there has been prior planning and training for disaster response. These studies also show that organized grassroots efforts may be more successful if they are woven into the social and political fabric of the community — neighborhood associations, schools, workplaces, places of worship, and other existing organizations.

Effective response therefore requires comprehensive planning and coordination of all who will be involved — government, volunteer groups, private businesses, schools, and community organizations. With training and information, individuals and community groups can be prepared to serve as a crucial resource capable of performing many of the emergency functions needed in the immediate post-disaster period. The CERT Program is designed to train individuals to be assets to help communities prepare for effective disaster response.

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### WHEN DISASTER STRIKES

The damage caused by natural disasters, such as earthquakes, hurricanes, tornadoes, and flooding, or from manmade/technological events such as explosions or hazardous materials accidents can affect all aspects of a community, from government services to private enterprise to civic activities. These events:

- Severely restrict or overwhelm our response resources, communications, transportation, and utilities
- Leave many individuals and neighborhoods cut off from outside support

Damaged roads and disrupted communications systems may restrict the access of emergency response agencies into critically affected areas. Thus, for the initial period immediately following a disaster — often up to 3 days or longer — individuals, households, and neighborhoods may need to rely on their own resources for:

- Food
- Water
- First aid
- Shelter

Individual preparedness, planning, survival skills, and mutual aid within neighborhoods and worksites during this initial period are essential measures in coping with the aftermath of a disaster. What you do today will have a critical impact on the quality of your survival and your ability to help others safely and effectively. By learning about the likely hazards in your community and your community's plans and protocols, understanding hazard-specific protective actions and response skills, assembling important emergency supplies, and mitigating potential hazards in your home, you will be more resilient to any disruptive event. You will be an important asset to your family, neighbors, and other members of your community.

### ABOUT COMMUNITY EMERGENCY RESPONSE TEAM (CERT) BASIC TRAINING

If available, emergency services personnel are the best trained and equipped to handle emergencies. Following a catastrophic disaster, however, you and the community may be on your own for a period of time because of the size of the area affected, lost communications, and unpassable roads.

CERT Basic Training is designed to prepare you to help yourself and to help others in the event of a catastrophic disaster. Because emergency services personnel will not be able to help everyone immediately, you can make a difference by using your CERT training to save lives and protect property.

### ABOUT COMMUNITY EMERGENCY RESPONSE TEAM (CERT) BASIC TRAINING (CONTINUED)

This training covers basic skills that are important to know in a disaster when emergency services are not available. With training and practice, and by working as a team, you will be able to protect yourself and do the greatest good for the greatest number after a disaster.

### **HOW CERTS OPERATE**

As each CERT is organized and trained in accordance with standard operating procedures developed by the sponsoring agency, its members select an Incident Commander/Team Leader (IC/TL) and an alternate and identify a meeting location, or staging area, to be used in the event of a disaster.

The staging area is where the fire department and other services will interact with CERTs. Having a centralized contact point makes it possible to communicate damage assessments and allocate volunteer resources more effectively. This is true for all CERTs, whether active in a neighborhood, workplace, school, college/university campus, or other venue.

Damage from disasters may vary considerably from one location to another. In an actual disaster, CERTs are deployed progressively and as needs dictate. Members are taught to assess their own needs and the needs of those in their immediate environment first.

CERT members who encounter no need in their immediate area then report to their staging area, where they take on assigned roles based on overall area needs. Members who find themselves in a heavily affected location send runners to staging areas to get help from available resources. Ham and other radio links also may be used to increase communication capabilities and coordination.

The CERT Program can provide an effective first-response capability. Acting as individuals first, then later as members of teams, trained CERT volunteers can fan out within their assigned areas, extinguishing small fires, turning off natural gas at damaged homes, performing light search and rescue, and rendering basic medical treatment. CERTs also act as effective "eyes and ears" for uniformed emergency responders. Trained volunteers also offer an important potential workforce to service organizations in non-hazardous functions such as shelter support, crowd control, and evacuation.

#### **COURSE OVERVIEW AND OBJECTIVES**

The purpose of the *Community Emergency Response Team (CERT) Basic Training* is to provide the individuals who complete this course with the basic skills that they will need to respond to their community's immediate needs in the aftermath of a disaster, when emergency services are not immediately available. By working together, CERT members can assist in saving lives and protecting property using the basic techniques in this course. The target audience for this course is individuals who desire the skills and knowledge required to prepare for and respond to a disaster.

### **Overall Course Objectives**

Upon completing this course, the participants should be able to:

- 1. Describe the types of hazards that are most likely to affect their homes, workplaces, and neighborhoods.
- 2. Take steps to prepare themselves and their families for a disaster.
- 3. Describe the functions of CERTs and their role in immediate response.
- 4. Identify and reduce potential fire hazards in their homes, workplaces, and neighborhoods.
- 5. Work as a team to apply basic fire suppression strategies, resources, and safety measures to extinguish a pan fire.
- 6. Apply techniques for opening airways, controlling excessive bleeding, and treating for shock.
- 7. Conduct triage under simulated disaster conditions.
- 8. Perform head-to-toe patient assessments.
- 9. Select and set up a treatment area.
- Employ basic treatments for various injuries and apply splints to suspected fractures and sprains.
- 11. Identify planning and sizeup requirements for potential search and rescue situations.
- 12. Describe the most common techniques for searching a structure.
- 13. Work as a team to apply safe techniques for debris removal and victim extrication.
- 14. Describe ways to protect rescuers during search and rescue operations.
- 15. Describe the post-disaster emotional environment and the steps that rescuers can take to relieve their own stressors and those of disaster survivors.
- 16. Describe CERT organization and documentation requirements.

In addition to the overall course objectives listed above, each unit has specific objectives.

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### **COURSE AGENDA**

The agenda for this course is shown below and continued on the following pages. Please note that some adjustments to the agenda may be required to allow discussion of hazards specific to a community and — depending on class size — to allow all participants to take part in the exercise portions of this course.

Unit	Topics
1	Disaster Preparedness
	■ Introductions and Overview
	■ Community Preparedness: Roles and Responsibilities
	<ul> <li>Hazards and Their Potential Impact</li> </ul>
	<ul> <li>Impact on the Infrastructure</li> </ul>
	<ul> <li>Home and Workplace Preparedness</li> </ul>
	<ul> <li>Reducing the Impact of Hazards Through Mitigation</li> </ul>
	CERT Disaster Response
	<ul> <li>Protection for Disaster Workers</li> </ul>
	<ul> <li>Additional Training for CERTs</li> </ul>
	■ Unit Summary
2	Fire Safety and Utility Controls
	■ Introduction and Unit Overview
	■ Fire Chemistry
	■ Fire and Utility Hazards
	■ CERT Sizeup
	■ Fire Sizeup Considerations
	■ Firefighting Resources
	■ Fire Suppression Safety
	<ul> <li>Hazardous Materials</li> </ul>
	■ Exercise: Suppressing Small Fires
	<ul> <li>Unit Summary</li> </ul>

Unit	Topics
3	Disaster Medical Operations — Part 1
	■ Introduction and Unit Overview
	■ Treating Life-Threatening Conditions
	■ Triage
	■ Unit Summary
4	Disaster Medical Operations — Part 2
	■ Introduction and Unit Overview
	Public Health Considerations
	■ Functions of Disaster Medical Operations
	Establishing Medical Treatment Areas
	■ Conducting Head-to-Toe Assessments
	■ Treating Burns
	Wound Care
	■ Treating Fractures, Dislocations, Sprains, and Strains
	Nasal Injuries
	■ Treating Cold-Related Injuries
	■ Treating Heat-Related Injuries
	■ Bites and Stings
	■ Unit Summary
5	Light Search and Rescue Operations
	■ Introduction and Unit Overview
	■ Safety During Search and Rescue Operations
	■ Conducting Interior and Exterior Search Operations
	■ Conducting Rescue Operations
	■ Unit Summary
6	CERT Organization
	■ Introduction and Unit Overview
	CERT Organization
	CERT Mobilization

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Unit	Topics	
	■ Documentation	
	Activity: ICS Functions	
	Activity: Tabletop Exercise	
	■ Unit Summary	
7	Disaster Psychology	
	■ Introduction and Unit Overview	
	■ Disaster Trauma	
	■ Team Well-Being	
	■ Working with Survivors' Trauma	
	Unit Summary	
8	Terrorism and CERT	
	■ Introduction and Unit Overview	
	■ What Is Terrorism?	
	■ Terrorist Targets	
	■ Terrorist Weapons	
	■ CBRNE Indicators	
	<ul> <li>Preparing at Home, Work, and in Your Neighborhood</li> </ul>	
	■ CERTs and Terrorist Incidents	
	<ul> <li>Activity: Applying CERT Principles to a Suspected Terrorist Incident</li> </ul>	
	■ Unit Summary	
9	Course Review, Final Exam, and Disaster Simulation	
	■ Introduction and Unit Overview	
	■ Course Review	
	■ Final Exam	
	■ Disaster Simulation	
	Exercise Critique and Summary	

### AFTER CERT BASIC TRAINING

Upon completion of the *CERT Basic Training* course, participants will receive a certificate. Your community may also provide additional documents that will identify each participant as an emergency response team member during disaster response.

CERT members should maintain their own CERT safety equipment, such as goggles, gloves, and basic first aid supplies, and have them available for use during a disaster. Training in disaster response should not be a one-time event. Awareness, commitment, and skills must be reinforced through followup training and repeated practice to maintain the edge necessary for effective response in the face of a disaster.

To maintain their skill level and continually improve performance, CERT members should participate in continuing supplemental training when offered in your area. Working through practice disaster scenarios with other teams will provide opportunities not only for extended practice but also for valuable networking with teams in the local area.

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#### INSTRUCTOR RESPONSIBILITIES

#### **INSTRUCTOR QUALIFICATIONS**

Instructors will be recruited and selected to conduct this course based on their working knowledge of the content and skills required for each session. It is recommended that at least two instructors jointly conduct each session. Because Sessions 3 and 4 address disaster medical operations, it is recommended that these sessions be conducted by licensed or certified:

- Paramedics or Emergency Medical Technicians
- Nurses

It is recommended that all other sessions be conducted by skilled fire and rescue instructors who have completed the CERT Train-the-Trainer course.

Instructors should also be knowledgeable about:

- The CERT model
- The types of hazards (natural, technological, and manmade) that present the greatest risk to the community
- Local building structures that present the greatest hazard in the event of a disaster
- The community's emergency operation plan

#### PREPARING TO TRAIN

The preparation and conduct of the Instructor has a definite impact on the effectiveness of the training. This introductory section provides guidelines for preparing for this course. Use the following steps when you prepare for training:

- Thoroughly read both the Instructor Guide and the Participant Manual.
- Conduct a walk-through of all exercises and be prepared to answer any questions that the participants ask while completing the exercises themselves.
- Tailor each session to your local community. Wherever possible, use local photographs of common fire hazards, local buildings, etc. Using local information will add a personal meaning for the participants and will help them to "buy into" the CERT concept.
- Draft your own notes in the white space around the margins of this book. Include information that is specific to the community. Indicate points where you want to include additional local photographs.
- Identify sessions that require you to prepare information or materials that relate specifically to your community (see "Preparation" at the beginning of each unit).
   Prepare these items in advance of the session.

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### PREPARING TO TRAIN (CONTINUED)

- Be certain you are aware of any cultural sensitivities for the community in which you will be training. It is important to understand how to best deliver the content so as to engage the participants. Because of the differences in individual cultures, it is essential that you get to know the culture. You will need to work with members of that culture to understand any topics in the training that may be culturally sensitive and to resolve any potential issues.
  - In advance of the training, meet with a community representative involved in emergency preparedness to discuss the different topics covered in the training. Together, try to identify any culturally sensitive issues, such as physical contact, medical response, or disaster psychology. Discuss ways to present these topics in the most appropriate way for the participants.
  - During the training, don't pretend to be an expert on cultural issues, and invite participants to discuss such topics. If possible, a member of the community in which you are training should co-teach the class.
  - Bear in mind several points regarding communities and cultures. First, when
    coming into a new community, members of that community may not accept you
    immediately. This is one reason to request information and seek the guidance
    and advice of community representatives regarding cultural issues. Additionally,
    remember that not all members of a community may have the same cultural
    background. Avoid making assumptions about the beliefs or attitudes of the
    participants.
- Draft or copy any supplemental materials from which you feel the participants will benefit. Many supplemental materials may be available from local emergency management personnel or from such Federal agencies as the National Fire Academy, Emergency Management Institute, or National Severe Weather Center. If you use copyrighted materials, be sure to obtain copyright releases.
- Instructors are encouraged to add pertinent information to the course, but topics should not be deleted.

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### PREPARING THE CLASSROOM

As an Instructor, you are responsible for:

The equipment that you need for the course

For each session, you will need:

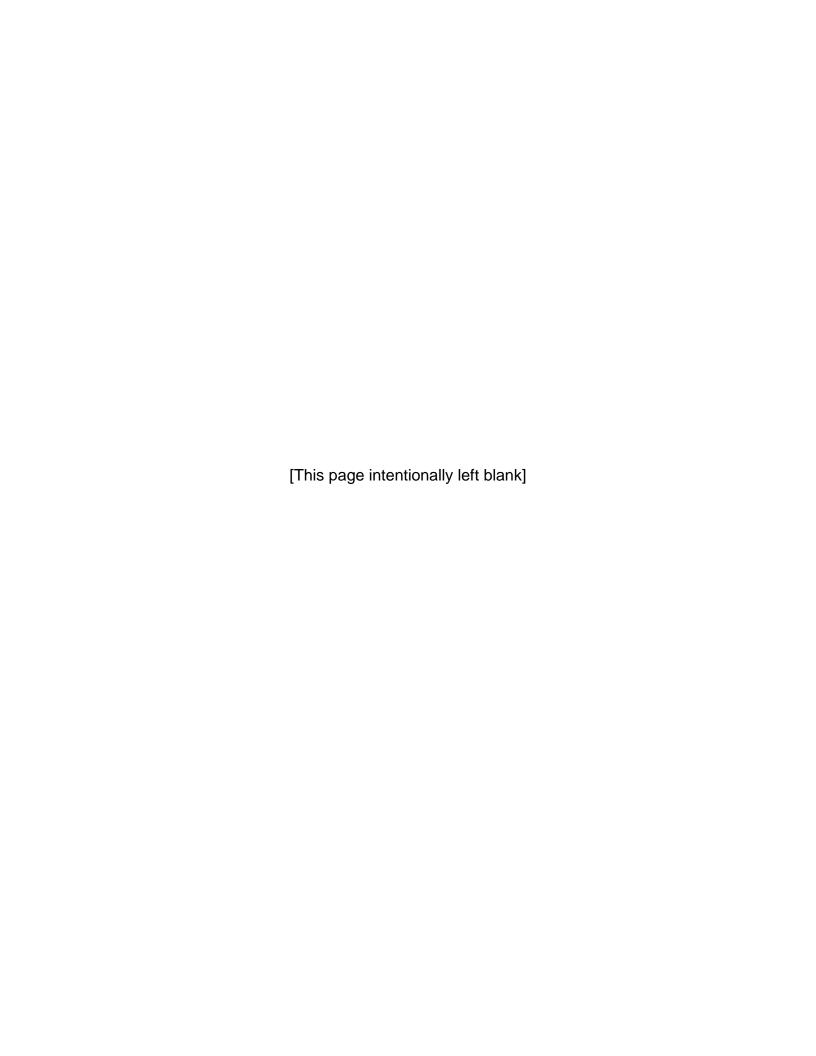
- A computer with PowerPoint software (PowerPoint 97 or more recent)
- A computer projector and screen
- Chart paper, easel, and markers
- Masking tape
- Pens and pencils

Session-specific equipment and materials are listed at the beginning of the Instructor Notes for each unit.

The room arrangement

This is your choice and, depending on the number of participants, you may opt for different arrangements. Regardless of the room arrangement you select, the training room must be large enough to accommodate the exercises for each session.

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### COMMUNITY EMERGENCY RESPONSE TEAM

### **BASIC TRAINING COURSE**

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### COMMUNITY EMERGENCY RESPONSE TEAM

### **BASIC TRAINING COURSE**

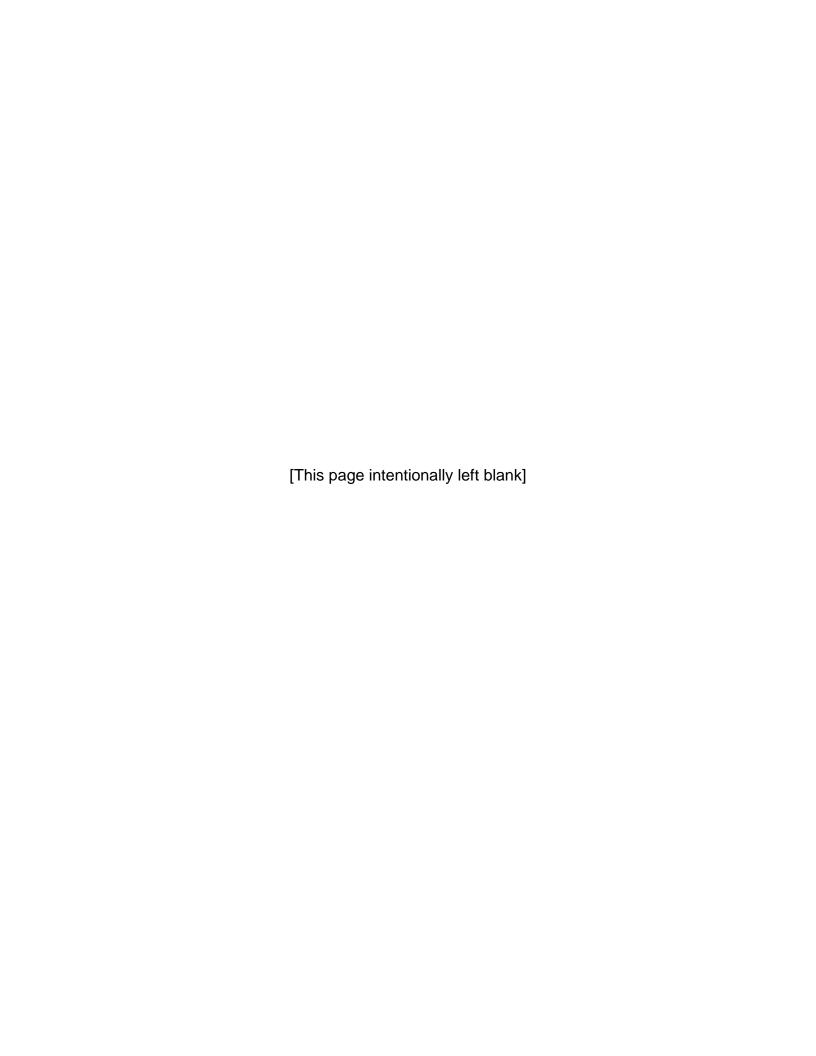
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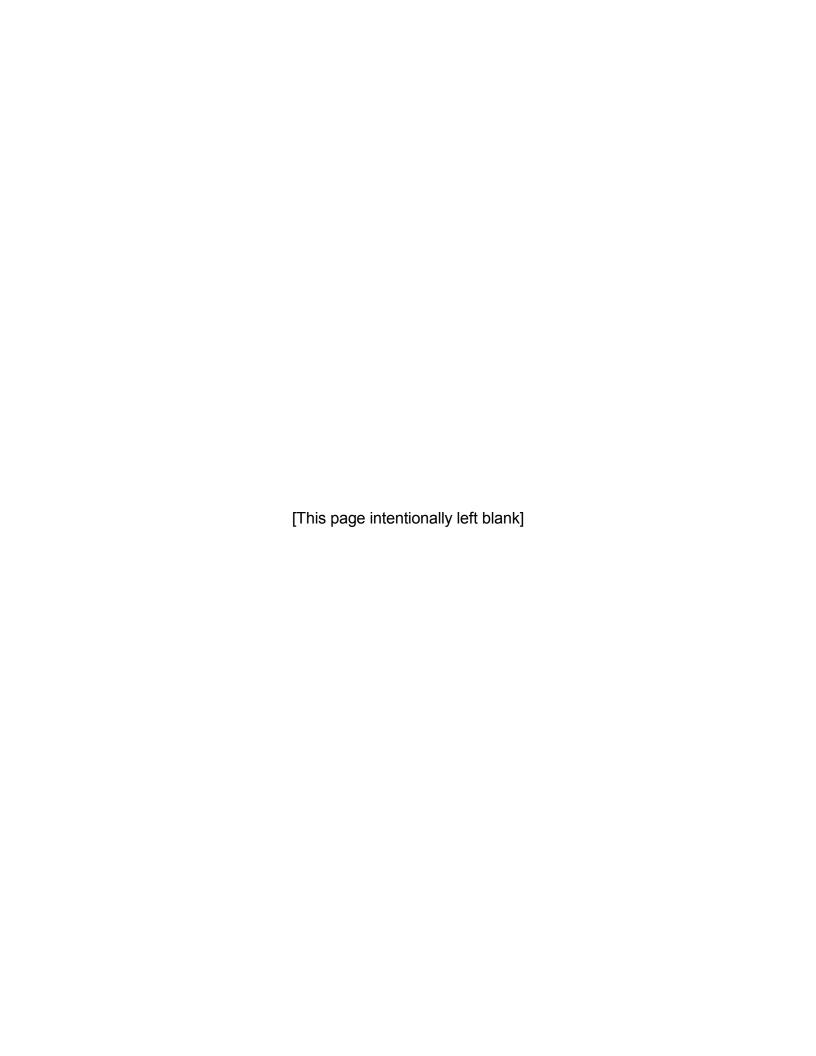
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### **UNIT 1: DISASTER PREPAREDNESS**

In this unit you will learn about:

- Roles and Responsibilities for Community Preparedness: How everyone in a community has a role in disaster preparedness and response.
- Elements of Disasters and Their Impact on the Infrastructure: The potential effect
  of extreme emergencies and disasters on transportation; electrical service; telephone
  communication; availability of food, water, shelter and fuel; and emergency services.
- **Personal and Organizational Preparedness:** How you can prepare in advance to improve the quality of your survival and to reduce the damage from hazards.
- Role of CERTs: CERT organization, disaster and non-disaster roles, and laws that protect disaster workers from liability.



### **OBJECTIVES** At the conclusion of this unit, the participants will be able to: Identify the roles and responsibilities for community preparedness, to include government, community leaders from all sectors, and the public. Describe the types of hazards most likely to affect their community and their potential impact on people, health, and infrastructure. Undertake personal and organizational preparedness actions. Describe the functions of CERTs and their role as a CERT member. SCOPE The topics that will be discussed in this unit are: Introductions and Overview Community Preparedness: Roles and Responsibilities Hazards and Their Potential Impact Impact on the Infrastructure Home and Workplace Preparedness Reducing the Impact of Hazards Through Mitigation **CERT Disaster Response Protection for Disaster Workers** Additional Training for CERTs **Unit Summary ESTIMATED** 2 hours 30 minutes **COMPLETION TIME** TRAINING METHODS The lead instructor will begin by welcoming the participants to the course, introducing himself or herself and the other instructor(s), and making any necessary administrative announcements. The instructor will then briefly review a major disaster that recently affected the area or the State, stressing its aftermath, lessons learned (including the importance of preparedness), and the role that CERTs might have had in that disaster. Next, the instructor will briefly explain the course objectives and discuss the topics to be covered in the course.

### TRAINING METHODS (CONTINUED)

The instructor will then give a brief overview of the nature of disasters and extreme emergencies, stressing how CERTs fit into the response and recovery picture.

Then the instructor will begin an introductory exercise. The purpose of this exercise is to introduce the participants to each other and illustrate the types of skills and abilities that CERTs require.

During this exercise, each participant will introduce himself or herself and provide a brief description of:

- Why he or she is attending the course
- Where he or she lives or works in the community

Following the introductions, the instructor will review the collective distribution of participants and facilitate a brief discussion of how the skills demonstrated in the introductory activity might be useful in the immediate aftermath of a disaster. During the discussion, the instructor will stress the importance of communication, trust, and teamwork (the whole being greater than the sum of the parts) as critical elements of effective CERTs.

Next, the instructor will lead a discussion of the chief threat(s) for the community and the impact that the threat(s) is (are) likely to have on the community's infrastructure and emergency services.

The instructor will then lead a discussion of the types of structural and non-structural hazards that the participants may face in the different types of structures located within the community and how those hazards can be mitigated through individual and community preparedness efforts both at home and in the workplace.

Finally, the instructor will summarize the key points of the session while creating the linkage that, as CERT members, the participants will play a vital role in response.

Please be advised that, as a general rule, the instructor is encouraged to add pertinent local information to this unit, but should never subtract material.

### RESOURCES REQUIRED

- Community Emergency Response Team Instructor Guide
- Community Emergency Response Team Participant Manual
- PowerPoint Slides 1-0 through 1-35
- PowerPoint Slides from hazard modules selected

#### **EQUIPMENT**

The following additional equipment is required for this unit:

- A computer with PowerPoint software
- A computer projector and screen
- Scissors (1 for every 5 participants)
- Tape (1 roll for every 5 participants)
- Two pieces of cardboard, approximately 8 by 10 inches (1 set for every 5 participants)
- Forty pieces of construction paper, 8.5 by 11 inches (1 set for every 5 participants)

### **PREPARATION**

- Prepare information on State and local laws that protect CERT members in your area. Enter the information in the table on p. 1-37 of the Participant Manual before making copies.
- Carefully review this unit and the hazard modules that are included as annexes to this unit. Select the hazards that present the greatest threat to your community and incorporate them into the unit. If possible, tailor the hazard materials by including local examples and photographs.
- Working with a representative of the community in which you will be conducting training, identify any potentially culturally sensitive topics in this module. Develop strategies for presenting any such topics in ways that will be engaging and appropriate for the participants.

For example, some cultures dislike the term "disaster preparedness," because it can imply an invitation to disaster. In this case, an alternate concept such as "community readiness" could be helpful.

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#### **NOTES**

A suggested time plan for this unit is as follows:

Introductions and Overview	20 minutes
Community Preparedness: Roles and Responsibilities	10 minutes
Hazards and Their Potential Impact	10 minutes
Impact on the Infrastructure	30 minutes
Home and Workplace Preparedness	30 minutes
Reducing the Impact of Hazards Through Mitigation	15 minutes
CERT Disaster Response	15 minutes
Protection for Disaster Workers	10 minutes
Additional Training for CERTS	5 minutes
Unit Summary	5 minutes

Total Time: 2 hours 30 minutes

#### **REMARKS**

This unit includes information on a variety of hazards, some of which, but not all, may affect your community. Review this unit and the additional materials carefully <u>before</u> training to identify hazards that pose a threat to your community.

After determining which hazard presentations you wish to include, you will want to add the PowerPoint slides into the main file for Unit

- 1. To merge the slide presentations:
- 1. Open the PowerPoint file for Unit 1.
- 2. Open the PowerPoint file for the hazard you wish to include.
- 3. While in the <u>hazard presentation</u>, click "Slide Sorter View" ( ⊞) at the bottom left corner of the screen.
- 4. Click "Edit" at the top of the screen.
- 5. Click "Select All" from the edit pull-down menu.
- 6. Click "Window" at the top of the screen and select the Unit 1 presentation.
- 7. Click "Slide Sorter View" ( 田 ).
- 8. Place the cursor where the hazard insert should be by clicking between the slides at the appropriate place in the Unit 1 presentation.
- 9. Right click, and select "Paste" to pull in the hazard slides.
- 10. Repeat Steps 2 through 8 for each hazard presentation that you wish to include in this unit.

# **Unit 1: Disaster Preparedness**

INSTRUCTOR GUIDANCE	CONTENT
	Check-In
	As the participants are arriving, develop a class roster by passing around a sheet of paper, or ask them to be sure to check in on the class roster if it has already been developed. Ask the participants to confirm their name, address, phone number, and e-mail address.



**Display Slide 1-0** 

### Introductions and Overview

### Welcome

Welcome the participants to Community Emergency Response Team Basic Training.

Introduce yourselves and provide some background information about your past experiences in emergency response.

Make any administrative announcements that are necessary at this time. Include information about:

- The times for this and future sessions.
- Materials required
- Building disaster preparedness kits
- Emergency exits
- Restroom locations, smoking policy, etc.
- Course completion requirements

# INSTRUCTOR GUIDANCE CONTENT Setting the Stage



Display Slide 1-1

Open by telling the participants that the damage caused by natural disasters and manmade events can be extensive.

While emergency services personnel are the best trained and equipped to handle emergencies, they may not be immediately available in a catastrophic disaster. In such a situation, members of the community may be on their own for several days or longer. They may have to rely on their own resources for food, water, first aid, and shelter, and neighbors or coworkers may have to provide immediate assistance to those who are hurt or need other help.

Point out that Community Emergency Response Teams (CERTs) respond in the period immediately after a disaster when response resources are overwhelmed or delayed.

### Explain that CERTs:

- Assist first responders when requested in accordance with standard operating procedures developed by the sponsoring agency and by area of training
- Assume many of the same functions as response personnel following a disaster

While CERTs are a valuable asset in emergency response, CERTs are not trained to perform all of the functions or respond to the same degree as professional responders. CERTs are a bridge to professional responders until they are able to arrive.

This training covers basic skills that are important to know in a disaster when emergency services are not immediately available. By learning how to work as a team, neighbors and coworkers will be able to do the greatest good for the greatest number after a disaster.

### **INSTRUCTOR GUIDANCE** CONTENT **Course Preview** Course Preview Explain that this unit will provide an overview of the · Fire safety course by establishing a context for CERTs within the · Disaster medical operations specific hazards faced by the community. · Light search and rescue CERT organization Disaster psychology Tell the group that later units will cover: CERT and terrorism Fire safety Disaster medical operations **№** FEMA CERT Basic Training CER Light search and rescue Display Slide 1-2 CERT organization Disaster psychology CERT and terrorism **Exercise: Building a Tower** Introduce the exercise to the participants by explaining that they will now work in small groups. Each group will work together to accomplish the same task — building a tower. If desired, provide the **Instructions:** Follow the steps below to conduct this participants with a different exercise: activity that highlights similar skills: the ability to work 1. Assign the participants to groups of five. together successfully with limited resources and under 2. Distribute the following materials to each group: time pressure. One pair of scissors One roll of scotch tape Two pieces of cardboard (approximately 8 by 10 inches) Forty pieces of construction paper (8.5 by 11 inches) 3. Tell the groups that they will spend the next 10

INSTRUCTOR GUIDANCE	CONTENT
	minutes planning and designing a freestanding tower that stands at least 5 feet tall from the bottom of the structure to the top. Explain that you will tell the groups when to begin and that they will have 5 minutes from that point to construct the tower. Emphasize that the first 5 minutes is for planning only.
	4. Tell the groups when to begin their work and when to end.
	5. At the end of the allotted time, facilitate a group discussion of what the groups have learned through the exercise. Be sure to cover the following points:
	<ul><li>Unfamiliar people</li></ul>
	<ul><li>Can work on an unfamiliar problem</li></ul>
	<ul><li>Using unfamiliar tools</li></ul>
	<ul><li>In unfamiliar surroundings</li></ul>
	<ul><li>In a time-compressed environment</li></ul>
	<ul> <li>To reach a common goal</li> </ul>
	6. Stress that the skills and abilities that the groups used during the exercise are the same skills that they will use as CERT members.

## **INSTRUCTOR GUIDANCE CONTENT Unit Objectives** Unit Objectives · Identify roles and responsibilities for community preparedness At the end of this unit, the participants should be able to: Describe types of hazards that affect community, people, health, and Identify the roles and responsibilities for community infrastructure preparedness, to include government, community Undertake personal and organizational leaders from all sectors, and the public. preparedness actions . Describe functions of CERTs Describe the types of hazards most likely to affect **ॐ** FEMA CERT Basic Training Unit 1 Ginaster Preparedness Ed CENT their community and their potential impact on people, health, and infrastructure. Display Slide 1-3 Undertake personal and organizational preparedness actions. Describe the functions of CERTs and their role as a CERT member.

### **INSTRUCTOR GUIDANCE** CONTENT Community Preparedness: Roles and Responsibilities Community Preparedness: Roles and Tell participants that community preparedness is a key Responsibilities priority in lessening the impact of disasters. It is . Key priority in lessening the impact of critical that all community members take steps to prepare in advance of an event. · Critical that all community members take steps to prepare · Effective when addresses unique Explain that effective community preparedness attributes of community and engages addresses the unique attributes of the community: whole community The threat and hazards profile and vulnerabilities S FEMA CERT Basic Training Unit 1. Disaster Preparedness of the area Display Slide 1-4 The existing infrastructure Resources and skills within the community The population composition of the community Effective community preparedness also engages the whole community: Government leaders and the public sector Community leaders from the private and civic sectors The public Government Government · Government has responsibility to: Explain that government has the responsibility to · Develop, test, and refine emergency plans develop, test, and refine emergency operations plans, · Ensure emergency responders have adequate skills and resources ensure emergency responders have adequate skills · Provide services to protect and assist citizens and resources, and provide services to protect and assist its citizens. To meet these challenges, government should involve S FEMA CERT Basic Training Unit 1: Disaster Precaredness CER the community in the planning process; to incorporate community resources in the plans; to provide reliable, Display Slide 1-5 actionable information; and to encourage training, practicing, and volunteer programs.

INSTRUCTOR GUIDANCE	CONTENT
Emergency Operations Plan  Assigns responsibility to organizations and individuals Sets forth lines of authority Describes how people and property will be protected Identifies personnel, equipment, facilities, supplies, and other resources	Tell participants that government emergency service providers include:  Emergency Management  Law Enforcement  Fire and Rescue  Emergency Medical Services  Public Health Services  Public Works  Human Services  The Emergency Operations Plan (EOP)  Tell participants that all government agencies with a role in disaster response work to organize and coordinate their agencies' activities before an emergency or disaster. The product of their work is the Emergency Operations Plan or "EOP" for that community.
Display Slide 1-6  Your local agency may use a different term for the Emergency Operations Plan. Use the term used in your jurisdiction.  Depending on where you live, there may also be a hazard mitigation plan and/or evacuation plan. Briefly describe these if applicable.	<ul> <li>Assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in an emergency that exceeds the capability or routine responsibility of any one agency (e.g., the fire department)</li> <li>Sets forth lines of authority and organizational relationships and shows how all actions will be coordinated</li> <li>Describes how people and property will be protected in emergencies and disasters</li> </ul>

INSTRUCTOR GUIDANCE	CONTENT
	<ul> <li>Identifies personnel, equipment, facilities, supplies, and other resources available — within the jurisdiction or by agreement with other jurisdictions — for use during response and recovery operations</li> </ul>
	In short, the EOP describes how the community will function in an emergency.
Community Leaders	Community Leaders
<ul> <li>Have a responsibility to participate in community preparedness</li> <li>Participate on local collaborative planning council</li> <li>Identify and integrate appropriate resources into government plans</li> <li>Ensure that facilities, staff, and customers served are prepared</li> </ul>	Explain to participants that community leaders from the private and civic sectors have a responsibility to participate in community preparedness. Their responsibilities include:
Display Slide 1-7	<ul> <li>Participating on the local collaborative planning council to provide insights and perspectives reflecting their industry or the constituency they service, for example, people with disabilities, local schools, communities with language or cultural differences, small businesses, the economically disadvantaged, communities of faith</li> </ul>
	<ul> <li>Identifying and integrating appropriate resources into government plans</li> </ul>
	<ul> <li>Ensuring facilities, staff, and customers or population served are prepared, trained, and practiced in preparedness actions</li> </ul>

### **INSTRUCTOR GUIDANCE** CONTENT The Public The Public · Learn about community alerts, warnings, and evacuation routes Take training Remind participants that the public also has a · Practice skills and personal plans responsibility for preparedness. All members of the · Network and help others community should: Give feedback to community Report suspicious activity Learn about community alerts and warnings, Volunteer evacuation routes, and how to get critical CERT Basic Training Unit 1. Disaster Preparedness S FEMA CERT information **Display Slide 1-8** Take training in preparedness, first aid, and response skills Practice skills and personal plans through periodic drills in multiple settings Network and be able to help others Participate in community feedback opportunities Report suspicious activity Volunteer **Engaging the Whole Community Engaging the Whole Community** . Goal of Citizen Corps is to make communities safer, more prepared, and more resilient Citizen Corps is the grassroots movement to Citizen Corps Councils bring government strengthen community safety and preparedness and community leaders together through increased engagement of all sectors of the · Councils ensure emergency plans more effectively reflect the community community. Citizen Corps is administered by the Federal Emergency Management Agency but S FEMA IN CERT implemented locally. The goal of Citizen Corps is to CERT Basic Training make communities safer, more prepared, and more **Display Slide 1-9** resilient when incidents occur.

Explain to participants that some communities may have a Citizen Corps Council (CCC) or other entity such as a Local Emergency Planning Committee (LEPC) that acts as a CCC.

Despite advances in technology, a functioning community is based on complex and interdependent systems driven by human forces. Citizen Corps Councils bring government and community leaders together to ensure emergency plans more effectively reflect the community, including the population composition, the hazard profile, and the infrastructure.

INSTRUCTOR GUIDANCE	Content
	<ul> <li>The goals of the Councils are to:</li> <li>Tailor activities to engage all sectors of the community</li> <li>Identify and build on existing strengths</li> <li>Increase collaboration between government and the whole community</li> <li>Expand integration of community resources into plans and protocols</li> <li>Encourage personal and organizational preparedness through outreach, training, and exercises</li> <li>Promote volunteer opportunities for ongoing community safety and surge capacity in disasters</li> </ul> Hazards and Their Potential Impact
Natural     Technological     Intentional  CERT Basic Training Unit 1: Disseter Preparedness  1-10  Display Slide 1-10	Types of Disasters
	<ul> <li>Explain that disasters can be:</li> <li>Natural (e.g., earthquakes, wildfires, floods, extreme heat, hurricanes, landslides, thunderstorms, tornadoes, tsunamis, volcanic eruptions, winter storms)</li> <li>Technological (e. g., hazardous material spill, nuclear power plant accident)</li> <li>Intentional (terrorism using chemical, biological, radiological, nuclear, or explosive weapons)</li> </ul>

#### INSTRUCTOR GUIDANCE CONTENT **Key Elements of Disasters Key Disaster Elements** They are relatively unexpected Emergency personnel Explain that, regardless of the event, disasters have may be overwhelmed several key elements in common: · Lives, health, and the environment are endangered They are <u>relatively unexpected</u>, with little or no warning or opportunity to prepare. Available personnel and emergency services may S FEMA CERT Basic Training be overwhelmed initially by demands for their **Display Slide 1-11** services. Lives, health, and the environment are endangered. Stress that, in the immediate aftermath of a disaster. needs are often greater than professional emergency services personnel can provide. In these instances, CERTs become a vital link in the emergency service chain. **Understanding Local Hazard Vulnerability** Local Hazard Vulnerability · Identify most common disasters that occur . Identify possible hazards with most severe Assessing your community's vulnerability to hazards impact · Consider recent or historical impacts allows the community to prioritize preparedness . Identify susceptible locations in the measures and to target effective actions for the community for specific hazards · Consider what to expect from disruption of appropriate hazard. To assess your community's services vulnerability to hazards, it is useful to: S FEMA Identify the most common disasters that occur Display Slide 1-12 Identify possible hazards with most severe impact Consider recent and/or historical impacts Identify susceptible locations in the community for specific hazards: people, buildings, infrastructure Consider what to expect for disruption of services and length of restoration

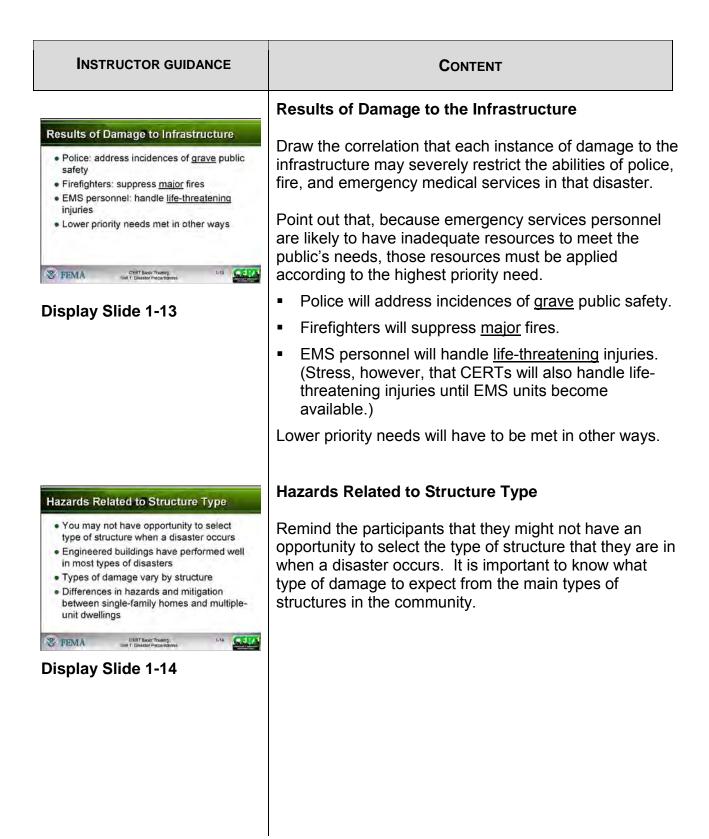
INSTRUCTOR GUIDANCE	CONTENT
	Impact on the Infrastructure
<b>?</b>	How many of you have been caught in a(n) [insert the type of event that is most common for your area]?
Keep a close eye on the clock. Try to limit the discussion to 10-15 minutes.	What types of problems did you experience with such things as utilities and transportation?
PM, P. 1-9	Refer the participants to the chart titled <i>Possible Impact of Damage on Infrastructure</i> in their Participant Manuals. Summarize the participants' responses to the discussion question by listing some of the effects on the infrastructure.

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PM, P. 1-9 Examples of Possible Impact of Damage on Infrastructure

Damage to	Possible Effects
Transportation	<ul> <li>Inability to assess damage accurately</li> </ul>
·	Ambulances prevented from reaching victims
	Police prevented from reaching areas of civil unrest
	Fire departments prevented from getting to fires
	Flow of needed supplies (food, water, etc.) is interrupted
	■ Roads are closed and/or impassable
Structures	<ul> <li>Damaged critical facilities (e.g., hospitals, fire stations, police precincts, airports) unable to function normally</li> </ul>
	<ul> <li>Increased risk of damage from falling debris</li> </ul>
Communication Systems	Victims unable to call for help
	Coordination of services is hampered
	Families and friends cannot communicate
Utilities	<ul><li>Loss of service</li></ul>
	■ Increased risk of fire or electrical shock
	Limited access to fuel, e.g., pumps that may not work
	Loss of contact between victims and service providers
Water Service	Medical facilities hampered
	<ul> <li>Inadequate water flow, which results in notice to boil water and hampered firefighting capabilities</li> </ul>
	■ Increased risk to public health
Fuel Supplies	Increased risk of fire or explosion from fuel line rupture
, ,	Risk of asphyxiation
Financial Services	ATM machines do not work
	Credit card systems inoperable

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INSTRUCTOR GUIDANCE	CONTENT
	Tell the participants that engineered buildings, such as most high-rise buildings, have performed well in most types of disasters.
	Stress that, during earthquakes and high-wind events (e.g., tornadoes, hurricanes), older high-rise buildings, however, are more susceptible to damage from:
	Broken glass
	<ul><li>Falling panels</li></ul>
	<ul> <li>Collapsing walkways and stairways</li> </ul>
<b>?</b>	How many of you live in single-family homes?
	Do you know what types of damage to expect?
	If not mentioned by the group, tell them that age, type of construction, and type of disaster are major factors in potential damage to detached homes and garages.
	<ul> <li>Homes built before 1940 generally were not bolted to the foundation, making them subject to being shaken, blown, or floated off their foundations.</li> </ul>
	Older homes constructed of non-reinforced brick are less stable than newer construction.
	Remind the participants that:
	Tornado and hurricane damage to single homes can range from little damage to total destruction.
	<ul> <li>Following an event in which a structure has been damaged, there is a threat of additional damage, such as fire from ruptured gas lines.</li> </ul>
	They should be aware that they will encounter multiple-unit dwellings and that such dwellings should be approached in a different manner than a single family home. (Utility control will be covered in more depth in Unit 2 of the training.)

INSTRUCTOR GUIDANCE	CONTENT
<b>*</b>	How many of you live in mobile homes?
	Do you know what type of damage you can expect if a high-risk hazard occurs?
	If not mentioned by the group, stress that mobile homes are most susceptible to damage because they are easily displaced. When displacement occurs, structural integrity becomes questionable and utility connections are easily damaged, increasing the risk of fire and electric shock.
2	How many of you live in multiple-unit dwellings?
	Do you understand how the hazards and mitigation approaches differ from those of single-family homes?
	Remind participants that others in the building may be affected even if it appears that there is limited damage to the part of the building that is visible.
	Utility shutoffs are often arranged differently in multiple- unit dwellings than is typical in single-family homes. There is often a main utility shutoff for the entire building, as well as a shutoff located within each individual unit. Depending on the situation at hand, one or the other or both may need to be used. Be mindful of the effects and consequences of using each.
	Multiple-Use Buildings
	Explain that buildings such as malls, sports arenas, airports, places of worship, and other buildings with oversized roof spans pose particular hazards in a disaster:
	<ul> <li>Strip shopping centers pose a threat from collapse and broken glass.</li> </ul>
	<ul> <li>Warehouse-type structures may also collapse.</li> </ul>

INSTRUCTOR GUIDANCE	CONTENT
	Add that there is also a risk in all types of structures from non-structural hazards.
	How many of you are aware of non-structural hazards in your own neighborhoods, homes, or workplaces?
	If not mentioned by the group, stress that, in addition to structural hazards, everyone has non-structural hazards in their neighborhood, homes, or workplaces. Fixtures and items within a home, garage, or workplace can pose a hazard during or after a disaster.
Hazards from Home Fixtures	Hazards from Home Fixtures
Gas line ruptures     Displaced water heaters or ranges	Some of the hazards include:
Damage     From falling books, dishes, other cabinet contents     Electric shock or injury     From displaced appliances, office equipment	<ul> <li>Gas line ruptures from water heaters or ranges displaced by shaking, water, or wind</li> </ul>
Fire     From faulty wiring, overloaded plugs, or frayed electric cords	<ul> <li>Damage from falling books, dishes, or other cabinet contents</li> </ul>
FEMA CRET Basic Programme 1-15 CREATER Programme 1-15	<ul> <li>Risk of injury or electric shock from displaced appliances and office equipment</li> </ul>
Display Slide 1-15	<ul> <li>Fire from faulty wiring, overloaded plugs, frayed electrical cords</li> </ul>
	Emphasize the importance of reducing hazards as part of personal preparedness. Stress that there are several relatively simple measures that individuals can take to alleviate many home and workplace hazards. These will be covered later under home and workplace preparedness. It is also important to know how and when to turn off utilities safely. Utility shutoffs will be covered in Unit 2 – Fire Safety and Utility Control.

# INSTRUCTOR GUIDANCE CONTENT



**Display Slide 1-16** 

### Home and Workplace Preparedness

Tell participants that FEMA conducts a national household survey to measure the public's attitudes, perceptions, and actions taken for personal preparedness. Research findings provide some interesting insights on public expectations and beliefs. Data for the 2009 survey include:

- Only 50% of the public is familiar with the alerts and warning systems in their community.
- Importance of family and community members in the first 72 hours of a disaster: 70% of people report an expectation to rely on household members, and 49% say they will rely on people in their neighborhood.
- Nearly 30% indicate that a primary reason they have not taken steps to prepare is the expectation that fire, police, or other emergency personnel will help them.
- Only 40% of people nationwide think there is a likelihood of a natural disaster <u>ever</u> occurring in their community.
- Fifty-three percent indicate confidence in ability to respond in the first 5 minutes of a sudden natural disaster, but only 20% report confidence in ability to respond to a terrorist attack.
- Preparedness differs according to age, education, income, language and culture, disabilities and abilities, experience, and other factors.

### INSTRUCTOR GUIDANCE CONTENT **Preparing for a Disaster** Preparing for a Disaster Know local hazards, alerts, warning systems, evacuation routes, and sheltering plans Explain that many preparedness actions are useful in · Consider important elements of disaster any type of emergency situation, and some are specific to a particular type of disaster. A critical first step to · Address specific needs for yourself and people you know preparedness is to understand the hazards in their communities and to learn about local alerts and warning ₩ FEMA CERT Basic Training systems, evacuation routes, and sheltering plans. It is also important that the CERT members familiarize themselves with hazards in other areas when they are Display Slide 1-17 traveling and may experience a type of hazard they are not as familiar with. Remind them that regardless of the type of disaster, important elements of disaster preparedness include: Having the skills to evaluate the situation guickly and to take effective action to protect yourself Having a family disaster plan and practicing the plan with drills Assembling supplies in multiple locations Reducing the impact of hazards through mitigation practices Getting involved by participating in training and volunteer programs Emphasize to participants that it is also always important to address specific needs for themselves and people they know, including any access or functional needs, considerations for pets and service animals, and transportation. More information on preparedness is available online. PM, P. 1-15 Direct the participants to a handout provided in their Participant Manual, Web Sites of Interest.

PM, P. 1-15	Web Sites of Interest
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URL	Description
www.ready.gov/	FEMA's national Web site for disaster preparedness. Excellent general advice and a good place to start.
www.fema.gov/areyouready/	Are You Ready? is a 200-page FEMA publication that provides a step-by-step approach to disaster preparedness and specific information by disaster type.
www.redcross.org	The American Red Cross has a Web site full of excellent tips and information related to most of the natural disasters that occur, including a few topics not covered at FEMA's <a href="https://www.ready.gov">www.ready.gov</a> Web site.
www.pandemicflu.gov	The Centers for Disease Control and Prevention (CDC) established this Web site as a hub for national information on pandemic influenza.

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### INSTRUCTOR GUIDANCE CONTENT **Protective Actions** Protective Actions Assess situation . Decide to stay or change locations Explain to participants that because many disasters · Critical early decision in disasters · Seek clean air and protect breathing occur with little or no warning, individuals need to have the knowledge and skills to take immediate protective Protect from debris and signal if trapped actions in the first critical moments after a disaster has Remove contaminants Practice good hygiene occurred, before they have instruction from authorities. Sett CERT CERT Basic Training While the specific action to take is based on the disaster type, the amount of warning, whether they are Display Slide 1-18 inside, outside, or driving, and the amount of training they have, the following list provides a good overview of the protective actions you should be familiar with. These should be their objectives in assessing their post-event environment. Assess situation. When something occurs without notice, it is important to take a few seconds to assess the situation to determine their most effective next steps. This includes identifying the type of event and whether air or a building structure has been compromised. Decide to stay or change locations. In some instances they should stay where they are (if they are inside and an event has occurred outside, they may need to stay inside) and in other circumstances they should change location (if they are inside and the event is inside, they may need to evacuate the building). All disasters have unique attributes, so it is important for them to realize that they may need to evaluate the circumstances to determine the best course of action.

INSTRUCTOR GUIDANCE	CONTENT
	Staying or changing location is a critical early decision in disasters. If they are not in immediate danger, they should stay where they are and get more information before taking their next steps. Thinking through the likely hazards in their community and where they might be when an event occurs may help them visualize their response. While they may need to make the first, immediate decision to stay inside or go outside, or to shelter in place by sealing a room without authoritative instruction, it is important that they listen to local authorities when that information is provided. If experts tell them to evacuate from their location, LEAVE!
	Seek clean air and protect breathing passages. Regardless of the type of disaster, clean air is a critical need. Actions to protect their breathing passages and seek clean air may include covering their mouth with a cloth or mask, vacating the building, or sheltering in place by sealing an internal room while the airborne contaminant dissipates.
	Protect themselves from debris and signal rescuers if trapped. Protecting themselves from falling or precarious debris is a critical protective action. If they become trapped, protect their airways, bang on an object, or blow a whistle. Yelling should be a last resort.
	Remove contaminants. If contaminants have been released into the area or they have made contact with liquid or solid contaminants, it is critical that they remove the contaminants as quickly as possible. Remove contaminated clothing and wash with soap and water starting at the head and working toward the feet.

INSTRUCTOR GUIDANCE	Content
	<ul> <li>Practice good hygiene. Good hygiene is a preventive measure for spreading disease, and it's important to be mindful of hygiene in a post- disaster environment. Clean drinking water and sanitation are important protective actions.</li> </ul>
Sheltering	Sheltering
Shelter in place: sealing a room Identify internal room Stay for several hours Store supplies Shelter for extended stay Stay for several days or up to 2 weeks Store emergency supplies  CERT Battle Transing Lind T. Dasatter Propulerchant  Stay  Display Slide 1-19	There are different types of sheltering, and different types are appropriate for different disasters.  Shelter in place: sealing a room. Sealing a room is a way to protect themselves from contaminants in the air for a short period of time until the contaminants dissipate. They should identify an internal room in their home, at work, or other locations where they spend a great deal of time. If sheltering-in-place is needed, they will be in this room for only a few hours, but it is important that they be able to seal the room quickly. Storing specific items in the room is helpful. They should have snacks and water; a battery-operated radio, a flashlight, and pre-cut plastic sheeting and duct tape to seal off vents and door and window openings.  Shelter for extended stay. Sheltering for an extended stay means that they would stay where they are for several days or, in the case of a pandemic, they may be asked to limit their time outside the home for up to 2 weeks. It is important to store emergency supplies for these possibilities.

INSTRUCTOR GUIDANCE	CONTENT
	• Mass care/community shelter. These are congregate care facilities that house many people in one location. These shelters often provide water, food, medicine, and basic sanitary facilities but, if possible, they should take their 3-day disaster supplies kit with them so that they will be sure to have the supplies they require.
	Developing a Disaster Plan
* Where will you meet family members?  * Who is your out-of-State "check-in" contact?  * Will you have an extended stay? Shelter in place? Evacuate?  * How will you escape your home? Workplace? School? Place of worship?  ** PEMA*  * CERT have Tarreng transportation?  * Di you have transportation?  * Di you practice your plan?  * Display Slide 1-20  Explain that the answers to these questions may be different depending on the hazard and the participants probably will not be able to plan for every event that could happen. But stress that, by playing "What if?" with high-risk hazards, they will be better prepared for any hazard that might strike.	Point out to participants that in addition to knowing immediate protective actions that they may need to take, an emergency plan can mean the difference between life and death in a disaster. For example:  Where will you meet family members? You should have a location outside the house and another location outside the neighborhood.  Identify an out-of-state "check-in contact."  Plan for all possibilities: extended stay, shelter in place, or evacuation.  How will you escape buildings where you spend time: your home, workplace, school, place of worship?  What route (and several alternatives) will you use to evacuate? Do you have transportation?

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INSTRUCTOR GUIDANCE	CONTENT
Remind the participants to see <a href="https://www.ready.gov">www.ready.gov</a> for additional information.	Remind participants that, as always, family safety is the most important factor when disaster strikes. In an effort to make the best decision regarding their family's safety, the participants should always first consider what is best given the situation. It is also essential that they practice their plan with their family — evacuating the home and contacting all family members using their "check-in contact."  Emphasize to participants that practicing their plan
	now will improve their performance when it matters most.
PM, P. 1-19	Direct the participants to a handout provided in their Participant Manual, Creating a Family Disaster Plan.

PM, P. 1-19	Creating a Family Disaster Plan

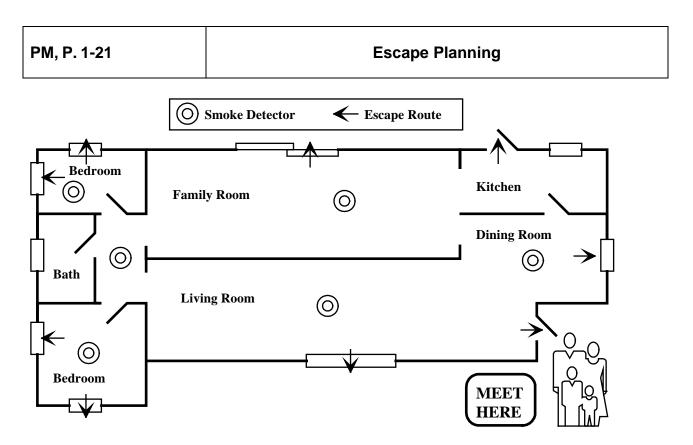
#### To get started . . .

- Contact your local emergency management office and your local chapter of the American Red Cross.
  - Find out which disasters are most likely to happen in your community.
  - Ask how you would be warned.
  - Find out how to prepare for each type of disaster.
- Meet with your family.
  - · Discuss the types of disasters that could occur.
  - Explain how to prepare and respond.
  - Discuss what to do if advised to evacuate.
  - Practice what you have discussed.
- Plan how your family will stay in contact if separated by disaster.
  - Pick two meeting places:
    - A location a safe distance from your home in case of fire
    - A place outside your neighborhood in case you can't return home
  - Choose an out-of-State friend as a "check-in contact" for everyone to call.
    - Make sure that the person selected understands that they are your out-of-State contact in case of emergency and what you would expect of them should such an emergency arise.
    - Give your "check-in contact" person a list of pertinent people to contact. Be sure to include phone numbers!
    - Periodically practice using your local and out-of-State contacts as if it were an emergency situation.
- Complete the following steps.
  - Post emergency telephone numbers by every phone.
  - Show responsible family members how and when to shut off water, gas, and electricity at main switches.
  - Install a smoke alarm on each level of your home, especially near bedrooms; test them monthly and change the batteries two times each year. (Change batteries when you change your clocks in the spring and fall.)
- Contact your local fire department to learn about home fire hazards.
  - Learn first aid and CPR. Contact your local chapter of the American Red Cross for information and training.
- Meet with your neighbors.
  - Plan how the neighborhood could work together after a disaster. Know your neighbors' skills (medical, technical).
  - Consider how you could help neighbors who have special needs, such as elderly or disabled persons.
  - Make plans for child care in case parents can't get home.

INSTRUCTOR GUIDANCE	CONTENT
	Activity: Evacuate!
	<b>Instructions:</b> Follow the steps below to conduct this exercise:
	<ol> <li>Describe a disaster (hurricane, earthquake, etc.) and instruct the participants that they have 5 minutes to evacuate their home in this disaster scenario.</li> </ol>
	<ol><li>Ask participants to come up with a list of items they would bring with them and/or what they would do in that window of time.</li></ol>
	3. For added urgency, end the exercise after 4 minutes.
	Ask volunteers to share their information and explain their choices.
	Debrief by explaining that the answer to this question may be different depending on the hazard. Participants probably will not be able to plan for every event that could happen.
	Stress that, by playing "What if?" with high-risk hazards, they will be better prepared for any hazard that might strike.

INSTRUCTOR GUIDANCE	CONTENT
	Escape Planning
<b>?</b> **	How many of you have developed escape plans for your homes or workplaces?
Escape Planning     Consider needs of children and individuals	Emphasize the importance of having an escape plan that:
with disabilities  Inform all family members or office coworkers of the plan	<ul> <li>Includes escape from every room of the house or every area of the workplace</li> </ul>
Run practice escape drills	<ul> <li>Considers the needs of children and individuals with disabilities</li> </ul>
FEMA CERT basic Trianing 121 COLD	Explain that all family members or office coworkers should be informed about the plan.
Display Slide 1-21	
PM, P. 1-21	Explain the <i>Escape Planning</i> plan. Tell the participants that a sample escape plan is in the Participant Manual. Explain that, in most cases, homeowners won't have smoke alarms in every room, but it is important to have a smoke alarm at least on every level of the house.
	Urge the participants to practice their plans after they develop them. Suggest that they conduct family fire drills, follow the local evacuation routes, and locate the nearest shelter to ensure that, when a disaster occurs, they know what to do.
	An example of an escape plan is shown in the figure that follows.

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Sample family escape plan with arrows showing an escape route from every room in the home and a family meeting place outside the home

INSTRUCTOR GUIDANCE	CONTENT
PM, PP. 1-22 through 1-27	Refer the participants to Assembling and Storing a Disaster Supply Kit in the Participant Manual. Tell the group that the list includes all disaster supplies recommended by FEMA.
Consider asking participants to take one or two steps (that you define) in assembling their household kit.	Point out that the disaster supplies included on this list are fairly complete. Suggest that the participants determine the supplies that they will need for evacuation, those that they will need to shelter in place, and those that they will need for both.
	Remind the participants that there are special considerations for those with special needs, children, and pets.
<b>?</b> **	Do you have any questions about home and workplace preparations?

INSTRUCTOR GUIDANCE	CONTENT

PM, PP. 1-22 through 1-27	Assembling and Storing a Disaster Supply Kit
1-21	

You can cope best by preparing for disaster <u>before</u> it strikes. One way to prepare is by assembling a Disaster Supply Kit. After disaster strikes, you won't have time to shop or search for supplies. But if you've gathered supplies in advance, you and your family can endure an evacuation or home confinement.

### To Prepare Your Kit

- 1. Review the checklist on the next few pages.
- 2. Gather the supplies from the list. Remember that many households already have many of the items needed for their kits. These items can be assembled in appropriate locations for quick access in an emergency, but used under normal circumstances whenever needed. For example, keep a wrench in your kit to shut off gas at the meter in an emergency, but use the wrench for everyday tasks, too. Just be sure to return it to the emergency kit.
- 3. Place the supplies you're apt to need for an evacuation in an easy-to-carry container. These supplies are listed with an asterisk (\*).

CERT BASIC TRAINING: INSTRUCTOR GUIDE JANUARY 2011 PAGE 1-37

#### Water

Store water in plastic containers such as soft drink bottles.

- Look for the triangular recycling symbol with a number 1 on the bottom of the bottle
  as those are best for water storage. Avoid using containers that will decompose or
  break, such as plastic milk jugs or glass bottles.
- Wash the bottle with soap and warm water, fill with water from your tap, and store in a cool, dark area away from direct sunlight.
- Replace your emergency water every 6 months by repeating the process; like food and batteries, water does expire!

Keep in mind that a normally active person needs to drink at least 2 quarts of water each day. Hot environments and intense physical activity can double that requirement. Children, nursing mothers, and ill people will need more.

- Store 1 gallon of water per person per day (2 quarts for drinking, 2 quarts for food preparation and sanitation).\*
- Keep at least a 3-day supply of water for each person in your household.

PM, PP. 1-22 through 1-27	mbling and Storing a Disaster Supply Kit
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If you have guestions about the quality of the water, purify it before drinking. You can heat water to a rolling boil for 1 minute or use commercial purification tablets to purify the water. You can also use regular household liquid chlorine bleach if it is pure 5.25% sodium hypochlorite. (Do not use perfumed bleach!) To purify water, use the table below as a guide:

### **Ratios for Purifying Water with Bleach**

Water Quantity	Bleach Added
1 Quart	2 Drops
1 Gallon	8 Drops
5 Gallons	1/2 Teaspoon

Note: If water is cloudy, double the recommended dosage of bleach.

After adding bleach, shake or stir the water container and let it stand 30 minutes before drinking.

#### Food

Store at least a 3-day supply of nonperishable food. Select foods that require no refrigeration, preparation, or cooking and little or no water. If you must heat food, pack a can of Sterno<sup>®</sup>. Select food items that are compact and lightweight. Avoid salty foods if possible as they increase thirst. Include a selection of the following foods in your disaster supply kit. Check food and water expiration dates biannually.

- Ready-to-eat canned meats, fruits, and
   Foods for infants, elderly persons, or vegetables
- Canned juices, milk, soup (if powdered, store extra water)
- Staples sugar, salt, pepper
- High-energy foods peanut butter, jelly, crackers, granola bars, trail mix
- persons on special diets
- Comfort and stress foods cookies. hard candy, sweetened cereals, lollipops, instant coffee, tea bags

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### Kitchen Items

- Manual can opener
- Mess kits or paper cups, plates, and plastic utensils
- All-purpose knife
- Household liquid bleach to treat drinking water
- Aluminum foil and plastic wrap
- Re-sealing plastic bags
- If food must be cooked, small cooking stove and a can of cooking fuel

### First Aid Kit\*

Assemble a first aid kit for your home and one for each car. (Note: This kit is not intended to supplement or replace a CERT member supply kit!) A first aid kit should include:

- First aid manual
- Sterile adhesive bandages in assorted sizes
- Two-inch sterile gauze pads (4-6)
- Four-inch sterile gauze pads (4-6)
- Hypoallergenic adhesive tape
- Triangular bandages (3)
- Needle
- Moistened towelettes
- Antibacterial ointment
- Thermometer
- Tongue blades (2)
- Tube of petroleum jelly or other lubricant

- Assorted sizes of safety pins
- Cleaning agent/soap
- Non-latex exam gloves (2 pairs)
- Cotton balls
- Sunscreen
- Three-inch sterile roller bandages (3 rolls)
- Four-inch sterile roller bandages (3 rolls)
- Scissors
- Tweezers
- Hot and cold compress

PM, PP. 1-22 through 1-27	Assembling and Storing a Disaster Supply Kit
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### First Aid Kit\* (contd.)

### **Nonprescription Drugs**

- Aspirin or nonaspirin pain reliever
- Antidiarrhea medication
- Antacid (for stomach upset)
- Allergy medication and, if necessary, epinephrine
- Laxative
- Vitamins
- Activated charcoal (used if advised by the Poison Control Centers

### **Tools and Supplies**

- Emergency preparedness manual\*
- Battery-operated weather radio and extra batteries\*
- Flashlight and extra batteries\*
- Fire extinguisher: small canister, ABC type
- Tube tent
- Pliers
- Duct tape
- Compass\*
- Matches in a waterproof container
- Aluminum foil
- Plastic storage containers
- Signal flare(s)\*
- Paper, pencil\*
- Needles, thread
- Work gloves
- Medicine dropper

- Non-sparking shutoff wrench to turn off household gas and water
- Whistle
- Plastic sheeting
- Landline telephone
- Fuel for vehicle and generator

#### Sanitation

- Toilet paper, towelettes\*
- Soap, liquid detergent\*
- Feminine supplies\*
- Personal hygiene items\*
- Plastic garbage bags, ties (for personal sanitation uses)
- Plastic bucket with tight lid
- Disinfectant
- Liquid hand sanitizer
- Household chlorine bleach

### **Pet Supplies**

- Medications and medical records (stored in a waterproof container) and a first aid kit
- Current photos of your pets in case they get lost
- Information on feeding schedules, medical conditions, behavior problems, and the name and number of your veterinarian in case you have to foster or board your pets
- Sturdy leashes, harnesses, and/or carriers to transport pets safely and ensure that your animals can't escape
- Food, potable water, bowls, cat litter and pan, and can opener
- Pet beds and toys, if easily transportable

### **Clothing and Bedding**

Include at least one complete change of clothing and footwear per person (and remember to change for the different seasons!).

- Sturdy shoes or boots\*
- Rain gear\*
- Blankets or sleeping bags\*

- Hat and gloves\*
- Thermal underwear\*
- Sunglasses\*

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PM, PP. 1-22 through 1-27	Assembling and Storing a Disaster Supply Kit

### **Household Documents and Contact Numbers\***

- Personal identification, cash (including change) or traveler's checks, and a credit card
- Copies of important documents: birth certificates, marriage certificate, driver's license, Social Security cards, passport, wills, deeds, inventory of household goods, insurance papers, contracts, immunization records, bank and credit card account numbers, stocks and bonds. Be sure to store these in a watertight container.
- Emergency contact list and other important phone numbers
- Map of the area and phone numbers of places you could go
- An extra set of car keys and house keys
- Copies of prescriptions and/or original prescription bottles

### Special Items

Remember family members with special needs, such as infants and elderly or those with disabilities.

### For Baby\*

- Formula
- Diapers
- Bottles
- Powdered milk
- Medications

### For All Family Members

- Heart and high blood pressure medication\*
- Insulin\*
- Other prescription drugs\*
- Denture needs\*
- Contact lenses and supplies\*
- Extra eye glasses\*
- Entertainment games and books

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<sup>\*</sup>Items marked with an asterisk are recommended for evacuation.

INSTRUCTOR GUIDANCE	CONTENT
	Reducing the Impact of Hazards Through Mitigation
Preparing for a Disaster	Preparing for a Disaster
Mitigation is the reduction of loss of life and property by lessening the impact of disasters     Any activity that prevents an emergency or reduces effects of hazards     CERT members should have adequate homeowners coverage     Add flood insurance if in a flood hazard area      CERT Basic Training 1-22  Display Slide 1-22	Tell participants that in addition to managing the impact that a disaster would have on them and their families by assembling disaster supplies, mitigation will also help. Mitigation is the reduction of loss of life and property by lessening the impact of disasters. Mitigation includes any activities that prevent an emergency, reduce the likelihood of occurrence, or reduce the damaging effects of unavoidable hazards. Mitigation can include non-structural measures, structural changes, and purchasing appropriate insurance.  Explain that CERT members should ensure that their homeowner's policy provides adequate coverage and
	covers appropriate hazards in their area. In addition, homeowners insurance does not cover damage caused by flooding, so it is important to know whether they are in a flood hazard area and to purchase flood insurance if so. Visit the National Flood Insurance Program Web site, <a href="https://www.floodsmart.gov">www.floodsmart.gov</a> , to learn more.

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#### **INSTRUCTOR GUIDANCE** CONTENT Explain that non-structural hazard mitigation includes Non-structural Hazard Mitigation relatively simple actions participants can take to prevent home furnishings and appliances from causing Anchor heavy furniture · Secure appliances and office equipment damage or injuries during any event that might cause Install hurricane storm shutters them to shift. Examples of non-structural hazard · Childproof cabinet doors mitigation include: · Locate and label gas, electricity, and water shutoffs Anchor heavy furniture. · Secure water heaters and have flexible gas lines installed Secure appliances and office equipment. CERT Basic Training Install hurricane storm shutters. Display Slide 1-23 Secure cabinet doors with childproof fasteners. Locate and label gas, electricity, and water shutoffs. Pay particular attention to the precautions that are common Secure water heaters and have flexible gas lines and necessary in your locality. installed.

Other Mitigation Measures

Bolt houses to foundations
Install trusses or hurricane straps to reinforce roof
Strap propane tanks and chimneys
Strap mobile homes to their slabs
Raise utilities
Build a safe room

Whenever possible, bring in samples of materials used (e.g., industrial-strength Velcro®), and demonstrate

### **Display Slide 1-24**

their use.

Research the types of structural hazards in your area, and modify these hazard mitigation measures to make them appropriate to your area.

Some mitigation measures require a bigger investment to address structural changes to reduce the impact of disasters. Depending on the likely hazards in each area, these may include:

- Bolt house to foundations.
- Install trusses or hurricane straps to reinforce the roof.
- Strap propane tanks and chimneys.
- Strap mobile homes to their slabs.
- Raise utilities (above the level of flood risk).
- Build a safe room.

INSTRUCTOR GUIDANCE	CONTENT
	Emphasize that a safe room is NOT the same as a shelter-in-place location. A safe room requires significant fortification in order for the room to provide protection against extremely high winds. More information is available at <a href="https://www.fema.gov/plan/prevent/saferoom/index.shtm">www.fema.gov/plan/prevent/saferoom/index.shtm</a>
	Tell participants that sheltering-in-place is done to protect against contaminants in the air. To shelter in place, they do not need to alter the structure of the room. Participants are simply sealing the room with plastic sheeting and duct tape for a short period of time while the contaminants in the air dissipate.
PM, P. 1-30	Refer the participants to <i>Fortifying Your Home</i> in the Participant Manual.

CERT BASIC TRAINING: INSTRUCTOR GUIDE

PM, P. 1-30	Fortifying Your Home
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Type of Hazard	Sample Precautions
Structural	<ul> <li>Bolt older houses to the foundation.</li> </ul>
	<ul> <li>Install trusses or hurricane straps to reinforce the roof.</li> </ul>
	<ul> <li>Strap propane tanks and chimneys.</li> </ul>
	<ul> <li>Strap mobile homes to their concrete pads.</li> </ul>
	<ul> <li>Raise utilities (above the level of flood risk).</li> </ul>
	<ul> <li>Ask a professional to check the foundation, roof connectors, chimney, etc.</li> </ul>
Non-Structural	<ul> <li>Anchor such furniture as bookshelves, hutches, and grandfather clocks to the wall.</li> </ul>
	<ul> <li>Secure appliances and office equipment in place with industrial-strength Velcro<sup>®</sup>.</li> </ul>
	<ul> <li>Install hurricane storm shutters to protect windows.</li> </ul>
	<ul> <li>Secure cabinet doors with childproof fasteners.</li> </ul>
	Locate and label shutoffs for gas, electricity, and water before disasters occur. After a disaster, shut off the utilities as needed to prevent fires and other risks. Store a non-sparking shutoff wrench where it will be immediately available.
	<ul> <li>Teach all home occupants, including children who are old enough to handle the responsibility, when and how to shut off the important utilities.</li> </ul>
	<ul> <li>Secure water heaters to the wall to safeguard against a ruptured gas line or loose electrical wires.</li> </ul>

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**INSTRUCTOR GUIDANCE** 

### **Display Slide 1-25**

#### CONTENT

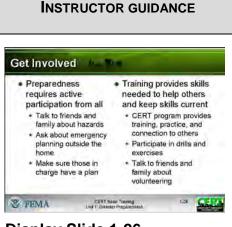
### **Fortifying Your Home**

Remind participants that different non-structural hazards pose different threats, depending on the disaster. A few examples are provided below.

- Home Fires: Make sure that burglar bars and locks on outside window entries are easy to open from the inside.
- Landslides and Mudslides: Install flexible pipe fittings to avoid gas or water leaks. Flexible fittings are more resistant to breakage.
- Wildfires:
  - Avoid using wooden shakes and shingles for roofing.
  - Clear all flammable vegetation at least 30 feet from the home. Remove vines from the walls of the home.
  - Place propane tanks at least 30 feet from the home or other structures.
  - Stack firewood at least 30 feet away and uphill from the home.

**CERT BASIC TRAINING: INSTRUCTOR GUIDE** 

For more information: "Learn About the Different Types of Disasters and Hazards" at <a href="https://www.fema.gov/hazard/index.shtm">www.fema.gov/hazard/index.shtm</a>



### **Display Slide 1-26**

#### CONTENT

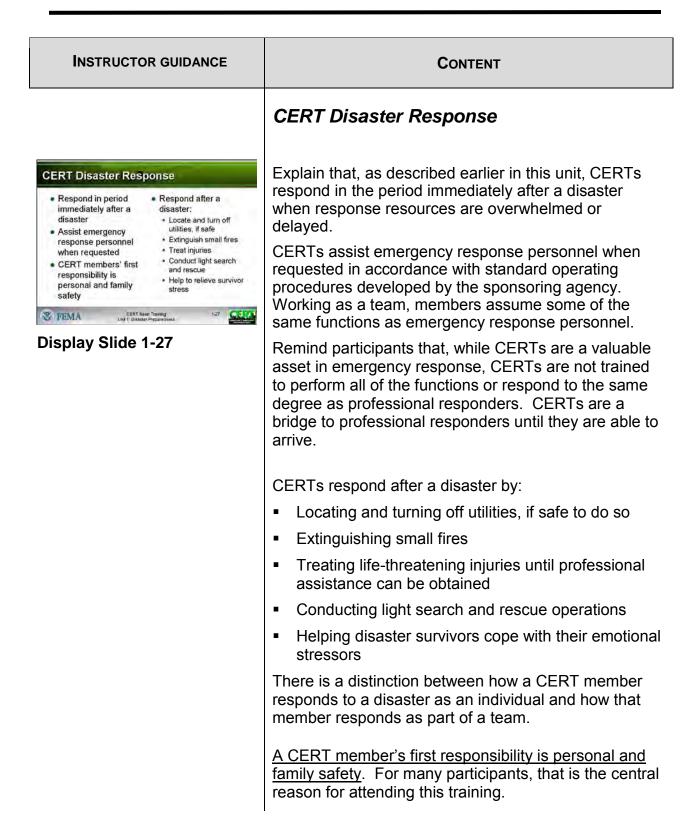
#### **Get Involved**

Explain that preparedness requires active participation from all. Participants should:

- Start the process by talking to their friends and family about the hazards in their area and what steps they all need to take to be able to help each other in a crisis — large or small
- Ask about emergency planning at their workplace, their schools, their place of worship, and other social settings
- Make sure that those in charge have a plan and are connected to community authorities on emergency management and planning

Emphasize that they should take training to acquire the skills they need to help others and to keep their skills current through refresher training and practice.

- Their participation in the CERT Program will provide training, practice, and the connection with others to develop teams.
- Plan also to participate in drills and exercises with their family and neighbors and at their workplace, school, place of worship, and community-organized events. The more they practice, the better prepared they will be to take effective action when a disaster happens.
- Talk to their friends and family about volunteering, too. Volunteering to help their community through CERT and other activities is a great experience to share!



INSTRUCTOR GUIDANCE	CONTENT
	Only after personal and family safety is secured is it possible and pertinent to respond in a group capacity to do what is necessary for the community as a whole.
	How that group response is orchestrated is defined by the sponsoring agency. In general, the team members select a leader (and alternate) and define the meeting location — or staging area — to be used in the event of disaster.
	CERT members gather at the pre-established staging area to organize and receive tasking assignments. Runners may be identified to serve as a communication link between the staging area and CERT members working in the field.
	In this way, CERT members can provide first for their own well-being and that of their family and, once appropriate, serve as part of the CERT responding to the disaster in the community.
	In some cases, CERT members also provide a well-trained workforce for such duties as shelter support, crowd and traffic management, and evacuation.
	In all instances, it is critical that CERT members stay within the limits of their training when providing disaster relief.
	CERT organization and operations will be covered in depth in Unit 6 of the training.

# INSTRUCTOR GUIDANCE CONTENT



### Display Slide 1-28

PM, P. 1-34

Clearly explain to whom CERTs report in your area.

Explain also that this is a snapshot of how CERTs operate. CERT organization and operation will be covered in detail Unit 6.



### **CERT Organization**

Refer the participants to the chart titled *CERT Organization* in the Participant Manual. Point out that they will learn more about the major CERT functional areas in Unit 6.

Emphasize that, no matter which function CERT members are assigned to, effective CERTs require teamwork.

Remind the participants that while CERT members play a vital role in disaster response, they are NOT trained or expected to perform all of the functions of professional responders.

Tell the group that there are checklists in the *Additional Materials* section at the back of Unit 1 in the Participant Manual that will help in:

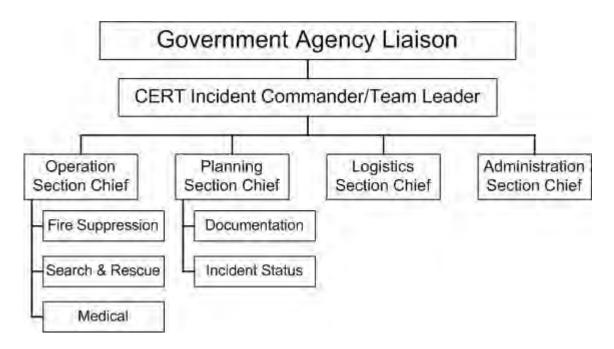
- Planning and organizing a CERT
- Assembling equipment and supplies for a CERT

Be sure to emphasize that many details included in the checklists for *Team Organization* will be discussed in later modules of the training.

**CERT BASIC TRAINING: INSTRUCTOR GUIDE** 

Do you have any questions about community preparations?

PM, P. 1-34	CERT Organization
PIVI, P. 1-34	CER I Organization



CERT organization showing the government agency liaison at the top.

Underneath is the CERT Incident Commander/Team Leader who directs the activities of four sections: Operations, Planning, Logistics, and Administration.

Underneath the Operations section are three response teams: Fire Suppression, Search and Rescue, and Medical.

Underneath the Planning section are two sections: Documentation and Incident Status.

## INSTRUCTOR GUIDANCE CONTENT **Personal Protective Equipment** Emphasize to participants that while CERT members play a vital role in disaster response, they are NOT trained or expected to perform all of the functions of professional responders. Also emphasize that, at all times, a CERT member's first job is to stay safe. Remind the participants of the central importance of Personal Protective Equipment wearing the appropriate personal protective equipment Helmet (PPE). CERT members are required to wear: Goggles • N95 Mask Helmet · Gloves (work and non-latex) Goggles

## **Display Slide 1-29**

 Sturdy shoes or work boots

**ॐ** FEMA

Briefly demonstrate the proper equipment by putting on your own PPE.

CERT Basic Training



**Display Slide 1-30** 

## **CERT in Action**

N95 Mask

Gloves (work and non-latex exam)

Sturdy shoes or boots

Explain that, across the country, CERTs continue to be activated in a wide range of disaster and emergency support operations. For these efforts, CERT members and teams are receiving Federal, State, and local recognition for their response assistance.

For brief profiles of how CERTs have assisted in actual emergencies all over the country, visit "CERT in Action!" at the national CERT Web site, <a href="https://www.citizencorps.gov/cert">www.citizencorps.gov/cert</a>. Click on the link "CERT in Action!"

# Non-Disaster Roles • Identify and aid neighbors/coworkers who might need assistance • Distribute preparedness materials; do demos • Staff first aid booths at special events • Assist with installation of smoke alarms • Parade route management CERT Basic Training. List 1: Disaster Preparediess

INSTRUCTOR GUIDANCE

## **Display Slide 1-31**

Describe non-emergency volunteer opportunities for CERTs in your community.

#### CONTENT

#### **CERTs in Non-Disaster Roles**

Explain that CERT members also are a potential volunteer pool for the community. They can help with projects such as:

- Identifying and aiding neighbors and coworkers who might need assistance during an emergency or disaster
- Distributing preparedness materials and doing preparedness demonstrations
- Staffing parades, health fairs, county fairs, and other special events
- Assisting with the installation of smoke alarms for seniors and special-needs households
- Parade route traffic management

# Protection for Disaster Workers • CERT members generally protected by: • "Good Samaritan" laws • Volunteer Protection Act of 1997 • Relevant State statutes

INSTRUCTOR GUIDANCE

## **Display Slide 1-32**

ate-liability.shtml

Please remember to cover all State laws that apply to both rescuers and victims. If pertinent information has been entered on the page, tell participants to turn to p. 1-37 in their Participant Manuals for applicable laws. Direct participants to the following Web site for additional information: http://nonprofitrisk.org/library/st

### CONTENT

### Protection for Disaster Workers

Explain that, as volunteers engaging in CERT, members are generally protected by "Good Samaritan" laws that protect people who provide care <u>in a prudent</u> and reasonable manner.

Point out that, in a disaster, CERT members are also protected by the Volunteer Protection Act of 1997, a Federal law that protects volunteers from liability as long as they are acting in accordance with the training that they have received.

CERT members may also have protection under relevant State statutes where they live. Remind participants that these laws vary from State to State, and emphasize the laws that apply in their area.

PM, P. 1-37	Applicable Laws and Key Points

Applicable Laws	Key Points

## INSTRUCTOR GUIDANCE Additional Training for CERTs · Advanced first aid Donations management Animal issues in Shelter management disasters Defibrillator (AED) concerns Traffic/crowd control Community relations Utilities control · CPR skills Online courses Debris removal CERT **№** FEMA CERT Basic Training Unit 1 Disaster Proparagraph **Display Slide 1-33** Indicate that these are some examples and specify any additional training that your

program offers to CERT members.

Recommend the CERT Web site for online training for a range of topics:

www.citizencorps.gov/cert/

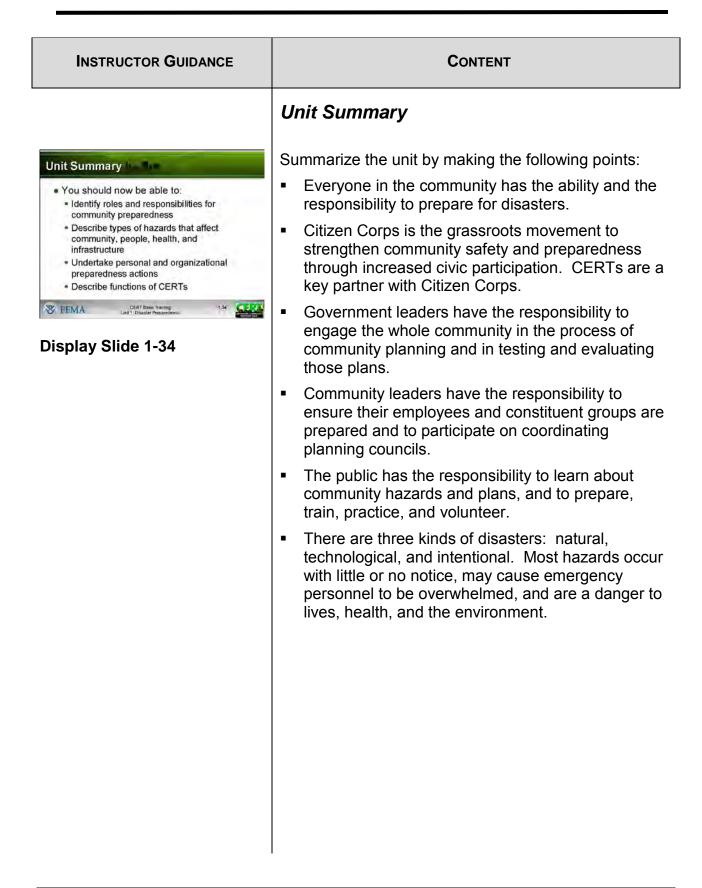
# CONTENT

# Additional Training for CERTs

After completing initial CERT training, many CERT members seek to expand and improve their skills through continuing CERT modules offered locally, courses offered through the American Red Cross, or programs from other sources. Some CERT members have sought additional training opportunities in:

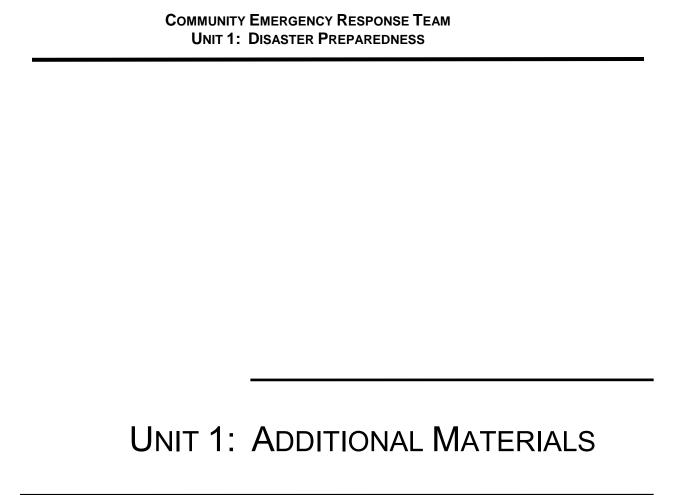
- Advanced first aid
- Animal issues in disasters
- Automated External Defibrillator (AED) use
- Community relations
- CPR skills
- Debris removal
- **Donations management**
- Shelter management
- Special needs concerns
- Traffic and crowd control
- **Utilities** control

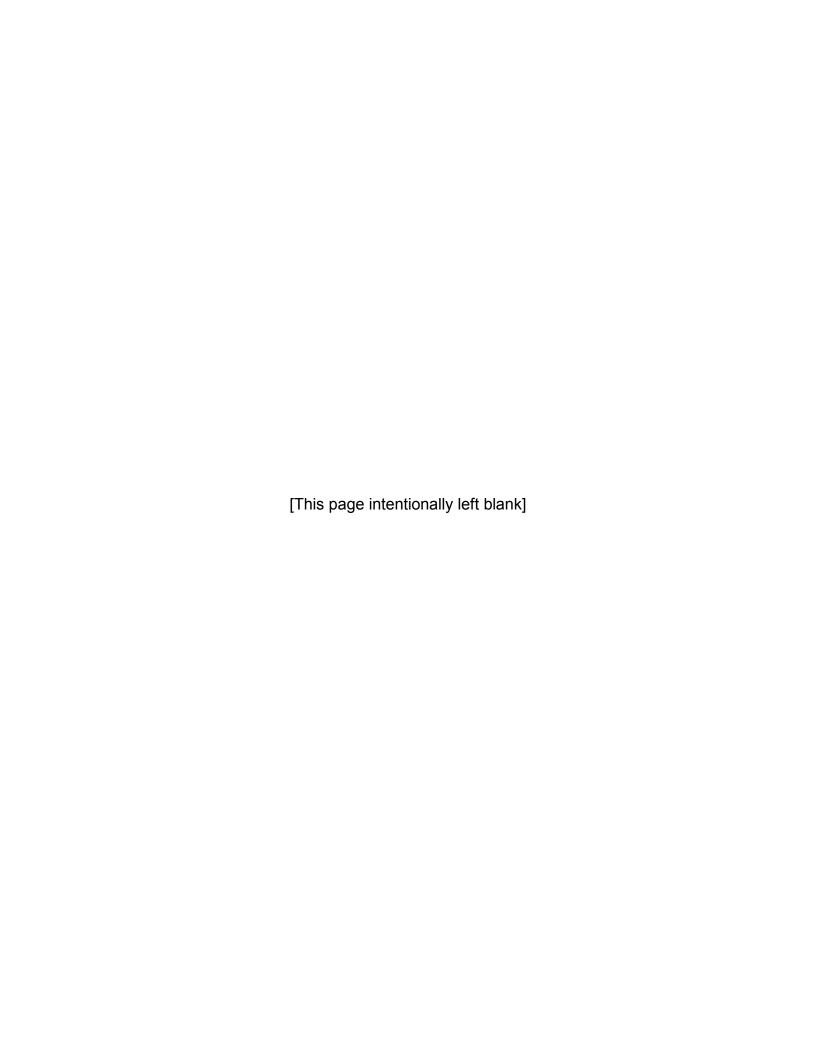
INSTRUCTOR GUIDANCE		CONTENT
	available on Managemer	so Independent Study (IS) courses line from the Federal Emergency nt Agency (FEMA) that will of interest to bers. Some of these include:
	IS-100.a	Introduction to Incident Command System
	IS-200.a	ICS for Single Resources and Initial Action Incidents
	IS-700.a	National Incident Management System (NIMS), An Introduction
	IS-800.b	National Response Framework, An Introduction
	Independen	ete listing and access to FEMA t Study courses, visit g.fema.gov/IS/. Click on the "ISP Course



Instructor Guidance	CONTENT
	Personal preparedness should be tailored to the hazards in your community, but should include:
	<ul> <li>Learning about community alerts, warnings, and plans</li> </ul>
	Learning about appropriate protective actions
	<ul> <li>Developing household plans and conducting drills to practice</li> </ul>
	<ul> <li>Assembling disaster supplies in multiple locations</li> </ul>
	Reducing hazards in the home
	<ul> <li>Encouraging others to prepare and volunteering to help your community</li> </ul>
	<ul> <li>CERTs are among a variety of agencies and personnel who cooperate to provide assistance in the aftermath of a disaster. The keys to CERT effectiveness are in:</li> </ul>
	<ul> <li>Familiarity with the types of events that are high risk for the area and the types of damage that can occur as a result</li> </ul>
	<ul> <li>Adequate preparation for each event and its aftermath</li> </ul>
	<ul> <li>Training in the functional areas to which CERTs are assigned</li> </ul>
	<ul> <li>Practice through refreshers and simulations</li> </ul>
	<ul> <li>CERTs have proven themselves invaluable in the areas in which they were tested. They can be invaluable in this community as well.</li> </ul>
?	Do you have any questions about anything covered in this unit?

Homework Assignment  1. Review detailed information for Unit 1 2. Read unit to be covered in next session 3. Bring necessary supplies and wear appropriate clothes for next session 4. Discuss preparedness with family and friends 5. Assemble supplies in multiple locations 6. Examine homes for hazards  Display Slide 1-35  Homework Assignment  Tell the group that the next unit will cover fire safety. Then remind the group that, before the next session, they should:  1. Review the detailed information in Unit 1 of the Participant Manual  2. Read and familiarize themselves with Unit 2: Fire Safety and Utility Controls in the Participant Manual  3. Bring a pair of leather gloves and safety goggles to use in the fire suppression unit and to serve as a starting point for their disaster supply kits. Tell the group to wear appropriate clothes to the next session (no shorts or open-toed shoes) because they will practice putting out a small fire with an extinguisher.  4. Discuss preparedness with family and friends and make a communications plan, including an out-of-	Tell the group that the next unit will cover fire safety. Then remind the group that, before the next session, they should:  1. Review detailed information for Unit 1 2. Read unit to be covered in next session 3. Bring necessary supplies and wear appropriate clothes for next session 4. Discuss preparedness with family and friends 5. Assemble supplies in multiple locations 6. Examine homes for hazards  Display Slide 1-35  Display Slide 1-35  Tell the group that the next unit will cover fire safety. Then remind the group that, before the next session, they should:  1. Review the detailed information in Unit 1 of the Participant Manual  2. Read and familiarize themselves with Unit 2: Fire Safety and Utility Controls in the Participant Manual  3. Bring a pair of leather gloves and safety goggles to use in the fire suppression unit and to serve as a starting point for their disaster supply kits. Tell the group to wear appropriate clothes to the next session (no shorts or open-toed shoes) because they will practice putting out a small fire with an extinguisher.  4. Discuss preparedness with family and friends and	INSTRUCTOR GUIDANCE	CONTENT
<ul><li>5. Begin to assemble supplies in multiple locations</li><li>6. Examine their homes for hazards and identify ways to prevent potential injury</li></ul>	·	Homework Assignment  1. Review detailed information for Unit 1 2. Read unit to be covered in next session 3. Bring necessary supplies and wear appropriate clothes for next session 4. Discuss preparedness with family and friends 5. Assemble supplies in multiple locations 6. Examine homes for hazards	Homework Assignment  Tell the group that the next unit will cover fire safety. Then remind the group that, before the next session, they should:  1. Review the detailed information in Unit 1 of the Participant Manual  2. Read and familiarize themselves with Unit 2: Fire Safety and Utility Controls in the Participant Manual  3. Bring a pair of leather gloves and safety goggles to use in the fire suppression unit and to serve as a starting point for their disaster supply kits. Tell the group to wear appropriate clothes to the next session (no shorts or open-toed shoes) because they will practice putting out a small fire with an extinguisher.  4. Discuss preparedness with family and friends and make a communications plan, including an out-of-State "check-in contact"  5. Begin to assemble supplies in multiple locations  6. Examine their homes for hazards and identify ways to prevent potential injury
<ul><li>5. Begin to assemble supplies in multiple locations</li><li>6. Examine their homes for hazards and identify ways</li></ul>	·		<ul> <li>4. Discuss preparedness with family and friends and make a communications plan, including an out-of-State "check-in contact"</li> <li>5. Begin to assemble supplies in multiple locations</li> <li>6. Examine their homes for hazards and identify ways</li> </ul>





## **COMMUNITY EMERGENCY RESPONSE TEAM CHECKLIST**

<u>Instructions</u>: This checklist will help guide you in the setup of your CERT as well as emergency preparedness at home.

Personal Preparedness	Check if Completed	Date Checked
■ Food		
<ul><li>Water</li></ul>		
<ul> <li>Out-of-State Check-In Contact</li> </ul>		
<ul> <li>Mitigation Measures</li> </ul>		
<ul><li>Water heater</li><li>Utilities</li><li>Cabinets, etc.</li><li>Other:</li></ul>		
Team Organization		
<ul><li>Leadership</li></ul>		
<ul><li>Incident Commander/Team Leader</li><li>Group leaders</li></ul>		
<ul><li>Membership</li></ul>		
<ul><li>Roster</li><li>Phone list</li><li>Skills inventory</li></ul>		
<ul> <li>Communications</li> </ul>		
<ul><li>Telephone tree</li><li>Newsletter</li><li>Amateur radio</li><li>Runners</li></ul>		

# COMMUNITY EMERGENCY RESPONSE TEAM CHECKLIST (CONTINUED)

Τe	eam Organization	Check if Completed	Date Checked
•	Resources		
	<ul><li>Personnel</li><li>Equipment</li><li>Supplies</li><li>Personal CERT kit</li></ul>		
•	Area Surveys and Locations		
	<ul> <li>Evacuation plans</li> <li>Staging area/command post</li> <li>Medical treatment area</li> <li>Specific hazard areas</li> <li>Area maps</li> </ul>		
•	Response Plan		
	<ul> <li>Response criteria</li> <li>Communications and notifications</li> <li>Staging area/command post</li> </ul>		
•	Teamwork		
	<ul><li>Meetings</li><li>Drills and exercises</li><li>Training</li></ul>		
	First aid CPR Other:		

# RECOMMENDED PERSONAL PROTECTION EQUIPMENT (PPE)

The following items are minimum safety equipment for all CERT members.

- Hard hat
- Protective eyewear (safety goggles)
- Leather work gloves
- Long-sleeved shirt

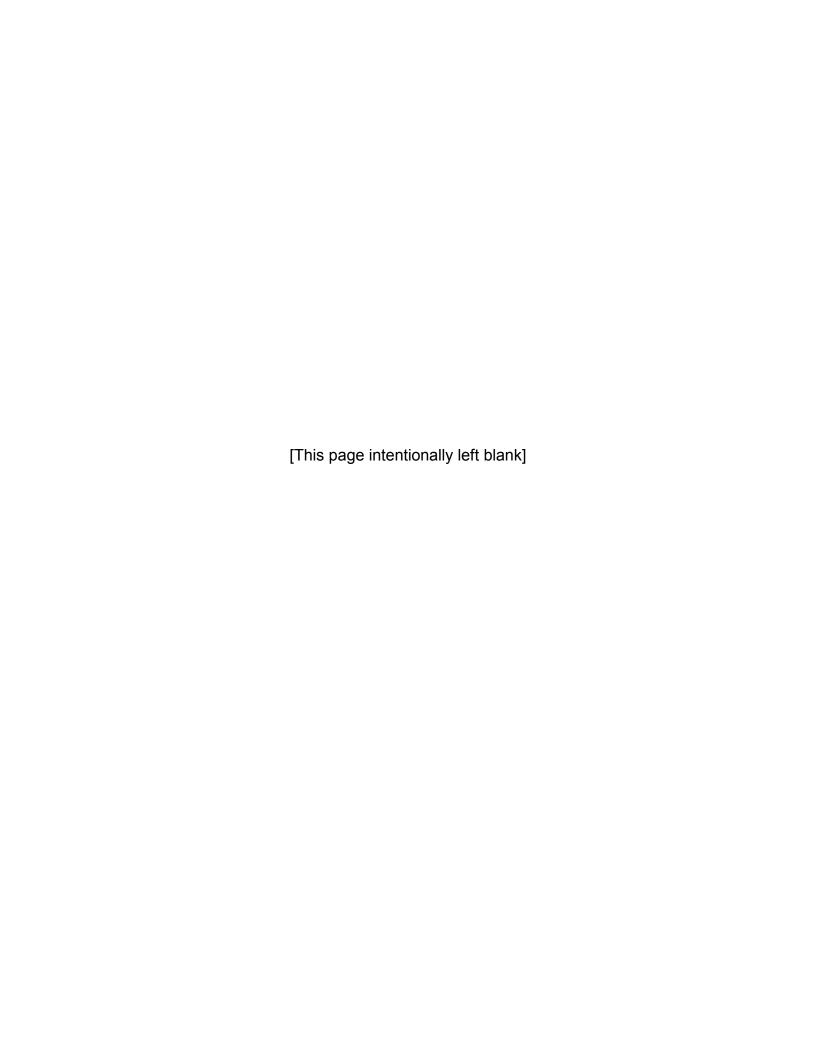
- N95 mask
- Reflective vest
- Sturdy shoes or boots
- Long pants

## RECOMMENDED CERT EQUIPMENT AND SUPPLIES

The following equipment and supplies are recommended as minimum kit items for each CERT member. These guidelines are recommended in addition to team supplies.

E	quipment and Supplies	Date Obtained	Quantity	Date Checked
•	Nylon or canvas bag with shoulder strap			
•	Water (two canteens or bottles per search and rescue team)			
•	Dehydrated foods			
•	Water purification tablets			
•	Work gloves (leather)			
•	Non-latex exam gloves (10 pair min.)			
•	Goggles			
•	N95 masks			
•	Flashlight or miner's lamp			
•	Batteries and extra bulbs			
•	Secondary flashlight			
•	Cyalume sticks (12-hour omni glow)			
•	Voltage tick meter			
•	Pea-less whistle			
•	Utility knife			
•	Note pads			
•	Markers:			
	<ul> <li>Thin point</li> </ul>			
	<ul> <li>Thick point</li> </ul>			
•	Pens			
•	Duct tape			
•	Masking tape (2 inch)			
•	Scissors (EMT shears)			

Equipment and Supplies	Date Obtained	Quantity	Date Checked
<ul> <li>Non-sparking crescent wrench</li> <li>First aid pouch containing:         <ul> <li>4- by 4-inch gauze dressings (6)</li> <li>Abdominal pads (4)</li> <li>Triangular bandages (4)</li> <li>Band-Aids</li> <li>Roller bandage</li> <li>Any personal medications that a CERT member may</li> </ul> </li> </ul>			
need during deployment			



# Unit 2: Fire Safety and Utility Controls

In this unit you will learn about:

- **Fire Chemistry:** How fire occurs, classes of fire, and choosing the correct means to extinguish each type of fire.
- **Fire and Utility Hazards:** Potential fire and utility hazards in the home and workplace, and fire prevention strategies
- CERT Sizeup: How to conduct the continual data-gathering and evaluation process at the scene of a disaster or emergency
- Fire Sizeup Considerations: How to evaluate fires, assess firefighting resources, and determine a course of action
- Portable Fire Extinguishers: Types of portable fire extinguishers and how to operate them
- **Fire Suppression Safety:** How to decide if you should attempt to extinguish a fire; how to approach and extinguish a fire safely
- Hazardous Materials: How to identify potentially dangerous materials in storage, in transit, and in your home



#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

#### **OBJECTIVES**

At the conclusion of this unit, the participants should be able to:

- Explain the role of CERTs in fire safety.
- Identify and reduce potential fire and utility risks in the home and workplace.
- Know the nine steps of the CERT sizeup process.
- Conduct a basic sizeup for a fire emergency.
- Operate a portable fire extinguisher correctly.
- Understand minimum safety precautions, including safety equipment, utility control, buddy system, and backup teams.
- Identify the locations of hazardous materials in the community and home and reduce the risk from hazardous materials in the home.
- Extinguish small fires using a fire extinguisher.

#### SCOPE

The topics that will be discussed in this unit are:

- Introduction and Unit Overview
- Fire Chemistry
- Fire and Utility Hazards
- CERT Sizeup
- Fire Sizeup Considerations
- Firefighting Resources
- Fire Suppression Safety
- Hazardous Materials
- Exercise: Suppressing Small Fires
- Unit Summary

# ESTIMATED COMPLETION TIME

2 hours 30 minutes

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

# TRAINING METHODS

As an introduction to fire safety, the instructor will describe fire chemistry and the classes of fire, emphasizing the importance of selecting the correct methods or agent for fire safety.

Then, the instructor will present an overview of hazards in the home and workplace, including electrical hazards, natural gas hazards, and flammable and combustible liquids, and lead a discussion of hazard mitigation and preparedness.

The instructor will then describe CERT strategies for assessing disaster or emergency situations using the continual, 9-step sizeup process. Participants will learn fire sizeup considerations and how to use the fire sizeup checklist when conducting a sizeup for a situation involving fire.

The next topic will be a discussion of firefighting resources, including portable fire extinguishers and creative resources such as pools, dirt or sand, and a garden hose. Emphasis will be placed on portable fire extinguishers because they will be the most common resource available to CERTs. Discussion of portable fire extinguishers will include types, extinguisher components, deciding to use a fire extinguisher, and correct extinguisher operation.

Fire suppression safety will be the next topic. The instructor will introduce the use of fire safety equipment and will place special emphasis on firefighter safety rules, including the 5-second rule, using the buddy system and a backup team, and techniques for fighting fires (e.g., confine the fire, stay low to the ground, identify a second exit route, etc.).

The instructor may choose to show a video at this point to reinforce the presentation on fire safety and fire extinguishers. (Video resources are included in the Equipment section below.)

Next, the instructor will lead an interactive discussion of hazardous materials, including where they are found, placarding, storage, and defensive strategies for hazardous materials accidents.

Finally, the unit will end with an exercise in which the participants will operate in teams of two and use a portable fire extinguisher to extinguish a gas fire.

# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

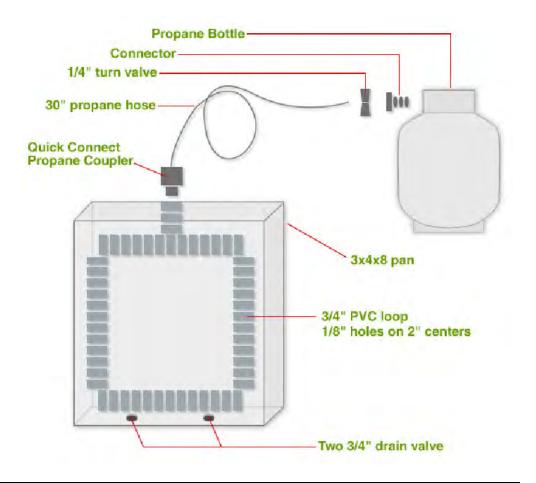
RESOURCES REQUIRED	<ul> <li>Community Emergency Response Team Instructor Guide</li> <li>Community Emergency Response Team Participant Manual</li> <li>PowerPoint Slides 2-0 through 2-32</li> </ul>
OTHER RESOURCES	If time permits, the 18-minute video <i>Fire Safety: The CERT Member's Role</i> is recommended for this unit. The video provides information on how to size up the fire and select the right extinguisher, as well as how to use extinguishers correctly. The video is available for download at the national CERT Web site, <a href="https://www.citizencorps.gov/cert/">www.citizencorps.gov/cert/</a> .
EQUIPMENT	In addition to the equipment listed at the front of this Instructor Guide, you will need the following equipment for this unit:
	<ul> <li>A computer with PowerPoint software</li> </ul>
	<ul> <li>A computer projector and screen</li> </ul>
	<ul> <li>Samples of NFPA 704 Diamond and other hazardous materials placards, if possible</li> </ul>
	<ul> <li>One roll of cotton swabbing</li> </ul>
	<ul> <li>One Pyrex<sup>®</sup> jar with lid</li> </ul>
	<ul> <li>One box of wooden kitchen matches</li> </ul>
	<ul> <li>One water fire extinguisher</li> </ul>
	<ul> <li>One dry chemical fire extinguisher</li> </ul>
	<ul> <li>Portable Class A:B:C fire extinguishers (1for every 5 participants)</li> </ul>
	<ul><li>Fire Pan (see page 2-5)</li></ul>
	<ul> <li>Road flares and a long pole</li> </ul>

# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

Notes	A suggested time plan for this unit is as follows:
	Introduction and Unit Overview
REMARKS	Most fire extinguisher service companies will provide Class A:B:C portable extinguishers for the final activity in this unit. Contact local companies for support.

# REMARKS (CONTINUED)

One method for setting up this exercise is shown below. Consult your local fire department for any additional assistance required in building and operating the fire pan. Check with your State fire marshal about guidelines for open burning.



# **Unit 2: Fire Safety and Utility Controls**

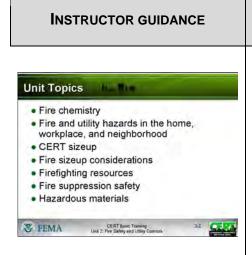
INSTRUCTOR GUIDANCE	CONTENT
	Introduction and Unit Overview
Fire Safety and Utility Controls  CERT Basic Training Unit 2	Welcome Introduce this unit by welcoming the participants to Unit 2 of the CERT Basic Training. Introduce any new instructors who will be assisting with this session.
Display Slide 2-0	
	Briefly review Unit 1.
?	Whom do CERT members take care of first?
Correct response:	
Themselves.	After that, whom do CERT members take care of?
Correct responses:     Families     Homes     Neighborhoods	

# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

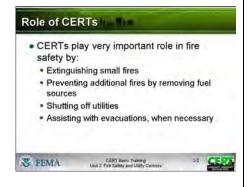
INSTRUCTOR GUIDANCE	CONTENT
<b>**</b>	How might a disaster impact a community's infrastructure?
Correct responses:	
Damage to transportation, structures, communications, utilities, water service, fuel supply, financial services	
<b>?</b>	Did you look for potential structural and non- structural hazards?
Discuss responses.	What did you find?
<b>?</b>	How might you mitigate those hazards?
Discuss.	
2	Have you started to prepare a disaster supply kit?
This is a gentle reminder to	Have you started to work on a disaster plan?
participants that they should be doing these things.	
	Introduce fire and utility safety by telling the participants that during and immediately following a severe emergency, the first priorities of professional fire services are life safety and extinguishing <i>major</i> fires.
	They may be hampered by impassable roads, weather conditions, inadequate water supply, and other inadequate resources.

# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

CONTENT
Unit Objectives  Tell the participants that at the end of this unit, they should be able to:  Explain the role that CERTs play in fire safety.  Identify and reduce potential fire and utility risks in the home and workplace.  Describe the 9-step CERT sizeup process.  Conduct a basic sizeup for a fire emergency  Explain minimum safety precautions, including:  Safety equipment  Utility control



## **Display Slide 2-2**



## **Display Slide 2-3**

## **Unit Topics**

Preview the unit topics by telling the group that the unit will provide them with the knowledge and skills that they will need to reduce or eliminate fire hazards and extinguish small fires.

CONTENT

The areas that they will learn about include:

- Fire chemistry
- Fire and utility hazards in the home, workplace, and neighborhood
- CERT sizeup
- Fire sizeup considerations
- Firefighting resources
- Fire suppression safety
- Hazardous materials

Tell the group that, at the end of the unit, they will have an opportunity to use a portable extinguisher to put out a fire.

#### Role of CERTs

Emphasize that CERTs play a very important role in fire and utility safety by:

- <u>Extinguishing small fires</u> before they become major fires
  - This unit will provide training on how to use an extinguisher to put out small fires and how to recognize when a fire is too big to handle. As a general rule, if you can't put out a fire in 5 seconds, it is already too big to handle and you should leave the premises immediately.

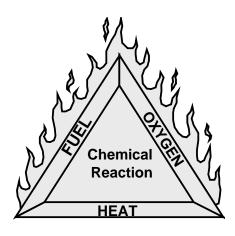
# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
Although CERTs assist with evacuations, the procedures for conducting evacuations are not covered in this course. It is recommended that evacuation be covered in supplemental training.	<ul> <li>Preventing additional fires by removing fuel sources</li> <li>This unit will also describe how to ensure that a fire, once extinguished, is completely extinguished and stays extinguished. This process is called overhaul.</li> <li>Shutting off utilities when necessary and safe to do so</li> <li>This unit will review utility shutoff procedures taught in Unit 1.</li> <li>Assisting with evacuations where necessary</li> <li>When a fire is beyond the ability of CERTs to extinguish, CERT members need to protect lives by evacuating the area and establishing a perimeter.</li> </ul>
	CERT Priorities
Help in emergencies before professional responders arrive     Rescuer safety is number one priority     Always work with a buddy     Always wear safety equipment     CERT Goal:     Do the greatest good for the greatest number	Stress the important role that CERTs play in neighborhood and workplace fire and utility safety. CERT members help in fire- and utility-related emergencies before professional responders arrive. When responding, CERT members should keep in mind the following CERT standards:  Rescuer safety is <u>always</u> the number one priority. Therefore, CERT members always:
FEMA CEAT bare Training 24	
Display Slide 2-4	Work with a buddy
	<ul> <li>Wear safety equipment (gloves, helmet, goggles, N95 mask, and sturdy shoes or boots)</li> </ul>
	<ul> <li>The CERT goal is to do the greatest good for the greatest number.</li> </ul>

# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
	Fire Chemistry
?	Does anyone know what it takes for a fire to burn?
The Fire Triangle	The Fire Triangle
• Heat	If not mentioned by the participants, explain that fire requires three elements to exist:
• Fuel • Oxygen  Chemical	<ul> <li>Heat: Heat is required to elevate the temperature of a material to its ignition point.</li> </ul>
Reaction  Heat  CERT Basic Training Lint 2: Fire Safety and Utility Controls  2-5	<u>Fuel</u> : The fuel for a fire may be a solid, liquid, or gas. The type and quantity of the fuel will determine which method should be used to extinguish the fire.
Display Slide 2-5	<ul> <li>Oxygen: Most fires will burn vigorously in any atmosphere of at least 20 % oxygen. Without oxygen, most fuels could be heated until entirely vaporized, yet would not burn.</li> </ul>
	Explain that working together, these three elements, called the <i>fire triangle</i> , create a chemical exothermic reaction, which is fire.
PM, P. 2-4	Refer the participants to the <i>Fire Triangle</i> figure in the Participant Manual.
	Stress that if <u>any</u> of these elements is missing or if any is taken away, fire will not occur or will extinguish.

PM, P. 2-4	Fire Triangle



Fire Triangle: Fuel, oxygen, and heat create a chemical reaction, which causes fire.

INSTRUCTOR GUIDANCE	Сонтент
<ol> <li>Use the following steps to demonstrate the concept:</li> <li>Ignite a rolled-up piece of cotton, place it inside a Pyrex<sup>®</sup> jar, and cover it tightly.</li> <li>Wait until the flame goes out.</li> <li>Remove the material from the jar and blow on it to demonstrate that, unless the fire is completely out and overhauled, adding oxygen may complete the fire triangle and rekindle the fire.</li> </ol>	Demonstrating the Fire Triangle  Tell the group that you will now demonstrate the concept of the fire triangle by removing the oxygen from burning cotton.  Emphasize the need to ensure that every piece of burning material is completely extinguished. Tell the participants to think of Smokey the Bear and campfires to remember this point.

# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
	Classes of Fire
Classes of Fire     A: Ordinary combustibles     B: Flammable and combustible liquids	Tell the participants that, to aid in extinguishing fires, fires are categorized into classes based on the type of fuel that is burning:
<ul> <li>C: Energized electrical equipment</li> <li>D: Combustible metals</li> <li>K: Cooking oils</li> </ul>	<ul> <li>Class A Fires: Ordinary combustibles such as paper, cloth, wood, rubber, and many plastics</li> </ul>
CERT Base Treaming Link 2: Fire Salvay and Unitary Coercivit  Display Slide 2-6	Class B Fires: Flammable liquids (e.g., oils, gasoline) and combustible liquids (e.g., charcoal lighter fluid, kerosene). These fuels burn only at the surface because oxygen cannot penetrate the depth of the fluid. Only the vapor burns when ignited.
Reemphasize the need to overhaul Class A fires (i.e., ensure that every piece of burning material is completely extinguished).	<ul> <li>Class C Fires: Energized electrical equipment (e.g., wiring, motors). When the electricity is turned off, the fire becomes a Class A fire.</li> </ul>
	<ul> <li>Class D Fires: Combustible metals (e.g., aluminum, magnesium, titanium)</li> </ul>
	<ul> <li>Class K Fires: Cooking oils (e.g., vegetable oils, animal oils, fats)</li> </ul>
	Stress that it is <u>extremely</u> important to identify the type of fuel feeding the fire to select the correct method and agent for extinguishing the fire.
?	Does anyone have any questions about fire chemistry?

# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
	Fire and Utility Hazards
	Explain that this section will deal with identifying and preventing fire and utility hazards in the home and workplace.
<b>?</b>	What are potential fire and utility hazards in homes or workplaces?
	Allow the group time to respond. Provide suggestions of additional potential fire and utility hazards.
?	What measures have you taken to mitigate or prevent the hazards?
	Use the participants' responses to make the following points:
	Each of us has some type of fire or utility hazard in our home and workplace.
	Most of these hazards fall into three categories:
	Electrical hazards
	Natural gas hazards
	Flammable or combustible liquids
	Point out that homes and workplaces can and do have other hazards, including incompatible materials stored in close proximity to each other, such as flammables/combustibles, corrosives, compressed gases, and explosives.

# UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
Reducing Electrical Hazards  • Avoid the "electrical octopus" • Don't run cords under carpets • Check for and replace broken or frayed cords • Maintain appliances  **EFF BARIE TRANSITY AND 127 For Solly and Unity Controls  **Display Slide 2-7	Explain that simple fire prevention measures will help reduce the likelihood of fires:  First, locate potential sources of ignition.  Then, do what you can to reduce or eliminate the hazards.  Electrical Hazards  Provide the group with examples of common electrical hazards and simple ways that they can be reduced or eliminated:  Avoid the "electrical octopus." Eliminate tangles of electrical cords. Don't overload electrical outlets. Don't plug power strips into other power strips.  Don't run electrical cords under carpets.  Check for and replace broken or frayed cords immediately.  Maintain electrical appliances properly. Repair or replace malfunctioning appliances.

# Electrical Emergencies Know where power shutoffs are for: Appliances Circuit breakers Fuses Post shutoff directions next to all utilities Know procedures for turning power back on CERT Bark Treung Link 2: Fire Safely and Utility Coertsh 28

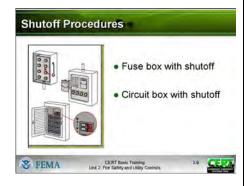
INSTRUCTOR GUIDANCE

## **Display Slide 2-8**

Check with a representative from the local utility company regarding local utility protocols. Obtain or develop training models of fuse and breaker boxes to allow demonstrations and hands-on practice.

Depending on your location, you may also choose to cover propane gas shutoffs.

PM, P. 2-8



**Display Slide 2-9** 

CONTENT

Responding to Electrical Emergencies

Point out that electrical emergencies sometimes occur despite our best efforts. Every member of the household should be aware of the following procedures in the event of an electrical emergency:

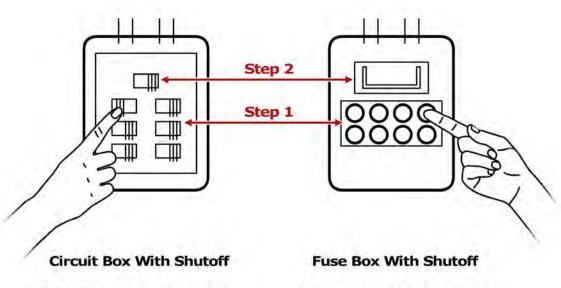
- Locate the circuit breakers or fuses, and know how to shut off the power. Post shutoff instructions next to the breaker box or fuse box.
- Unscrew individual fuses or switch off smaller breakers first, then pull the main switch or breaker.
- When turning the power back on, turn on the main switch or breaker first, then screw in the fuses or switch on the smaller breakers, one at a time.

Stress that the participants should <u>not</u> enter a flooded basement or standing water to shut off the electrical supply because water conducts electricity.

Refer the participants to the figures *Circuit Box and Fuse Box* in the Participant Manual.

#### **UNIT 2: FIRE SAFETY AND UTILITY CONTROLS**

PM, P. 2-8 Circuit Box and Fuse Box
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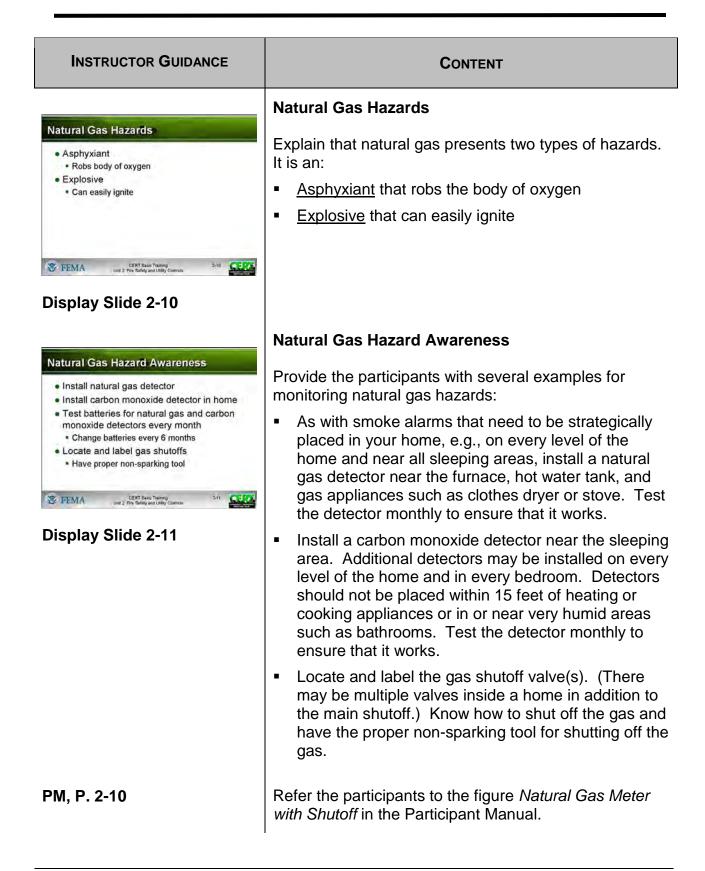
Circuit box showing shutoff steps. Step 1: Shut off individual breakers.

Step 2: Shut off main breaker.

Fuse box showing shutoff steps.

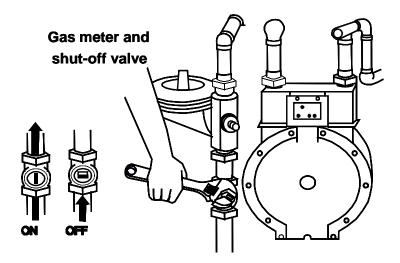
Step 1: Pull out individual fuses.

Step 2: Pull out main fuse.



#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

PM, P. 2-10 Natural Gas Meter with Shutoff



The gas meter shutoff diagram indicates the shutoff valve location on the pipe that comes out of the ground. To turn off the valve, use a non-sparking wrench to turn the valve clockwise one-quarter turn. Remember that, in all cases, natural gas flow should only be turned on by a licensed technician.

Please note: Some gas meters have automatic shutoff valves that restrict the flow of gas during an earthquake or other emergency. These are installed by a licensed plumber, downstream of the utility point of delivery. If you are unsure whether your home has this shutoff device, contact your gas service company. If this shutoff device is closed, only a qualified professional should restore it.

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

# INSTRUCTOR GUIDANCE Gas Shutoff Locate and label gas shutoff valves If not automatic, know procedures for shutting off gas CERT Basic Training List 2: Fire Safety and Utility Controls 2-12

#### **Display Slide 2-12**

Consult with a local utility representative to determine protocols and, if possible, create a model gas meter to demonstrate and allow practice with the procedure for shutting off the gas.

#### CONTENT

#### **Gas Shutoff**

#### Gas meter inside the home

Explain that if the gas meter is located inside the home, participants should only shut off the gas flow when instructed to by local authorities. Emphasize that if they smell gas or see the dials on the meter showing gas is flowing even though appliances are turned off, they should evacuate the premises and call 911. Tell them that they should not attempt to shut off the gas from inside the building if gas may be in the air.

#### Gas meter outside the home

Tell participants that they should turn off the meter from outside the building if they smell gas or see dials on the meter showing gas is flowing even though appliances are turned off. Stress that if there is a fire that they cannot extinguish, they should call 911 and turn off the gas only if it is safe to do so.

Explain that if participants are unsure of the proper procedures, they should not attempt to turn the utilities on again by themselves, particularly in multiple-unit dwellings. They should always follow the local fire department's guidelines.

Stress that after the gas flow is turned off, <u>it can be</u> restored only by a trained technician.

Note that some gas meters have automatic shutoff valves that restrict the flow of gas during an earthquake or other emergency. Explain that these should be installed by a licensed plumber, downstream of the utility point of delivery. Tell participants that if they are unsure whether their home has this shutoff device, they should contact their gas service company. Stress that if this shutoff device is closed, only a qualified professional should restore it.

Warn the participants never to enter the basement of a structure that is on fire to turn off any utility.

INSTRUCTOR GUIDANCE	CONTENT
	Explain that they should use a flashlight, not a candle, if an additional light source is needed to locate and shut off the gas valve.
	Flammable Liquid Hazards
L.I.E.S.  • Always read labels	Provide several examples for reducing hazards from flammable liquids:
<ul> <li>Use L.I.E.S. storage procedures (<u>L</u>imit, <u>I</u>solate, <u>E</u>liminate, <u>S</u>eparate)</li> </ul>	<ul> <li>Read labels to identify flammable products.</li> </ul>
	<ul> <li>Store them properly, using the L.I.E.S. method (Limit, Isolate, Eliminate, Separate).</li> </ul>
FEMA CERT Base Training 2-13 Lind 2: Fire Safety and Utility Controls	Stress that participants should only extinguish a flammable liquid using a portable fire extinguisher rated for Class B fires.
Display Slide 2-13	
L.I.E.S. stands for Limit, Isolate, Eliminate, Separate.	
Provide the group with information about safe disposal of hazardous materials in your area.	Tell the group that they should extinguish a flammable liquid using a portable fire extinguisher rated for that class of fire. Explain that ratings for portable extinguishers will be addressed later in this unit.

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

## 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

CERT Basic Training Link 2: Fee Safety and Utility C

INSTRUCTOR GUIDANCE

#### Display Slide 2-14

**▼** FEMA

PM, PP. 2-13 to 2-15

Point out that, while sizeup is a fire department term, the process has been tailored for CERTs and will be used again in other areas of CERT responsibility.

Provide several examples to illustrate the differences between fire department sizeup and CERT sizeup.

#### CONTENT

#### **CERT Sizeup**

Introduce this topic by explaining to the group that sizeup is a continual process that enables professional responders to make decisions and respond appropriately in the areas of greatest need. CERT sizeup consists of 9 steps and should be used in any emergency situation.

Refer the participants to *CERT Fire Sizeup* in the Participant Manual. Point out that, although the checklist is not exhaustive, it does include many of the questions that CERT members should ask when sizing up a fire situation.

Explain that you will now discuss fire sizeup considerations and review the checklist with the group.

#### **CERT Sizeup Steps**

Explain that the 9 steps of CERT sizeup are:

- 1. <u>Gather facts</u>. What has happened? How many people appear to be involved? What is the current situation?
- 2. <u>Assess and communicate the damage</u>. Try to determine what has happened, what is happening now, and how bad things can really get.
- 3. <u>Consider probabilities</u>. What is likely to happen? What could happen through cascading events?
- 4. Assess your own situation. Are you in immediate danger? Have you been trained to handle the situation? Do you have the equipment that you need?
- 5. <u>Establish priorities</u>. Are lives at risk? Can you help? Remember, life safety is the first priority!

INSTRUCTOR GUIDANCE	CONTENT	
	<ol> <li>Make decisions. Base your decisions on the answers to Steps 1 through 5 and in accordance with the priorities that you established.</li> </ol>	
	<ol> <li>Develop a plan of action. Develop a plan that will help you accomplish your priorities. Simple plans may be verbal, but more complex plans should always be written.</li> </ol>	
	8. <u>Take action</u> . Execute your plan, documenting deviations and status changes so that you can report the situation accurately to first responders.	
	9. Evaluate progress. At intervals, evaluate your progress in accomplishing the objectives in the plan of action to determine what is working and what changes you may have to make to stabilize the situation.	

PI	M, PP. 2-13 то 2-15	CERT Fire	Sizeup	
			Yes	No
St	ep 1: Gather Facts			
Ti	me			
•	Does the time of day of efforts? How?	week affect fire suppression		
W	/eather			
•		litions that affect your safety?		
	If yes, how will your saf	ety be affected?		
-	Will weather conditions	affect the fire situation?		
	If yes, how will the fire	situation be affected?		
Ty	Type of Construction			
What type(s) of structure(s) are involved?				
•	■ What type(s) of construction are involved?			
0	Occupancy			
-	Are the structures occu	pied?		
	If yes, how many people	e are likely to be affected?		
-	Are there special consi pets, people with disab	derations (e.g., children, elderly, ilities)?		

JANUARY 2011 CERT BASIC TRAINING: INSTRUCTOR GUIDE

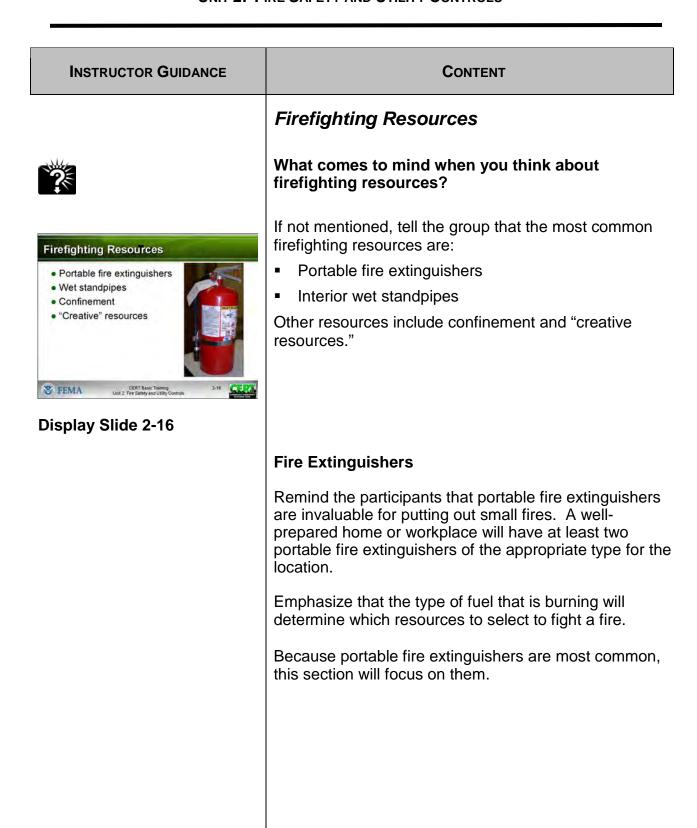
		Yes	No
Ha	nzards		
•	Are hazardous materials evident?		
•	Are any other types of hazards present?		
	If yes, what other hazards?		
St	ep 2: Assess and Communicate the Damage		
•	Survey all sides of the building. Is the danger beyond the CERT's capability?		
•	Have the facts and the initial damage assessment been communicated to the appropriate person(s)?		
St	ep 3: Consider Probabilities		
Lit	e Hazards		
•	Are there potentially life-threatening hazards?		
	If yes, what are the hazards?		
Pa	th of Fire		
•	Does the fire's path jeopardize other areas?		
	If yes, what other areas may be jeopardized?		
Ac	lditional Damage		
•	Is there a high potential for more disaster activity that will impact personal safety?		
	If yes, what are the known risks?		

CERT BASIC TRAINING: INSTRUCTOR GUIDE JANUARY 2011 PAGE 2-25

		Yes	No		
St	Step 4: Assess Your Own Situation				
•	What equipment is available to help suppress the fire?				
•	What other resources are available?				
•	Can fire suppression be <i>safely</i> attempted by CERT members?				
	If not, do not attempt suppression.				
St	ep 5: Establish Priorities				
•	Are there other, more pressing needs at the moment?		П		
	If yes, list.				
St	ep 6: Make Decisions				
•	Where will resources do the most good while maintaining a	n adequate mar	gin of safety?		
St	ep 7: Develop a Plan of Action				
•	Determine how personnel and other resources should be us	sed.			
St	ep 8: Take Action				
•	Put the plan into effect.				
St	ep 9: Evaluate Progress				
-	Continually size up the situation to identify changes in the:				
	<ul><li>Scope of the problem</li><li>Safety risks</li><li>Resource availability</li></ul>				
•	Adjust strategies as required.				

INSTRUCTOR GUIDANCE	CONTENT
	Emphasize that sizeup is a continuous process.
	Evaluation of progress — Step 9 — may require you to go back and gather more facts.
<b>?</b>	Does anyone have any questions about CERT fire sizeup?
	Fire Sizeup Considerations
Helps responders decide:     Whether to attempt to suppress a fire     A plan of action	Explain that a sizeup of a situation involving a fire will dictate whether to attempt fire suppression and will help you plan for extinguishing the fire.
Answers these questions:     Do my buddy and I have the right equipment?     Are there other hazards?     Is the building structurally damaged?     Can my buddy and I escape?     Can my buddy and I fight the fire safely?     Remember: The safety of individual CERT members is always the top priority	Point out that CERT sizeup is a continual 9-step process that enables one to make decisions and respond appropriately in the areas of greatest need.
ERAT Base Training Lina 2 Fire Saliny and Unitry Comma	Emphasize that the safety of individual CERT members is always the top priority. Say that effective fire sizeup will allow participants to answer all of the following questions:
	Do my buddy and I have the right equipment?
	Are there other hazards?
	Is the building structurally damaged?
	Can my buddy and I escape?
	Can my buddy and I fight the fire safely?
	Remind participants that the safety of individual CERT members is always the top priority.

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS



#### **UNIT 2: FIRE SAFETY AND UTILITY CONTROLS**

### INSTRUCTOR GUIDANCE CONTENT Types of Fire Extinguishers Fire Extinguishers Tell the group that there are four types of extinguishers: Water Dry chemical Carbon dioxide Water · Specialized fire extinguisher Dry chemical Carbon dioxide Specialized fire extinguishers ₹ FEMA CERT Basic Training Lint 2: Fire Safety and Utility Contro **Display Slide 2-17** PM, P. 2-18 Explain that the next section will briefly describe the characteristics of each type of fire extinguisher. Refer the participants to the Fire Types, Extinguishing Agents, and Methods chart in the Participant Manual for an overview of this information. Review the types of fires and extinguishing methods with the group.

PM, P. 2-17

#### Fire Types, Extinguishing Agents, and Methods

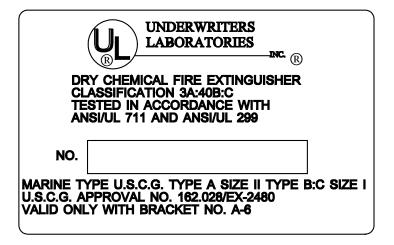
FIRE TYPE	EXTINGUISHING AGENT	EXTINGUISHING METHOD
Ordinary Solid Materials	Water	Removes heat
	Foam	Removes air and heat
	Dry chemical	Breaks chain reaction
Flammable Liquids	Foam	Removes air
	CO <sub>2</sub>	
B	Dry chemical	Breaks chain reaction
Electrical Equipment	CO <sub>2</sub>	Removes air
	Dry chemical	Breaks chain reaction
<b>Combustible Metals</b>	Special agents	Usually remove air
		1
Kitchen Oils	Chemical	Usually removes air
K		

#### INSTRUCTOR GUIDANCE CONTENT **Extinguisher Rating and Labeling** Extinguisher Rating/Labeling Tell the group that portable fire extinguishers must be · Labels show types of fires that rated and approved by the State fire marshal and extinguisher is used for: Underwriters Laboratories (an organization that sets . Class A fire ratings: 1A to 40A . Class B fire ratings: 1B to 640B safety standards for manufactured goods). They are • Higher number on label = greater amount rated according to their effectiveness on the different of extinguishing agent classes of fire. Their strength and capability must also be labeled by the manufacturer. ₩ FEMA GERT Basic Training Unit 2: Fire Safety and Utility C DAR CEN Explain that the label contains vital information about **Display Slide 2-18** the type(s) of fire for which the extinguisher is appropriate. Extinguishers that are appropriate for Class A fires have a rating from 1A to 40A, with a higher number indicating a higher volume of extinguishing agent. Extinguishers that are appropriate for Class B fires have a rating from 1B to 640B. No number accompanies an extinguisher rated Class C, D, or K. The C on the label indicates only that the extinguisher is safe to use on electrical fires. Extinguishers for Class D fires must match the type of metal that is burning and are labeled with a list detailing the metals that match the unit's extinguishing agent. These extinguishers also do not use numerical ratings. Extinguishers for Class K fires are designed to supplement fire suppression systems in commercial kitchens. They spray an alkaline mixture that, when combined with the fatty acid of the burning cooking oil or fat, creates soapy foam to hold in the vapors and extinguish the fire.

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

#### 

PM, P. 2-20 Manufacturer's Label Illustration



Sample manufacturer's label for a fire extinguisher, showing the Underwriters Laboratories symbol at the top, the type and classification of fire extinguisher, testing procedures used, and serial number. At the bottom of the label is marine information, including the U.S. Coast Guard approval number.

CONTENT
Review the types of fires and appropriate extinguishing methods with the group, noting the capacity, range, and pressure of each type of extinguisher.
Water Extinguishers
Tell the group that common characteristics of water extinguishers include:
<ul> <li>Capacity. Standard size is 2.5 gallons.</li> </ul>
Range. Standard range is 30-40 feet.
<ul> <li>Pressure. Standard pressure is 110 pounds per square inch (psi).</li> </ul>
Warn the group to use extreme caution when using a water extinguisher to ensure that the water, which is under pressure, does not scatter lightweight materials and spread the fire.
Chemical Extinguishers
Tell the participants that <u>dry chemical extinguishers</u> are most common.
<ul> <li>Dry chemical extinguishers have a sodium bicarbonate base and are effective on Class B and C fires.</li> </ul>
<ul> <li>Multipurpose dry chemical extinguishers have a monoammonium phosphate base and are effective for Class A, B, and C fires.</li> </ul>

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
If discussing or demonstrating how to use a carbon dioxide	Common characteristics of dry chemical extinguishers include:
extinguisher indoors, note the need for caution, as these extinguishers remove oxygen	<ul> <li><u>Capacity</u>. Approximately 10-20 seconds discharge time</li> </ul>
from the room.	<ul> <li>Range. Standard range is 8-12 feet.</li> </ul>
	<ul> <li>Pressure. Standard pressure is 175-250 psi.</li> </ul>
	Explain that, while still in use, <u>carbon dioxide</u> and <u>other</u> <u>specialized extinguishers</u> are becoming less common.
	Deciding to Use a Fire Extinguisher
	Tell the participants that there is a series of questions that they should ask themselves before attempting to fight a fire with a fire extinguisher.
PM, P 2-23	Refer the group to the chart titled <i>Deciding to Use a</i> Fire Extinguisher in the Participant Manual, and review the questions and decisions with the group:
	<ul> <li>Are there two ways to exit the area quickly and safely if I attempt to extinguish the fire? (The first priority for you and your buddy is safety.)</li> </ul>
	Do I have the right type of extinguisher for the type of fire?
	Is the extinguisher large enough for the fire?
	Is the area free from other dangers, such as hazardous materials and falling debris?
	Stress that if the participants answer "NO" to <u>any</u> of these questions, or if they have been unable to put out the fire in 5 seconds using the extinguisher, they should:
	<ul> <li>Leave the building immediately.</li> </ul>
	Shut all doors as they leave to slow the spread of the fire.

INSTRUCTOR GUIDANCE	CONTENT	
	Tell the participants that if they answer "YES" to <u>all</u> of these questions, they may attempt to extinguish the fire. Emphasize that, even if they answer "YES" to all of the questions but feel unable to extinguish the fire, they should leave immediately. Reemphasize the 5-second rule.	
	Overhauling the Fire	
	Explain that, if the fire is extinguished in 5 seconds and the area is safe, CERT members should stay and overhaul the fire. Overhauling is the process of searching a fire scene for hidden fire or sparks in an effort to prevent the fire from rekindling. Tell the participants how to overhaul a fire by remembering "cool, soak, and separate."	

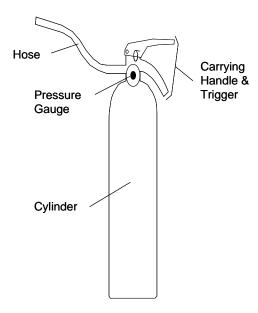
#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

PM, P. 2-23	Deciding to	Jse a Fire Extingu	isher
	pe quickly and safely from the mpt to extinguish the fire and do not succeed?	NO D	LEAVE IMMEDIATELY!
Do I have	YES the right type of extinguisher?	NO [	LEAVE IMMEDIATELY!
Is the exting	YES uisher large enough for the fire?	NO	LEAVE IMMEDIATELY!
	YES free from other dangers such as a materials and falling debris?	NO [	LEAVE IMMEDIATELY!
START	TO EXTINGUISH THE FIRE		
Is the fire	e extinguished in 5 seconds?	NO \	LEAVE IMMEDIATELY!
STAY AND	OVERHAUL THE FIRE IF THE AREA IS SAFE		

INSTRUCTOR GUIDANCE	CONTENT
?	Does anyone have any questions about how to use the decision-making flowchart?
	Operating a Fire Extinguisher
<b>**</b>	How many of you have operated a portable fire extinguisher?
	After a show of hands, ask a few participants to share their results. Use their comments to elaborate on the topic.
Demonstrate how to use a portable extinguisher.	Explain that you will demonstrate how to use a portable fire extinguisher.
PM, P. 2-24	Refer the participants to the diagram titled Components of a Portable Fire Extinguisher in the Participant Manual. Explain that a portable fire extinguisher includes four components:
	<ul><li>A pressure gauge</li></ul>
	■ A hose
	A cylinder
	A carrying handle with trigger
	Tell the group that they should always operate portable fire extinguishers in an upright position.

#### **UNIT 2: FIRE SAFETY AND UTILITY CONTROLS**

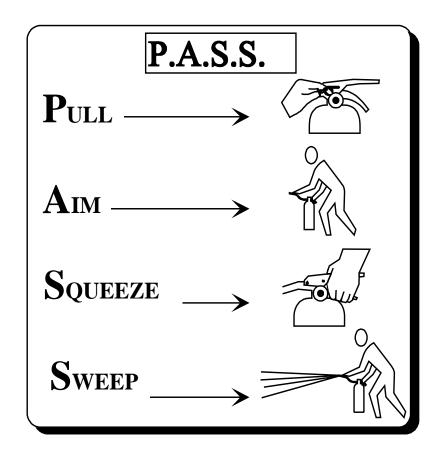
## PM, P. 2-24 Components of a Portable Fire Extinguisher



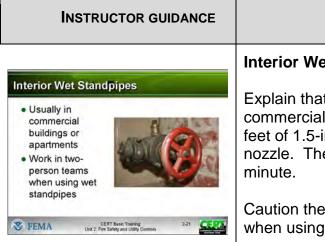
Components of a portable fire extinguisher: Hose, carrying handle and trigger, pressure gauge, cylinder

Instructor Guidance	CONTENT
	P.A.S.S.
P.A.S.S.  PULL  AIM  SQUEEZE  SWEEP  Test the extinguisher after pulling the pin  CERT Base Training  Unit 2 Fire Safety and Utility Cosmols  Display Slide 2-20  Demography of D. A. S. S.	Explain that the acronym for operating a fire extinguisher is P.A.S.S.:  Pull (Test the extinguisher after pulling the pin)  Aim  Squeeze  Sweep  To ensure that the extinguisher is working properly, test it before approaching any fire.
Demonstrate P.A.S.S.  PM, P. 2-25	Refer the participants to the <i>PASS</i> diagram in the
	Participant Manual.  Emphasize the need to <u>aim at the base</u> of the fire. Explain that each participant will have the opportunity to practice this technique near the end of the session.  Explain that, once used, fire extinguishers that have been completely depleted should be laid down and stored on their side so no attempt will be made to use them until recharged.
	Does anyone have any questions about portable fire extinguishers or their operation?

PM, P. 2-25	P.A.S.S



#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS



#### **Display Slide 2-21**

#### **Interior Wet Standpipes**

Explain that interior wet standpipes are usually in commercial and apartment buildings and consist of 100 feet of 1.5-inch jacketed hose with an adjustable spray nozzle. They deliver up to 125 gallons of water per minute.

CONTENT

Caution the group always to work in two-person teams when using an interior wet standpipe.

**Team Member 1:** Removes the hose from the cabinet and makes sure that hose is free of kinks and bends in the line. When ready, gives the go-ahead to Team Member 2 to open the water valve.

**Team Member 2:** After Team Member 1 gives the goahead, opens the water valve. Team Member 2 will then back up Team Member 1 at the nozzle.

Explain that, due to the dryness of the hose fabric, water may seep through the hose fabric until the hose is saturated. This may last for approximately 1 minute.

#### Confinement

In interior spaces, it is possible to *confine* a fire and restrict the spread of smoke and heat by closing doors, interior and exterior.

## INSTRUCTOR GUIDANCE CONTENT Other Creative Resources



If not mentioned, suggest these:

- Swimming pool or spa water and buckets
- Sand or dirt and shovels
- A garden hose

#### Other Oreative Resources

What other resources might be handy to fight a fire?



#### **Display Slide 2-22**

PM, P. 2-27-28

#### Fire Suppression Safety

Introduce this topic by reminding the participants that, as CERT members, small fire suppression may be one of their roles. Emphasize, however, that — even following a disaster — their personal safety must always be their number one concern. Stress that they will be unable to help anyone if they are injured through careless sizeup or unsafe acts.

Refer the group to the list of *Fire Suppression Safety Rules* in the Participant Manual.

#### Fire Safety Rules

Stress the importance of following  $\underline{all}$  fire suppression safety rules.

 Use safety equipment at all times. Wear your helmet, goggles, dust mask, leather gloves, and sturdy shoes or boots. If you are not equipped to protect your personal safety, leave the building.

INSTRUCTOR GUIDANCE	CONTENT
	Work with a buddy. Buddies serve an important purpose. They protect your safety. Don't ever try to fight a fire alone.
	Have a backup team, whenever possible. A backup team just makes good sense. A backup team can support your fire suppression efforts and can provide help if you need it.
	Always have two ways to exit the fire area. Fires spread much faster than you might think. Always have a backup escape plan in case your main escape route becomes blocked.
	<ul> <li>Look at the door. If air is being sucked under the door or smoke is coming out the top of the door, do not touch the door.</li> <li>Feel closed doors with the back of the hand, working from the bottom of the door up. Do not touch the door handle before feeling the door. If the door is hot, there is fire behind it. Do not enter! Opening the door will feed additional oxygen to the fire.</li> </ul>
	<ul> <li>Confine the fire, whenever possible, by closing doors and keeping them closed.</li> </ul>
	Stay low to the ground. Smoke will naturally rise. Keeping low to the ground will provide you with fresher air to breathe.
	<ul> <li>Maintain a safe distance. Remember the effective range of your fire extinguisher. Don't get closer than necessary to extinguish the fire.</li> </ul>
	<ul> <li>Never turn your back on a fire when backing out.</li> </ul>
	<ul> <li>Overhaul the fire to be sure that it is extinguished – and stays extinguished.</li> </ul>

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

# Fire Suppression Don'ts Don't get too close Don't try to fight a fire alone Don't try to suppress large fires Don't enter smoke-filled areas CERT Bake Training Lint 2: Fire Safety and Utility Controls

#### **Display Slide 2-23**

Explain that a small fire, unlike a large fire:

- Is about the size of a wastepaper can
- Can be extinguished with one fire extinguisher

Remind the group of the earlier demonstration (using burning cotton in the Pyrex<sup>®</sup> jar) to stress the need for overhauling.

#### CONTENT

Stress that what CERTs <u>don't</u> do when suppressing fires is as important as what they should do. DON'T:

- Get too close. Stay near the outer range of your extinguisher. If you feel the heat, you are too close.
- Try to fight a fire alone. Remember that your first priority is your personal safety. Don't put it at risk.
- Try to suppress large fires. Learn the capability of your equipment, and do not try to suppress a fire that is clearly too large for the equipment at hand (i.e., a fire that is larger than the combined ratings of available fire extinguishers).
- Enter smoke-filled areas. Suppressing fires in smoke-filled areas requires equipment that CERTs don't have.

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

PM, P. 2-27	Fire Suppression Safety Rules
-------------	-------------------------------

- <u>Use safety equipment</u> at all times. Wear your helmet, goggles, dust mask, leather gloves, and sturdy shoes or boots. If you are not equipped to protect your personal safety, <u>leave the building</u>.
- Work with a buddy. Buddies serve an important purpose. They protect your safety. Don't ever try to fight a fire alone.
- Have a backup team, whenever possible. A backup team just makes good sense.
   A backup team can support your fire suppression efforts and can provide help if you need it.
- Always have two ways to exit the fire area. Fires spread much faster than you might think. Always have a backup escape plan in case your main escape route becomes blocked.
- Look at the door. If air is being sucked under the door or smoke is coming out of the top of the door, do not touch the door.
- Feel closed doors with the back of the hand, working from the bottom of the door up. Do <u>not</u> touch the door handle before feeling the door. If the door is hot, there is fire behind it. Do not enter! Opening the door will feed additional oxygen to the fire.
- Confine the fire, whenever possible, by keeping doors closed.
- Maintain a safe distance. Remember the effective range of your fire extinguisher.
   Don't get closer than necessary to extinguish the fire.
- Overhaul the fire to be sure that it is extinguished and stays extinguished.

What CERTs <u>don't</u> do when suppressing fires is as important as what they should do. DON'T:

- Get too close. Stay near the outer range of your extinguisher. If you feel the heat, you are too close.
- <u>Try to fight a fire alone</u>. Remember that your first priority is your personal safety. Don't put yourself at risk.
- Try to suppress large fires. Learn the capability of your equipment, and do not try to suppress a fire that is clearly too large for the equipment at hand (i.e., a fire that is larger than the combined ratings of available fire extinguishers).
- Enter smoke-filled areas. Fire suppression in smoke-filled areas requires equipment that CERTs don't have.

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
	Proper Fire Suppression Procedures
	Describe and demonstrate the process for proper fire suppression.
Ask for a volunteer to assist you in demonstrating this technique.	Explain briefly the responsibilities of each buddy. A buddy system is used in all cases. The job of Team Member 1 is to put out a fire with an extinguisher. The job of Team Member 2 is to watch for hazards and ensure the safety of both team members.
	<ol> <li>Assume ready position. With the pin pulled, Team Member 1 holds the extinguisher aimed and upright, approximately 20 to 25 feet from the fire for small fires.</li> </ol>
	When ready to approach the fire, Team Member 1 should say, "Ready." Team Member 2 should repeat, "Ready."
	3. As Team Member 1 begins to move forward, he or she should say, "Going in." Team Member 2 should repeat the command and stay within reach of Team Member 1.
	4. Both team members should walk toward the fire. Team Member 1 should watch the fire and Team Member 2 should stay close to Team Member 1, keeping his or her hand on Team Member 1's shoulder. Team Member 2's job is to protect Team Member 1.
	<ol> <li>When Team Member 1 is exiting the fire area, he or she should say, "Backing out." Team Member 2 should repeat the command.</li> </ol>
After reviewing the fire suppression procedure, show the video <i>Fire Safety: The CERT Member's Role.</i>	6. Team Member 2 should guide Team Member 1 from the area with his or her hands as Team Member 1 continues facing the fire and looking for other hazards. Team Member 1 must never turn his or her back on the fire scene.

INSTRUCTOR GUIDANCE	CONTENT
INSTRUCTOR GUIDANCE	CONTENT
<b>?</b> **	Does anyone have any questions about fire suppression safety?
	Tell the group that next they are going to learn about identifying hazardous materials.

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
	Hazardous Materials
<b>?</b>	How do you know if a material is hazardous?
Allow the group time to respond.	
Hazardous Materials  Corrode other materials Explode or are easily ignited React strongly with water Are unstable when exposed to heat or shock Are otherwise toxic to humans, animals, or the environment through absorption, inhalation, injection, or ingestion  CERT BANK TRANKS  LINE 2. Prior Ballety and United Controls  Display Slide 2-24	Explain that materials are considered hazardous if they have any of the characteristics listed on the slide:  Corrode other materials  Explode or are easily ignited  React strongly with water  Are unstable when exposed to heat or shock  Are otherwise toxic to humans, animals, or the environment through absorption, inhalation, injection, or ingestion  Explain that hazardous materials include, but are not limited to:  Explosives  Flammable gases and liquids  Poisons and poisonous gases  Corrosives  Nonflammable gases
	<ul><li>Oxidizers</li><li>Radioactive materials</li></ul>
	Tradiodolivo matemate

INSTRUCTOR GUIDANCE	CONTENT
<b>*</b>	Why is it important to know if hazardous materials are present?
Acknowledge the participants' responses.	If not mentioned by the group, explain that knowledge that hazardous materials are present helps to protect CERT members' safety and is valuable sizeup information for all first responders.
	Identifying Hazardous Materials Locations
	Explain that there are several ways to identify locations where hazardous materials are stored, used, or in transit:
	Location and type of occupancy
	<ul> <li>Placards</li> </ul>
	Sights, sounds, and smells
	Location and Type of Occupancy
	Explain that hazardous materials are commonplace throughout every community. They are used in many commercial processes and sold in many retail outlets. While these hazards are managed under normal circumstances, accidents and disasters can cause these materials to be released into the environment.
	Provide some common locations in the community:
	<ul><li>Industrial locations (e.g., warehouse, rail yard, shipyard)</li></ul>
	Dry cleaner
	<ul><li>Funeral home</li></ul>
	<ul> <li>Home supply store</li> </ul>
	Big box store
	<ul><li>Delivery van (UPS, FedEx)</li></ul>

INSTRUCTOR GUIDANCE	CONTENT





**Display Slide 2-25** 

#### **Placards**

Has anyone ever seen the symbol in the slide or one similar to it? Does anyone know what it is or what it means?

If not mentioned by the group, explain that the placard is an NFPA 704 Diamond — the identification system instituted by the National Fire Protection Association. The NFPA 704 Diamond is a concise system for identifying the hazards associated with specific materials. This placard would be found on a fixed facility.

Tell the participants that the diamond is divided into four colored quadrants, each with a rating number inside of it, and that the number indicates the degree of risk associated with the material. Numbers range from 1 to 4. The higher the number the higher the risk!

CERT BASIC TRAINING: INSTRUCTOR GUIDE

#### Explain that:

- The <u>red</u> quadrant describes the material's flammability.
- The blue quadrant indicates health hazard.
- The <u>yellow</u> quadrant indicates <u>reactivity</u>.

## The White Quadrant • NFPA 704 Diamond White Quadrant: • \forall \text{...} Shows unusual reactivity with water • OX: Possesses oxidizing properties CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*PEMA\*\* \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*PEMA\*\* \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*PEMA\*\* \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*PEMA\*\* \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*PEMA\*\* \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*PEMA\*\* \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Controls \*\*CERT Base Training Into 2: Pier Sately and Ulling Into 2: Pier Sately and Pier Sately and Pier Satel

INSTRUCTOR GUIDANCE

#### Display Slide 2-26



**Display Slide 2-27** 

#### CONTENT

Point out that the <u>white</u> quadrant indicates <u>special</u> <u>precautions</u>. There are two symbols specified in the National Fire Codes, section 704.

- W indicates a material that displays unusual reactivity with water (i.e., should never be mixed with water or have water sprayed on it).
   Magnesium metal is an example of a material that is reactive to water.
- OX indicates a material that possesses oxidizing properties. <u>Ammonium nitrate</u> is an example of a material with oxidizing properties.

Explain that materials that are oxidizers increase the potential for explosion or fire.

Tell participants that in addition to the above symbols that are specified under the National Fire Codes, some NFPA 704 Diamonds will include additional symbols:

- ACID indicates that the material is an acid.
- ALK indicates that the material is a base.
- COR indicates that the material is corrosive.
- indicates that the material is radioactive.

Stress that the numbers within the NFPA 704 Diamond are used to assist professional firefighters in responding to accidents or fires. <u>CERT members</u> should consider these placards a "stop sign."

The only action CERT members should take is to evacuate persons who are downwind, as necessary, to an uphill or upwind location. Do not enter the building in an attempt to evacuate persons inside.

#### INSTRUCTOR GUIDANCE CONTENT Mention or use slides to illustrate local transportation hazards and any facilities that use the NFPA 704 Diamond. to provide more relevance to the discussion. If possible, show the group an actual 704 placard to improve recognition. **Identifying Hazardous Materials in Transit** Hazmats in Transit **Display Slide 2-28** Does anyone recognize the placards in the slide? If not mentioned by the group, explain that they are The NA placarding system is being phased out but is still Department of Transportation (DOT) placards. occasionally used, usually on Explain that the DOT placard is one of three ways that hazardous materials being hazardous materials are marked and identified while in transported from Canada. transit. The other two ways are: The United Nations (UN) system The North American (NA) warning placards

#### INSTRUCTOR GUIDANCE CONTENT If anyone asks, hazardous Point out that these placards can be on any vehicle, not only tankers. Also, emphasize that: materials that require placarding in any quantity No placard is required for less than 1,000 pounds of include poisonous gases that many hazardous materials. present an inhalation hazard Certain hazardous materials (e.g., anhydrous (DOT Class 2.3), poisonous ammonia) are placarded as a nonflammable gas for liquids that present an inhalation hazard (DOT Class domestic transport but as a flammable gas for international transport. (Anhydrous ammonia is a 6.1), and radioactive materials flammable gas!) (DOT Class 7). Sometimes drivers forget to change the placard when they change their cargo. CERT members should use extreme caution when approaching any vehicle in an accident. Refer the participants to the DOT Placard Warning PM, P. 2-33 illustrations in the Participant Manual. Tell the group that this slide shows examples of the UN and NA systems. The UN and NA systems are UN and NA Placards displayed mainly on tank cars, cargo tanks, rail cars,

and portable tanks.

UN and NA Placards

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Name

OXIDIZER

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1203

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#### **Display Slide 2-29**

If possible, show the participants actual DOT placards to improve recognition.

Explain that, like the NFPA 704 Diamond, the DOT, UN, and NA placards should be a "stop sign" for CERT members. CERT members should always err on the side of safety. They should *not* assume that, because there is no placard, no hazardous materials are present. Treat any unknown situation as a hazardous materials incident.

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

#### INSTRUCTOR GUIDANCE CONTENT As a general rule of thumb, if you see a number in the Greater Than 1? NFPA 704 Diamond that is greater than one, stay away. Remember! All hazardous material placards are a stop sign for CERTs S FEMA Display Slide 2-30 Sights, Sounds, and Smells Explain that hazardous materials are all around us and may be present regardless of the location or whether there are placards or other posted warnings. While hazardous materials often smell, sound, or look unusual, participants may not be able recognize something toxic. Participants should stay away from any unidentifiable substance and alert building managers or authorities. Does anyone have any questions about hazardous materials or how they are identified in storage or transport? Exercise: Suppressing Small Fires **Purpose:** This exercise will provide the participants with experience in two key areas of fire suppression: Using a portable fire extinguisher to suppress a small fire Applying teamwork to fire suppression Ensure that all of the participants are dressed properly and wear safety equipment for this exercise. Dress for this exercise may be casual. However, shorts and

open-toed shoes should not be permitted.

CERT BASIC TRAINING: INSTRUCTOR GUIDE

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
	Prepare a propane gas fire source outside in an area with at least 40 feet of open space upwind of the fire source. Provide Class A:B:C portable extinguishers.
	This exercise requires two instructors: Instructor 1 will lead the exercise. Instructor 2 will observe and serve as the exercise Safety Officer.
It is advisable to demonstrate critical steps (e.g., the "ready" position) before allowing the participants to complete this exercise.	Instructions: Follow the steps below to conduct this exercise. Coach the participants through the exercise using the instructions shown in bold type.
	Assign the participants to two-person teams.     Stress that participants must communicate with each other. The emphasis is on safety and teamwork.
	Taking one team at a time, provide each team member with a portable fire extinguisher.
	3. Instructor 2 will light the fire, using a road flare mounted on a long pole, when Instructor 1 indicates that the participants are ready to begin the exercise.
	Before allowing the participants to begin this exercise, Instructor 1 should ask them:
	<ul> <li>What their exit routes are</li> </ul>
	<ul><li>From which direction the wind is blowing</li></ul>
	<ul> <li>Whether the fire is spreading and where it would be in the next 30 seconds</li> </ul>
	•

INSTRUCTOR GUIDANCE	CONTENT
	5. Ask Team Member 1 to assume the "ready" position, with pin pulled, extinguisher aimed and upright, approximately 20 to 25 feet from the fire.
	When ready to approach the fire, Team Member 1 should say, "Ready." Team Member 2 should repeat, "Ready."
	As Team Member 1 begins to move forward, he or she should say, "Going in." Team Member 2 should repeat the command and place his or her hand on Team Member 1's shoulder and stay within reach of Team Member 1.
	6. Ask Team Member 2 to act as backup, assuming the "ready" position at an arm's distance from Team Member 1.
	Instructor No. 2 (Safety Officer)  Flammable Liquid Fire
	(Back-Up) Participant No. 1 Instructor No. 1
	Observers THE STATE OF THE STA

#### UNIT 2: FIRE SAFETY AND UTILITY CONTROLS

INSTRUCTOR GUIDANCE	CONTENT
	Position Instructor 1 between the participants and the fire at all times.
	Both team members should walk toward the fire. Team Member 1 should watch the fire and Team Member 2 should stay close to Team Member 1, keeping his or her hand on Team Member 1's shoulder. Team Member 2's job is to protect Team Member 1.
	8. Ask Team Member 1 to approach the fire from the windward side (i.e., with the wind to the participant's back). When approximately 10 feet from the fire, Team Member 1 should begin to discharge the extinguisher at the base of the fire, continuing the approach until the range for the extinguisher is optimal.
	Team Member 1 should sweep the base of the fire until it is extinguished.
	When Team Member 1 is ready to exit the fire area, he or she should say, "Backing out." Team Member 2 should repeat the command. Team Member 2 should guide Team Member 1 from the area with his or her hands as Team Member 1 continues facing the fire and looking for other hazards.
	After the fire is extinguished, ask the participants to trade positions and repeat the exercise. If time permits, allow each participant to use the extinguisher twice, to provide added practice.
	Repeat this exercise with the other teams until all participants have had the opportunity to extinguish the fire.

# Unit Summary • You should know: • Keys to effective fire suppression • CERT sizeup and fire sizeup considerations • Classes of fire and types of fire extinguishers • P.A.S.S. • How to identify hazardous materials Always follow the safety rules established for CERTs – personal safety comes first! CERT bare Treaming Link 2: Fire Safeky and Linkly Controls Display Slide 2-31

#### **Unit Summary**

Summarize the key points of this unit:

Effective fire suppression depends on an understanding of:

- The elements required for fire to exist
- The type of fuel involved
- The class of fire
- The resources required and available to extinguish each type of fire

CONTENT

Effective fire suppression techniques

Fire requires heat, fuel, and oxygen to exist.

There are five types, or classes, of fire:

- Class A: Ordinary combustibles
- Class B: Flammable liquids
- Class C: Energized electrical equipment
- Class D: Combustible metals
- Class K: Cooking oils

It is extremely important to identify the class of fire to use the proper extinguisher for the class.

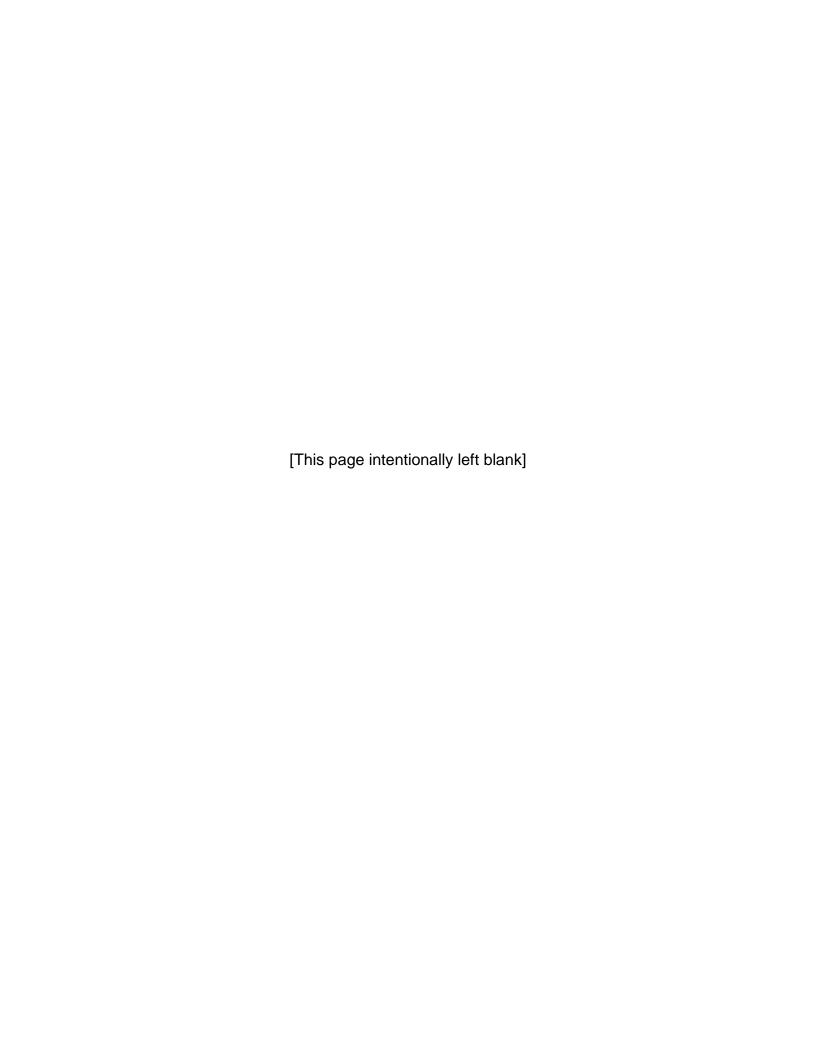
Portable fire extinguishers are most frequently used for suppressing small fires. Their labels tell the types of fires for which they are effective and the area that they can suppress.

When using portable fire extinguishers, remember P.A.S.S.: Pull, Aim, Squeeze, and Sweep. Always test the extinguisher after pulling the pin.

When suppressing a fire, <u>always</u> follow the safety rules established for CERTs.

**CERT BASIC TRAINING: INSTRUCTOR GUIDE** 

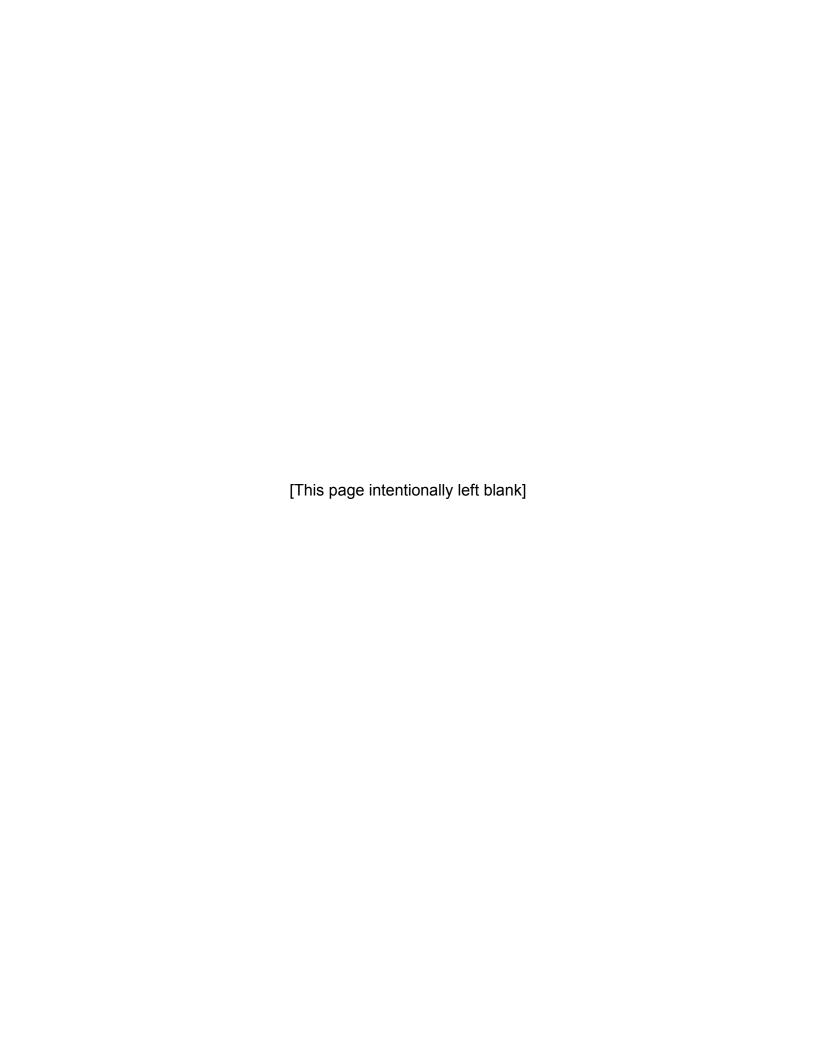
	2
INSTRUCTOR GUIDANCE	CONTENT
	To help understand the types of materials, there are several methods of placarding hazardous materials being stored or transported, including NFPA, DOT, UN, and NA. When faced with accidents involving materials that are placarded as hazardous — or when the material is unknown — keep away and call for professional help immediately.
Homework Assignment	Homework Assignment
<ol> <li>Read unit to be covered in next session</li> <li>Bring necessary supplies to next session</li> <li>Wear appropriate clothes to next session</li> </ol>	Remind the participants that, before the next session, they should:
	<ul> <li>Read and familiarize themselves with Unit 3:</li> <li>Disaster Medical Operations — Part I in the Participant Manual.</li> </ul>
FEMA CERT Base Training 1-32 CERT	Obtain and bring to the session:
Display Slide 2-32	<ul> <li>One box of 4- by 4-inch bandages</li> </ul>
Display Office 2-32	One roll of gauze
	One medical mask (N95)
	<ul> <li>One pair of examination gloves</li> </ul>
	One blanket
	Ask the participants to wear comfortable clothes for the next session because they will be practicing medical techniques.
	Thank the participants for attending the session. Remind them of the date and time for the next session if necessary.



## Unit 3: Disaster Medical Operations — Part 1

#### In this unit 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.



#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

#### **OBJECTIVES**

At the conclusion of this unit, the participants should be able to:

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

#### SCOPE

The scope of this unit will include:

- Introduction and Unit Overview
- Treating Life-Threatening Conditions
- Triage
- Unit Summary

## ESTIMATED COMPLETION TIME

2 hours 30 minutes

#### TRAINING METHODS

The lead instructor will begin this session by welcoming the participants to Unit 3: Disaster Medical Operations — Part 1, and will introduce the instructors for the session. The instructor will then provide an overview of the topics included in the unit: Treatment of life-threatening conditions that may be encountered (airway obstruction, bleeding, and shock) and conducting triage.

Next, the instructor will discuss and demonstrate the immediate procedures required for opening the airway, controlling bleeding, and treating for shock. The participants will have the opportunity to practice techniques for treating each of these conditions. During this period, some discussion will take place about the differences between disaster medical operations and the participants' image of everyday first aid. (For example, mouth-to-mouth resuscitation and cardiopulmonary resuscitation [CPR] lose some of their importance in disaster situations when there are multiple casualties needing immediate attention and limited resources.)

The next topic of this session will deal with triage. The instructor will open with a discussion of what triage is, when it is used, and the four categories into which victims are sorted. The instructor then explains the 6 steps of using triage in a disaster environment.

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

## TRAINING METHODS (CONTINUED)

Finally, the participants will practice triage evaluation and immediate treatment in a multi-casualty exercise. This exercise will illustrate the need to conduct triage effectively and expeditiously under pressure and to focus on rescuer safety.

#### RESOURCES REQUIRED

- Community Emergency Response Team Instructor Guide
- Community Emergency Response Team Participant Manual
- PowerPoint slides 3-0 through 3-27

#### OTHER RESOURCES

If time permits, the 23-minute video, CERT Triage: Handling Mass Causality Situations, is recommended for this unit. The video portrays triage procedures and treatment of obstructed airway, uncontrolled bleeding, and shock, as well as sizeup and rescuer safety. The video is available for download at the national CERT Web site: <a href="https://www.citizencorps.gov/cert/">www.citizencorps.gov/cert/</a>

#### **EQUIPMENT**

In addition to the equipment listed at the front of this instructor Guide, you will need the following equipment for this unit:

- A computer with PowerPoint software
- A computer projector and screen
- One mannequin
- Non-latex examination gloves (1 pair for each participant)
- One can of shaving cream
- 4- by 4-inch dressings (1 dressing for every 2 students)
- Note cards, markers, and masking tape

#### **PREPARATION**

#### **Triage Exercise**

The triage exercise near the end of this session requires materials prepared in advance of the activity.

Before the session, prepare victim status cards, each documenting the status of one disaster victim. Create at least 1 victim description for every 3 participants in the group (e.g., 7 different descriptions for a group of 21 participants). Make three sets of the victim status cards.

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

#### PREPARATION (CONTINUED)

Sample victim status descriptions

Victim #1: Ambulatory — responds to voice triage

Minor bleeding Normal blanch

Victim #2: Bleeding extremity

Unconscious

After two attempts to open airway, still not

breathing

Victim #3: Standing, but does not respond to voice

commands

Victim #4: No signs of bleeding

Unconscious

Blanch takes 5 seconds

Victim #5: No bleeding

Conscious

Doesn't squeeze hand when asked

Victim #6: Minor bleeding

Conscious but disoriented Breathing rate is 40 per minute

#### **Culturally Sensitive Topics**

Working with a representative of the community in which you will be teaching, identify any potentially culturally sensitive topics in this module. This module features a variety of topics that may require care in how they are presented, including the prioritization of injury required to conduct triage. Some content in this unit discusses touching victims (also featured in the end-of-unit role-playing activity), an activity that may be uncomfortable to some cultures or individuals.

Develop strategies for presenting any such topics in ways that will engage, rather than offend, participants.

Notes	A suggested time plan for this unit is as follows:
	Introduction and Unit Overview
	Total Time: 2 hours 30 minutes
REMARKS	Be sure to emphasize throughout the session the importance of rescuer safety (e.g., using safety equipment, working with a buddy, and doing a thorough sizeup). These points cannot be made too often or too strongly. CERT members cannot help anyone if they become victims.

## Unit 3: Disaster Medical Operations – Part I

## Disaster Medical Operations — Part 1 CERT Basic Training Unit 3

INSTRUCTOR GUIDANCE

#### Display Slide 3-0



**S** FEMA

#### Correct responses:

- Class A Fires: Ordinary combustibles such as paper, cloth, wood, rubber, and many plastics
- Class B Fires: Flammable liquids (e.g., oils, gasoline) and combustible liquids (e.g., charcoal lighter fluid, kerosene)
- Class C Fires: Energized electrical equipment (e.g., wiring, motors)

#### Introduction and Overview

#### Welcome

Introduce this unit by welcoming the participants to Unit 3 of the CERT Basic Training.

CONTENT

Introduce the new instructors for this unit and ask each to describe briefly his or her experience in medical operations.

Briefly review the fire safety lesson.

What are the five classes of fire?

INSTRUCTOR GUIDANCE	CONTENT
<ul> <li>Class D Fires:         <ul> <li>Combustible metals (e.g., aluminum, magnesium, titanium)</li> </ul> </li> <li>Class K Fires: Cooking oils in restaurants and cafeterias (e.g., vegetable oils, animal oils, fats). This does not apply to residential kitchens.</li> </ul>	
	Remind participants that the method used to extinguish each must be appropriate for the type of fire.
?	Before making the decision to extinguish a fire, CERTs should complete a thorough sizeup. What are the 9 sizeup steps in the right order?
Correct response:	and the discouple and many magnitudes.
<ol> <li>Gather Facts</li> <li>Assess and Communicate</li> <li>Consider Probabilities</li> <li>Assess Your Own Situation</li> <li>Establish Priorities</li> <li>Make Decisions</li> <li>Develop Plan of Action</li> <li>Take Action</li> <li>Evaluate Progress</li> </ol>	
<b>?</b> **	Should CERTs enter a smoke-filled building?
Correct response:	
Never.	

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

INSTRUCTOR GUIDANCE	CONTENT
?	There are some questions we need to ask to decide whether to extinguish a fire. What are they?
Correct responses:	
<ul> <li>Can I escape quickly and safely from the area if I attempt to extinguish the fire? (The first priority for you and your buddy is safety.)</li> </ul>	
Do I have the right type of extinguisher?	
Is the extinguisher large enough for the fire?	
<ul> <li>Is the area free from other dangers, such as hazardous materials and falling debris?</li> </ul>	
Is the fire extinguished in 5 seconds?	
?	How should CERT members treat a hazardous material placard?
Correct response:	
As a stop sign	
	Answer any questions that the students may have about fire safety. Then continue with the session.

CERT BASIC TRAINING: INSTRUCTOR GUIDE JANUARY 2011 PAGE 3-7

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

#### INSTRUCTOR GUIDANCE CONTENT Explain that the need for CERT members to learn Assumptions disaster medical operations is based on two · Need for CERT members to learn disaster assumptions: medical operations is based on two assumptions: The number of victims could exceed the local · Number of victims could exceed local capacity capacity for treatment. · Survivors will assist others - They will do whatever they know how to do Survivors will attempt to assist others. CERT They need to know lifesaving first aid or post-disaster survival techniques members will need to know lifesaving first aid or post-disaster survival techniques. CERT Resc Training Unit 3: Dispasse Medical Operations — Part 1 **Display Slide 3-1** Emphasize the need for CERT medical operations by Importance of Quick Action describing the phases of death from trauma: . Phase 1: Death within minutes, result of severe trauma 1. Phase 1: Death within minutes as a result of . Phase 2: Death within several hours, overwhelming and irreversible damage to vital result of excessive bleeding . Phase 3: Death in several days or weeks, organs result of infection 2. Phase 2: Death within several hours as a result of excessive bleeding ₩ FEMA CERT Rauc Training Unit 2: Discour Medical Operations — Part 3. Phase 3: Death in several days or weeks as a result of infection or multiple-organ failure (i.e., Display Slide 3-2 complications from an injury) Explain that 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). Point out that some disaster victims in the second and third phases of death could be saved by providing simple medical care.

CERT BASIC TRAINING: INSTRUCTOR GUIDE

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

#### INSTRUCTOR GUIDANCE CONTENT Add that in a disaster, there may be more victims than **CERT Training** rescuers, and assistance from medical professionals may not be immediately available. CERT personnel · Treatment for life-threatening conditions · Airway obstruction, bleeding, shock are trained to be part of disaster medical operations . Treatment for other, less urgent conditions and to provide: Provide greatest good for greatest number Treatment for life-threatening conditions — airway by conducting simple triage obstruction, bleeding, and shock — and for other, and rapid treatment less urgent conditions S FEMA CERT Rest Training Unit 3 Dispussor Medical Operations — Part The greatest good for the greatest number of people by conducting simple triage and rapid **Display Slide 3-3** treatment START



**Display Slide 3-4** 

Explain that 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.

<u>ST</u>art = Simple Triage: The first phase of START is the process by which victims are sorted based on injury and priority of treatment.

st<u>ART</u> = And Rapid Treatment: The second phase of START consists of rapid treatment of the injuries assessed and prioritized in the first phase.

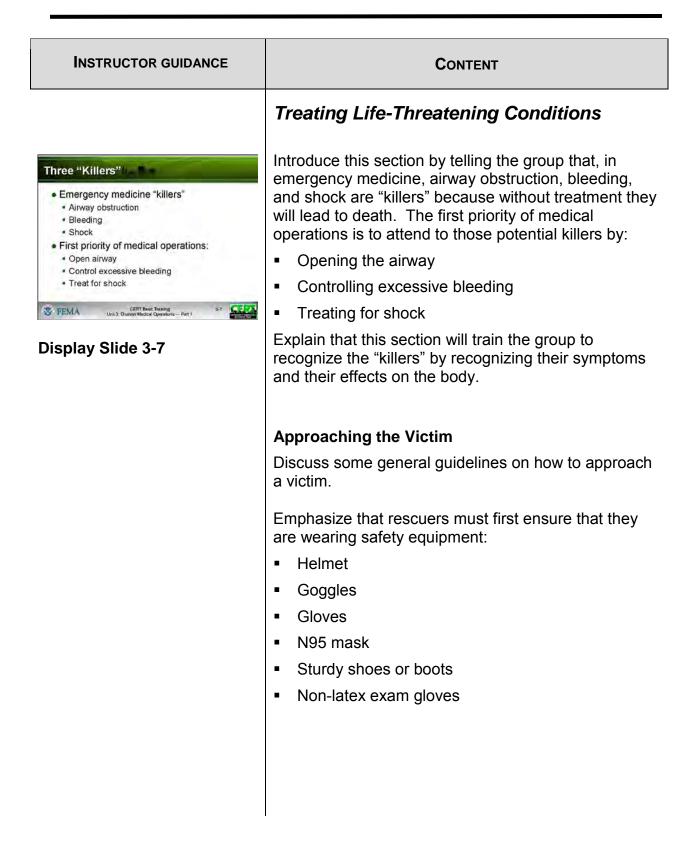
Poll the group to see how many have taken first aid courses.

**PAGE 3-9** 

INSTRUCTOR GUIDANCE	CONTENT
	Explain that all CERT participants are encouraged to take basic first aid and CPR training; however, those who have taken first aid courses 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	Unit Objectives
<ul> <li>Identify "killers"</li> <li>Apply techniques for opening airway, controlling bleeding, and treating for shock</li> <li>Conduct triage under simulated disaster</li> </ul>	Tell the group that at the end of this unit, they should be able to:
conditions	Identify the "killers."
	<ul> <li>Apply techniques for opening the airway, controlling bleeding, and treating for shock.</li> </ul>
SFEMA Unit 2 Owner Micical Operations — Part 1	Conduct triage under simulated disaster
Display Slide 3-5	conditions.  Stress once more that 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.

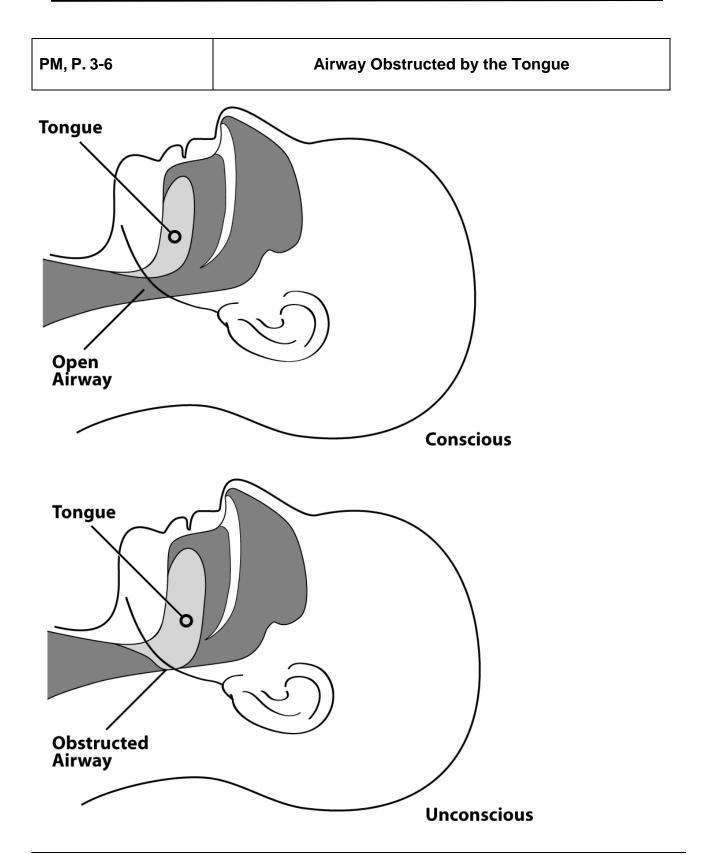
#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

### **INSTRUCTOR GUIDANCE** CONTENT **Unit Topics Unit Topics** Reiterate that this session will introduce the Treating life threatening injuries participants to the principles of triage, including treating the "three killers": airway obstruction, excessive bleeding, and shock. Tell the group that, throughout the unit, they will have opportunities to practice the treatment techniques and, at the end of the unit, they will have the opportunity to **ॐ** FEMA CERT Basic Training Unit 3: Disaster Medical Operations — Part 1 conduct triage evaluations in a simulated disaster. **Display Slide 3-6**



INSTRUCTOR GUIDANCE	CONTENT
How to Approach a Victim  Be sure victim can see you Identify yourself Your name and name of your organization Request permission to treat, if possible Respect cultural differences	Tell them that a time-saving technique is to wear non-latex exam gloves under their work gloves. Then, when they find a victim, they can remove their work gloves and are ready to work with the victim.  Remind participants to use non-latex exam gloves to prevent potential reaction by individuals who are allergic to latex.  Explain to the group that 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.
SFEMA Unas Charles Madrid Operations — Part 1	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.

INSTRUCTOR GUIDANCE	Content
Open the Airway  Line State Training  Una 2 Duarter Medica Operations — Part 1  Display Slide 3-9	Opening the Airway  Explain that the respiratory system includes the following components:  Lung Bronchus Larynx Pharynx Nasal Cavity Trachea
**	Does anyone know what the most common airway obstruction is?
Open vs. Obstructed Airway  The Standard Control of Con	If not mentioned, tell the group that the most common airway obstruction is the tongue.  Explain that, 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.
PM, P. 3-6	Refer the participants to the illustration titled <i>Airway</i> Obstructed by the Tongue in the Participant Manual.



#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

#### INSTRUCTOR GUIDANCE CONTENT The Head-Tilt/Chin-Lift Method Head-Tilt/Chin-Lift Method Explain that, 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. Refer the participants to the table titled *Head-Tilt/Chin-*Lift Method for Opening an Airway in the Participant **ॐ** FEMA Manual. **Display Slide 3-11** Explain that in addition to opening the airway, this method causes little or no cervical-spine manipulation because only the head is manipulated. PM, P. 3-7 Mention that the proper technique is important in opening an airway, but so is speed if there are multiple victims This method involves the following 7 steps: Demonstrate each step slowly using an instructor or Step 1: Positioning oneself at an arm's distance, participant as the victim. Be make contact with the victim and ask, "Can you sure to wear gloves to hear me?" Speak loudly but do not yell. reinforce the need for protective equipment. Step 2: If the victim does not or cannot respond, place the palm of one hand on the victim's forehead. Step 3: Place two fingers of the other hand under the chin and tilt the jaw upward while tilting the head backward slightly. Step 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. Step 5: Look for chest rise.

INSTRUCTOR GUIDANCE	CONTENT
If possible, demonstrate "abnormal" lung sounds.	<ul> <li>Step 6: Listen for air exchange.</li> <li>Indicate that when listening for air exchange, a CERT member should document abnormal lung sounds (wheezing, gasping, gurgling, etc).</li> <li>Appearance of any sound that is not normal raises the victim's status to "I." Remind the participants that it is NOT their duty to diagnose based on those signs.</li> </ul>
	<ul> <li>Step 7: Feel for abdominal movement.</li> <li>Step 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.</li> </ul>

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

## PM, P. 3-7 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	Look for chest rise.
6	<ul><li>Listen for air exchange.</li><li>Document abnormal lung sounds (wheezing, gasping, gurgling, etc.).</li></ul>
7	Feel for abdominal movement.

INSTRUCTOR GUIDANCE	Content
	Exercise: Opening the Airway
Teach this skill in accordance with your local protocols.  It is important to have other instructors who can help observe. Make sure that you all agree on the proper procedure.	Procedure: Explain that this exercise allows the participants in pairs to practice using the Head-Tilt/Chin-Lift method on each other.
	After all of the participants have had the opportunity to be the rescuer, discuss any problems or incorrect techniques that were observed. Explain how to avoid these problems in the future.
	Instructions: Follow the steps below to conduct this exercise:
	1. Assign the group to work in pairs.
	Ask the person on the right to be the victim and the person on the left to be the rescuer.
	Ask the victims to lie on the floor on their backs and close their eyes.
	4. Ask the rescuer to use the Head-Tilt/Chin-Lift method on the victim to open the airway.
	<ol> <li>After the rescuer has made two or three attempts at using the Head-Tilt/Chin-Lift method, ask the victim and the rescuer to change roles.</li> </ol>
	6. Allow each rescuer two or three observed attempts to use the Head-Tilt/Chin-Lift method.
	Observe each pair and correct improper technique.
	After all of the participants have had the opportunity to be the rescuer, discuss any problems or incorrect techniques that were observed. Explain how to avoid these problems in the future.

CONTENT
Maintaining the Airway
Tell the group that, if breathing has been restored, the clear airway still must be maintained. 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.
Remind the participants that part of their 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.
Tell the group that they 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.
Remind the group of the importance of opening the airway as quickly as possible. Emphasize that, in treating the three killers, checking for airway obstruction is <u>always</u> first.
Does anyone have any questions about recognizing and clearing airway obstructions?
Tell the participants that in the next section, they will learn to recognize and treat uncontrolled bleeding.

INSTRUCTOR GUIDANCE	CONTENT
	Controlling Bleeding
Show the class a 1-liter bottle to illustrate this learning point.	Introduce this section by telling the group that 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.
Types of Bleeding - 1	Explain to the group that there are three types of bleeding and the type can usually be identified by how fast the blood flows:
<ul> <li>Arterial bleeding</li> <li>Bleeding from artery spurts</li> <li>Venous bleeding</li> </ul>	<ul> <li>Arterial bleeding. Arteries transport blood under high pressure. Blood coming from an artery will spurt.</li> </ul>
Bleeding from vein flows     Capillary bleeding     Bleeding from capillaries oozes	<ul> <li>Venous bleeding. Veins transport blood under low pressure. Blood coming from a vein will flow.</li> </ul>
CERT Nave Training Uni 2: Disaster Mission Operators — Part 1	<ul> <li><u>Capillary bleeding</u>. Capillaries also carry blood under low pressure. Blood coming from capillaries will <u>ooze</u>.</li> </ul>
Types of Bleeding - 2  Captay  Captay  Captay  Lin 2 Discrete Medical Operators — Part 1  Display Slides 3-12 and 3-13	

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

INSTRUCTOR GUIDANCE	CONTENT
Control Bleeding  • 3 main methods for controlling bleeding: • Direct pressure • Elevation • Pressure points  CERT Bave Braining Unit 3. Director Medical Operations—Part 1	Tell the group that there are three main methods for controlling bleeding:  Direct pressure  Elevation  Pressure points  Explain that direct pressure and elevation will control bleeding in 95% of cases.
Display Slide 3-14	
PM, P. 3-10	Refer the participants to the table titled <i>Procedures for Controlling Bleeding</i> in the Participant Manual.

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PM, P. 3-10 Procedures for Controlling Bleeding
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Method	Procedures
Direct Pressure	<ul> <li>Place direct pressure over the wound by putting a clean dressing over the wound and pressing firmly.</li> </ul>
	<ul> <li>Maintain pressure on the dressing over the wound by wrapping the wound <u>firmly</u> with a pressure bandage and tying with a bow.</li> </ul>
Elevation	Elevate the wound above the level of the heart.
Pressure Points	Put pressure on the nearest pressure point to slow the flow of blood to the wound. Use the:
	Brachial point for bleeding in the arm
	Femoral point for bleeding in the leg
	Popliteal point for bleeding in the lower leg

CONTENT
Direct Pressure
Demonstrate the procedure for controlling bleeding through direct pressure:
<ul> <li><u>Step 1</u>: Place direct pressure over the wound by putting a clean dressing over it and pressing firmly.</li> </ul>
Step 2: Maintain pressure on the dressing over the wound by wrapping it <u>firmly</u> with a bandage.
Stress that 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.
Explain that 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.
Explain that 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
Explain that elevation can be used in combination with direct pressure.
Elevate the wound above the level of the heart.

Instructor Guidance	CONTENT
Demonstrate why elevation works by asking the participants to put their arms straight up in the air over their heads. Have them hold this position for 20-30 seconds.	Emphasize that 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.
Ask them how their fingers, hands and arms feel. They should feel cold, tingly, numb, etc.	
Pressure Points    Pressure Points   Pressure Point	Pressure Points  Tell the participants that there are also pressure points that can be used to stem the flow of bleeding.
Demonstrate use of the brachial pressure point by applying pressure to your own arm. Explain that this technique requires the application of strong pressure. Then, have the participants apply pressure to their own arms so that they can feel the effect of this method.	Demonstrate where to find the pressure points. The pressure points most often used are the:  Brachial point in the arm Femoral point in the leg Pressure point behind the knee Explain that the pressure point to be used depends on the location of the wound. The correct pressure point will be between the wound and the heart.

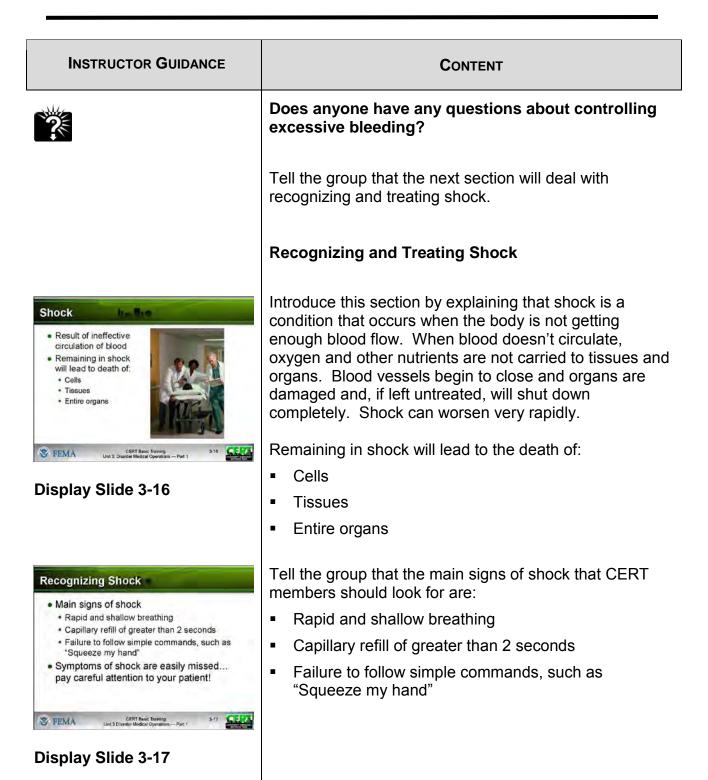
INSTRUCTOR GUIDANCE	Content
PM, P. 3-12	Refer the participants to the illustrations of these pressure points and the figure titled <i>Methods for Controlling Bleeding</i> in the Participant Manual.
	Encourage the participants to get victims to help themselves whenever possible by using any of these methods to control bleeding.
?	Does anyone have any questions about controlling bleeding?

PM, P. 3-12	Methods for Controlling Bleeding
just ab	Femoral Pressure Point in the Upper thigh  Popliteal Pressure Point which the knee

INSTRUCTOR GUIDANCE	CONTENT
	Exercise: Controlling Bleeding
	<u>Procedure:</u> Explain that this exercise allows the participants to practice the techniques for controlling bleeding on each other.
	The participants will be divided into pairs. Each member of the pair will practice applying a pressure bandage and elevation.
	<u>Instructions</u> : Follow the steps below to conduct this exercise:
	Assign the group to pairs.
	Identify one person to be the victim and one person to be the rescuer.
	Ask the victims to lie on the floor on their backs and close their eyes.
	4. Ask the rescuer to use direct pressure to control bleeding from a simulated wound on the right forearm just below the elbow. Have the rescuer:
	<ul> <li>Apply a pressure bandage</li> <li>Elevate the arm</li> <li>Repeat these two steps</li> <li>Repeat the two steps for speed</li> </ul>
	5. After the rescuer has made at least three attempts at using each technique, ask the victim and the rescuer to change roles. (Note: The three attempts should emphasize a progression of slow to fast in applying the skill.)
	6. Observe each group and correct any improper techniques. Common errors include bandages that are too loose, tying a knot instead of a bow, or elevation that cannot be maintained with comfort.
	Allow each rescuer at least one observed attempt to use each technique.

INSTRUCTOR GUIDANCE	CONTENT
	Tourniquets (Optional)
<b>Note:</b> This section on tourniquets is optional and can be added at the instructor's discretion.	Explain that 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.
	Explain the proper use of a tourniquet and demonstrate its application, making the following points.
	<ul> <li>A tourniquet is a bandage which, when placed around a limb and tightened, cuts off the blood supply to the part of the limb beyond it.</li> </ul>
	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.
	<ul> <li>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.</li> </ul>

INSTRUCTOR GUIDANCE	CONTENT
	■ To tie a tourniquet:
	<ol> <li>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).</li> </ol>
	2. Tie the piece of material around the limb.
	<ol><li>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.</li></ol>
	<ol> <li>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.</li> </ol>
	<ol><li>Tie one or both ends of the lever against the limb to secure it and maintain pressure.</li></ol>
	<ol><li>Mark the patient in an obvious way that indicates that a tourniquet was used and include the time it was applied.</li></ol>
	<ol><li>Do not loosen a tourniquet once it has been applied.</li></ol>
	Only proper medical authorities should remove a tourniquet.
	Review
	Reiterate the three main ways to control excessive bleeding:
	<ul> <li>Direct pressure</li> </ul>
	<ul><li>Elevation</li></ul>
	<ul> <li>Pressure points</li> </ul>
	Stress that bleeding must be controlled as quickly as possible so as not to endanger the victim's life from blood loss. Remind the group that they should always wear their non-latex exam gloves, goggles, and an N95 mask as a protection against blood-borne pathogens, such as hepatitis and HIV.



INSTRUCTOR GUIDANCE	Content
To demonstrate rapid, shallow breathing, ask two participants to come to the front of the room. Tell one to breathe normally. Tell the other to "pant" (i.e., 30 or more breaths per minute). Point out the audible difference to the class. Make sure that the participant who is "panting" is sitting during the demonstration.	Evaluate Breathing  Demonstrate rapid, shallow breathing.
Ask the participants to check their own capillary refill by pushing down on the palm of their hand and then releasing. Tell them to watch what happens. Ask one of the participants to explain.  Emphasize that capillary refill should occur within 2 seconds.	Evaluate Circulation  Demonstrate capillary refill. Tell the group that this is referred to as the "blanch test." A good place to do this is on the palm of the hand. The nail beds are sometimes used.  Explain that the blanch test is not valid in children, and that mental status should be used instead as the main indicator.
Ask participants to perform a radial pulse test by placing middle and ring finger over the interior of their wrist where the thumb meets the arm  Note that a normal pulse rate is 60-100 beats per minute.	Explain that another way to check for circulation is the radial pulse test. Explain that this is an alternative to the blanch test and can be used in the dark or where it is cold.  Demonstrate how to find a radial pulse.

INSTRUCTOR GUIDANCE	CONTENT
	Evaluate Mental Status
	Explain that 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
	Remind the group that 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.
PM P. 3-17	Discuss the procedure for treating victims of shock. Refer the participants to the chart titled <i>Procedures for Controlling Shock</i> in the Participant Manual.
	■ <u>Step 1</u> : Maintain an open airway.
	Step 2: Control excessive bleeding.
	Step 3: Maintain body temperature.

INSTRUCTOR GUIDANCE	CONTENT
	Remind participants to avoid rough or excessive handling. Stress the importance of maintaining 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.
	Emphasize that, although victims who are suffering from shock may be thirsty, they should <u>not</u> eat or drink anything initially because they may also be nauseated.
?	Does anyone have a question about the signs or treatment of shock?

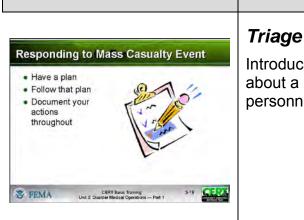
PM, P. 3-17 Procedures for Controlling Shock	
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Step	Action
1	Maintain an open airway.
2	Control obvious bleeding.
3	<ul> <li>Maintain body temperature (e.g., cover the ground and the victim with a blanket if necessary).</li> </ul>
Notes	<ul><li>Avoid rough or excessive handling.</li><li>Do not provide food or drink.</li></ul>

INSTRUCTOR GUIDANCE	Content
	Exercise: Treating Shock
	<u>Procedure:</u> Explain that this exercise allows the participants in pairs to practice the steps for treating shock on each other.
	Reiterate the key points about recognizing and treating shock:
	<ul> <li>A victim may display one or more signs of shock.</li> </ul>
	If there is any reason to suspect shock, apply immediate treatment.
	Instructions: Follow the steps below to conduct this exercise:
	Assign the group to the same pairs as in the previous exercises.
	Ask those who were the rescuers first in the last exercise to be the victims first.
	Ask the victims to lie on the floor on their backs and close their eyes.
	4. Explain the following scenario to the rescuers:
	<ul> <li>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.</li> </ul>
	What do you need to do next?
	5. Ask the rescuer to treat the victim.
	6. Observe each rescuer as he or she treats for shock. Do not let the students put a blanket under the victim's feet. Blankets are scarce during a disaster response and should not be used for nonessential purposes.

INSTRUCTOR GUIDANCE	CONTENT
	When each rescuer has been observed treating for shock, ask the victim and the rescuer to switch roles.
	When all of the rescuers have had the opportunity to treat their victims, lead a discussion about any incorrect techniques observed and how to correct them in the future.
?	Does anyone have a question about the signs of shock or its treatment?
	Tell the group that, in a disaster scenario, they may have many victims requiring attention and few resources to use. The next section will use the skills just learned for prioritizing victim treatment. This is called triage.

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1



INSTRUCTOR GUIDANCE

#### Display Slide 3-18

Examples might be from a recent news story or imagining what the emergency room would be like after an explosion at a shopping mall or sports event.



**Display Slide 3-19** 

Introduce this topic by getting participants thinking about a mass casualty event and how medical personnel handle it.

CONTENT

Emphasize the importance of sizeup by reviewing the 9 steps to properly size up a situation. Remind the participants that sizeup is a continual process; it never stops.

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

Instructor Guidance	CONTENT
	In mass casualty events, medical personnel:
The point of this discussion is to get the participants thinking	<ul> <li>Identify the dead and those who are too severely injured to be saved</li> </ul>
about multiple casualties.	<ul> <li>Send those with relatively minor injuries and wounds to a holding area to await treatment</li> </ul>
	<ul> <li>Identify those who would die from life-threatening injuries and treat them immediately</li> </ul>
	Tell the participants that these scenes showed medical personnel conducting <u>triage</u> — a French term meaning "to sort."
What Is Triage?	What Is Triage?
Process for managing mass casualty event  Victims are evaluated Victims are sorted by urgency of treatment needed  Victims are set up for immediate or delayed treatment	Explain that during medical triage, victims are evaluated, sorted by the urgency of the treatment needed, and set up for immediate or delayed treatment.
FEMA Ura 2 Ourser Michael Operations — Part 1 5-20	Explain further that triage was, in fact, initiated by the military and that experience has shown that triage is an effective strategy in situations where:
Display Slide 3-20	There are many more victims than rescuers
	There are limited resources
	Time is critical
	Point out that triage occurs as quickly as possible after victims are located or rescued.

CERT BASIC TRAINING: INSTRUCTOR GUIDE

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

# Triage Immediate (I): Victim has life-threatening injuries (airway, bleeding, or shock) Delayed (D): Injuries do not jeopardize victim's life; treatment can be delayed Minor (M): Walking wounded and generally ambulatory Dead (DEAD): No respiration after two attempts to open airway FEMA CERT BAGE TRANSING S21 S22

INSTRUCTOR GUIDANCE

#### **Display Slide 3-21**

When discussing triage, be sure to highlight how triage is organized and conducted in your area. Specify what materials the CERTs use to mark triaged victims, e.g., tags, tape, etc.

Some participants may respond negatively to not performing CPR. CPR is a maintenance therapy that requires time and rescuers that may not be available when dealing with multiple casualties. In a situation without multiple casualties, CPR may be administered by available trained personnel.

Explain any State laws about moving the dead that may apply to CERTs.

#### CONTENT

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."

Remind the group that the CERT goal is to do the greatest good for the greatest number.

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

Remind the participants that 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.

Instructor Guidance	CONTENT
	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.  Note that the setup of medical treatment areas will be covered in the next unit.
Rescuer Safety During Triage	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	Remind the group that, 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.
S-FEMA Ura3 Disaser Medical Operators — Part 1	
Display Slide 3-22	
Emphasize these points.	
Demonstrate the methods for changing non-latex exam gloves without contaminating oneself by pinching the glove at the top and rolling it off while turning it inside out as it comes off. To remove the second glove, tuck two fingers inside the glove and roll the glove off, being careful not to touch the outside.	Emphasize the need for rescuer safety 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. Tell the group that their disaster kits should have a box of non-latex exam gloves. Bleach and potable water should also be available at the CERT's medical treatment area.

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

INSTRUCTOR CUIDANCE	C211
INSTRUCTOR GUIDANCE	CONTENT
	Exercise: Removing Exam Gloves
	<b>Procedure:</b> Explain that this exercise allows the participants to practice the proper technique for removing soiled exam gloves without spreading contaminants.
	<u>Instructions</u> : Follow the steps below to conduct this exercise:
	Ask the participants to put on a pair of non-latex exam gloves.
	Walk around the room and give each participant a small dollop of shaving cream and ask them to rub their hands together as if washing.
	Demonstrate the procedure for removing gloves again with shaving cream on your gloves.
	Ask the participants to remove their gloves without touching or splattering any shaving cream.
	Repeat until all participants are able to complete the technique quickly and comfortably.

PAGE 3-41

Instructor Guidance	CONTENT
	Triage in a Disaster Environment
Step 1: Stop, Look, Listen, and Think     Step 2: Conduct voice triage     Step 3: Start where you stand; follow	Introduce this section by explaining the general procedure for CERTs to conduct triage:
systematic route  Step 4: Evaluate each victim and tag Step 5: Treat "I" victims immediately Step 6: Document triage results  FRMA  CERT Page Tripling Unit 2 Charles Tripling Unit 2 Charles Tripling Unit 2 Charles Tripling STE  Display Slide 3-23  Emphasize this first step.	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.
Discuss questions you should ask to gather facts about the situation.	<ul> <li>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. Note that, during triage, these individuals must be tagged "M."</li> <li>Step 3: Start where you stand, and follow a systematic route. Start with the closest victims and work outward in a systematic fashion.</li> </ul>

#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

INSTRUCTOR GUIDANCE	CONTENT
INSTRUCTOR GUIDANCE	CONTENT
	<ul> <li>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.</li> <li>Say that you will explain more about how to do a triage evaluation in a minute.</li> </ul>
	<ul> <li>Step 5: Treat I victims immediately. Initiate airway management, bleeding control, and/or treatment for shock for Category I victims.</li> </ul>
	<ul> <li>Step 6: Document triage results for:</li> <li>Effective deployment of resources</li> </ul>
	Information on the victims' locations
	<ul> <li>A quick record of the number of casualties by degree of severity</li> </ul>
	Emphasize that the rescuer's safety is paramount during triage. Stress the importance of wearing proper protective equipment to avoid endangering personal health.

PAGE 3-43

Instructor Guidance	CONTENT
This section puts together the pieces that have been covered so far in the unit.	Evaluating a Victim During Triage
Step 4: Triage Evaluation  Check airway and breathing Check circulation and bleeding Check mental status	Remind participants that the goal of triage is to identify and treat victims who need immediate care as rapidly as possible. As an expansion of Step 4 on the previous page, explain that there is a certain order for doing a triage evaluation. Every evaluation should be done in this order.
Display Slide 3-24 PM, P. 3-22	Refer the participants to the table titled <i>Evaluating a Victim During Triage</i> in the Participant Manual.
Demonstrate as you explain the steps.	<ul> <li>Explain that when conducting a triage evaluation they should:</li> <li>Start with the airway. At an arm's distance, make contact with the victim and speak loudly. If the victim does not respond, then: <ul> <li>Position the airway.</li> <li>Look, listen, and feel.</li> <li>Check breathing rate. Abnormally rapid respiration (above 30 per minute) indicates shock. Maintain the airway and treat for shock and tag "I."</li> <li>If the victim is not breathing after two attempts to open the airway, then tag the victim "DEAD."</li> </ul> </li> </ul>

Instructor Guidance	CONTENT
	<ul> <li>Second, check for bleeding.</li> <li>Stop uncontrolled bleeding.</li> <li>Perform blanch test for capillary refill (greater than 2 seconds should be marked "I").</li> <li>Or perform a radial pulse test.</li> <li>If pulse present, continue to assessment of mental status. Note abnormal pulse.</li> <li>If pulse absent or abnormal, elevate status to "I" and treat for bleeding and shock.</li> <li>Third, check mental status. If no response, the victim's status is "I."</li> <li>If the victim passes all tests, his or her status is "D." If the victim fails one test, status is "I." Remember that everyone gets a tag.</li> </ul>

PM, P. 3-22	Evaluating a Victim During Triage
FIVI, F. 3-22	Evaluating a victim burning mage

Step	Procedures
1	Check airway/breathing. At an arm's distance, make contact with the victim and speak loudly. If the victim does not respond:
	Position the airway.
	■ Look, listen, and feel.
	<ul> <li>Check breathing rate. Abnormally rapid respiration (above 30 per minute) indicates shock. Maintain the airway and treat for shock and tag "I."</li> </ul>
	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	Check circulation/bleeding.
	Take immediate action to control severe bleeding.
	<ul> <li>Check circulation using the blanch test (for capillary refill) or a radial pulse test.</li> </ul>
	<ul> <li>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."</li> </ul>
	Or check the radial pulse.
	If present, continue to step 3.
	<ul> <li>Note if the pulse is abnormal (rapid, thready, weak, etc.)</li> </ul>
	If absent, tag "I" and treat for bleeding and shock.
3	Check mental status. Inability to respond indicates that immediate treatment for shock is necessary. Treat for shock and tag "I."

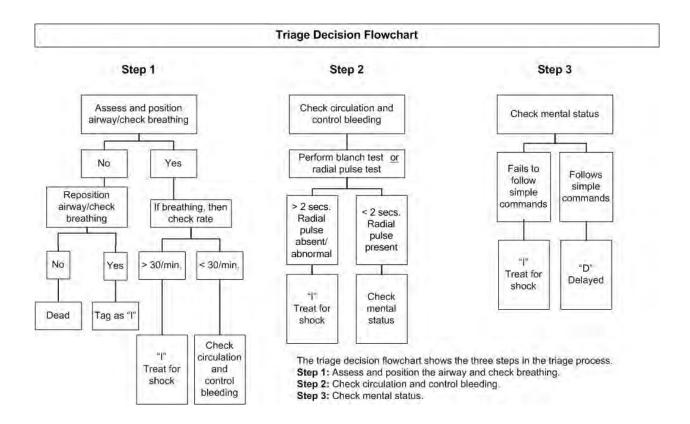
INSTRUCTOR GUIDANCE	CONTENT
Ask participants to work individually to learn the steps:  1. Read through the first step. 2. Perform the motions of the step. 3. Repeat the process for steps 2 and 3. 4. Finally, perform the motions of the entire triage evaluation without looking at the chart.  Suggest that participants do mental and physical walk-throughs of the triage evaluations at least three times a day until the next session.	Tell participants that they need to get very good at doing a triage evaluation rapidly. The goal should be to do it within 15-30 seconds.
	Documenting Triage
PM, P. 3-23	Refer the participants to the Sample Triage Documentation figure in the Participant Manual.  Explain how to document victims during triage (the number of people tagged "Immediate," "Delayed," "Minor," and "Dead") and their location. Also explain to the group how useful such information can be to professional responders.

PM, P. 3-23	Sample Triage Documentation
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Status	Location			
	Α	В	С	D
I	1	2	0	1
D	0	2	5	3
M	10	11	7	15
Dead	3	7	1	0

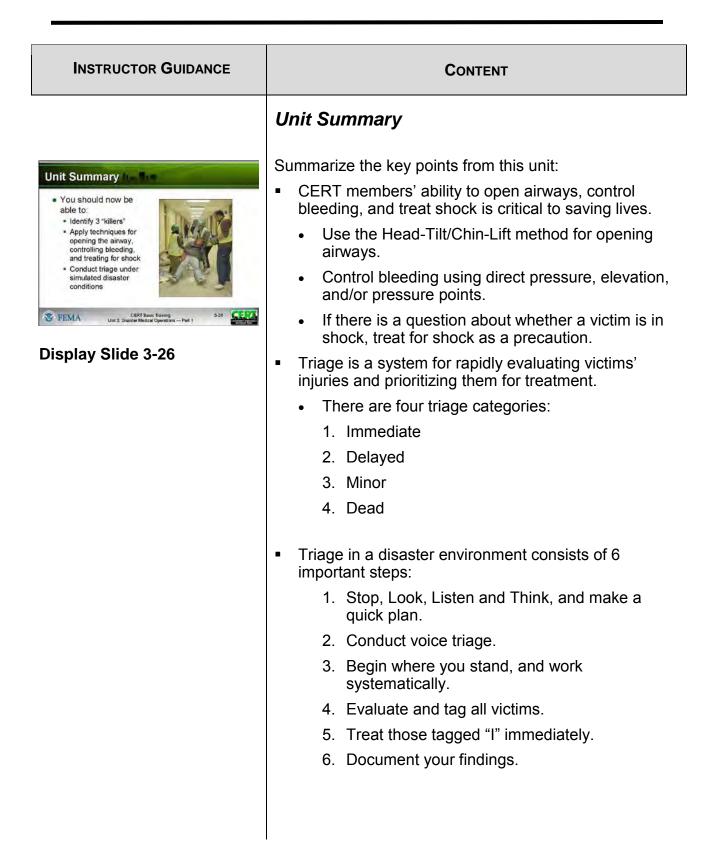
INSTRUCTOR GUIDANCE	CONTENT
	Triage Pitfalls
PM, P. 3-25	Refer the participants to the flowchart titled <i>Triage Decision Flowchart</i> in the Participant Manual and recommend that they study the flowchart outside of this session until they are very familiar with triage procedures. (Point out that "2 seconds" refers to the results of the capillary refill test.)
	Stress that time will be critical in a disaster. The participants will not be able to spend very much time with any single victim. Remind them that they want to do the greatest good for the greatest number of victims.
	Tell participants that in order to respond effectively in a mass casualty event, CERT members must:
	<ul> <li>Have a plan based on a thorough sizeup</li> </ul>
	■ Follow that plan
	<ul> <li>Document actions throughout</li> </ul>
Triage Pitfalls 11- 15-0  No team plan, organization, or goal	Stress also that the participants should take advantage of local exercises as a means of maintaining their triage skills and to help them avoid the triage pitfalls.
Indecisive leadership     Too much focus on	Triage pitfalls include:
one injury  Treatment (rather	No team plan, organization, or goal
than triage) performed	<ul><li>Indecisive leadership</li></ul>
FEMA CERT Back framing 5-28 CEPT	Too much focus on one injury
	Treatment (rather than triage) performed
Display Slide 3-25	
<b>?</b>	Does anyone have questions on how to perform triage?

PM, P. 3-25	Triage Decision Flowchart
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INSTRUCTOR GUIDANCE	Content
	Exercise: Conducting Triage
Before the session, prepare victim status cards, each documenting the status of one disaster victim. See <b>Preparation</b> at the beginning of this unit for instructions on how to complete the victim status cards.	<u>Purpose:</u> Explain that this exercise will allow the participants to practice conducting triage in a high-pressure situation.
	Participants will divide into three groups. Each participant will be given a card describing their medical status to tape to their shirt. The members of the group will take turns triaging.
	Explain to the participants that there will be three rounds of the exercise to give each person a chance to practice triage. In each round, one group will be the rescuers and the other groups will be victims. Each participant has a chance to be a rescuer once. The rescuers will have a limited amount of time to:
	<ul> <li>Size up the situation and develop a plan of action</li> </ul>
	Conduct triage and tag each victim for treatment
	<ul> <li>Document the number of victims in each category of triage (Immediate, Delayed, Minor, Dead)</li> </ul>
	Remind the participants to bring their blankets to the disaster area.
	<u>Instructions</u> : Follow the steps below to conduct this exercise:
	In the classroom, divide the participants into three groups. Provide one set of the victim status cards to each group. Each participant will get one card.
	2. In Round 1, Groups 2 and 3 are victims and remain in the classroom. Each person should tape his or her victim status card to their shirt. One instructor remains in the classroom to work with the victims to arrange themselves.

INSTRUCTOR GUIDANCE	CONTENT
	3. In Round 1, Group 1 will be the rescuers. While Groups 2 and 3 set up the scene in the classroom, Group 1 goes outside the room to quickly develop a plan of action. A second instructor should observe the rescuers' brief planning session.
	4. After no more than 2 minutes, Group 1 enters the classroom to triage the victims. (They will tag each by writing "I", "D," "M," or "Dead" on the victim status card.)
	5. Allow the rescuers 5 minutes to complete their triage. Observe the rescuers as they conduct triage.
	6. In Round 2, Group 2 will be the rescuers.
	7. In Round 3, Group 3 will be the rescuers.
	<u>Debrief:</u> After all three groups have had a chance to practice triage, call the groups together and conduct a discussion on the results of the triage exercise:
	Problems that the rescuers encountered during triage
	<ul> <li>How it felt to be under pressure to conduct triage within such a short period of time</li> </ul>
	Relate the rescuers' feelings about their time constraints to the pressure they will feel under actual conditions. Explain that they will learn ways to control some of their stresses in a later session.
?	Does anyone have questions about triage?
Be sensitive to the participants and the difficulty of these decisions during a catastrophic event.	Emphasize that planning and organization are necessary to do the greatest good for the greatest number of victims.



#### UNIT 3: DISASTER MEDICAL OPERATIONS — PART 1

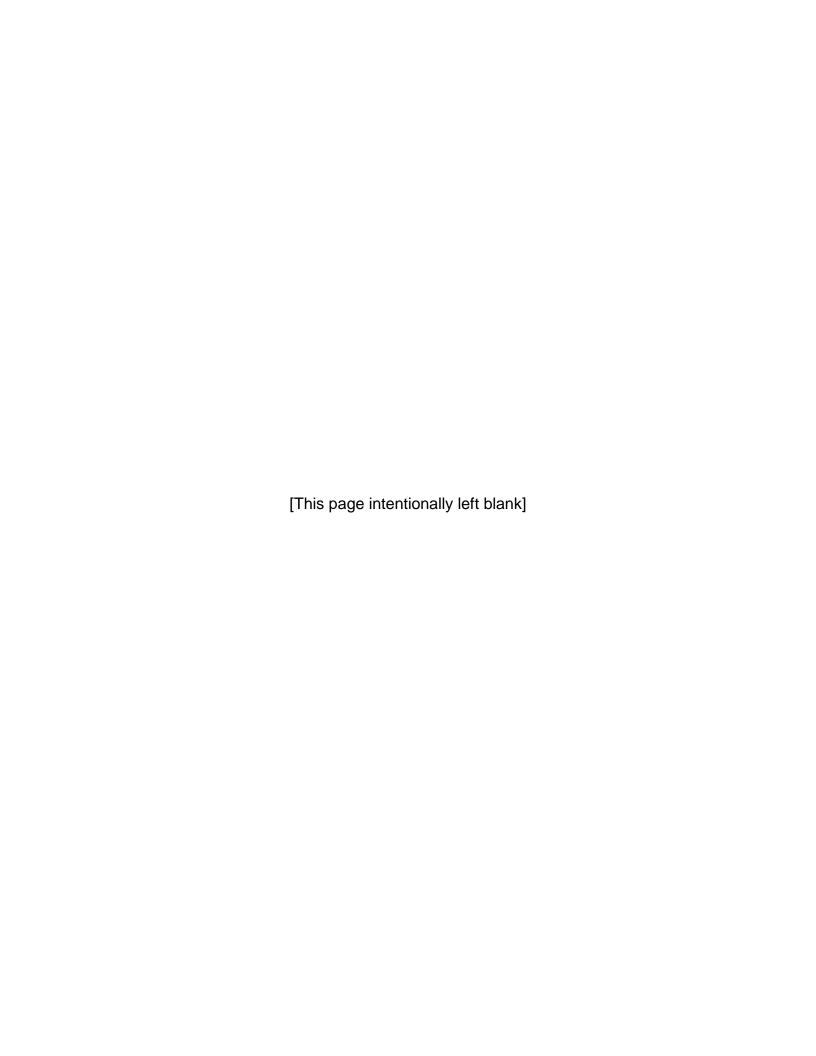
INSTRUCTOR GUIDANCE	CONTENT
Homework Assignment  1. Read unit to be covered in next session 2. Bring necessary supplies for the next session 3. Wear appropriate clothes for the next session	<ul> <li>The procedure for conducting triage evaluations involves checking:         <ul> <li>The airway and breathing rate</li> <li>Circulation and bleeding</li> <li>Mental status</li> </ul> </li> <li>Remind the participants that disaster medical operations require careful planning, teamwork, and practice. Urge them to take advantage of community-wide disaster exercises whenever they are scheduled.</li> <li>Homework Assignment</li> <li>Ask the participants to read and become familiar with Unit 4: Disaster Medical Operations — Part 2 before the next session.</li> <li>Remind the participants to bring a blanket, roller gauze, adhesive tape, duct tape, and cardboard to the next session.</li> <li>Thank everyone for attending this session.</li> </ul>

CERT BASIC TRAINING: INSTRUCTOR GUIDE

# Unit 4: Disaster Medical Operations — Part 2

#### In this unit you will learn about:

- Public Health Considerations: How to maintain hygiene and sanitation.
- Functions of Disaster Medical Operations: What the five major functions of disaster medical operations are and how they are set up.
- Disaster Medical Treatment Areas: How to establish them and what their functions are.
- Patient Evaluation: How to perform a head-to-toe assessment to identify and treat injuries.
- Basic Treatment How to:
  - Treat burns
  - Dress and bandage wounds
  - Treat fractures, dislocations, sprains, and strains
  - Treat hypothermia
  - Treat heat-related injuries
  - Control nasal bleeding
  - Treat bites and stings



#### **OBJECTIVES**

At the conclusion of this unit, the participants should be able to:

- Take appropriate sanitation measures to help protect public health.
- Perform head-to-toe patient assessments.
- Establish a treatment area.
- Apply splints to suspected fractures and sprains and employ basic treatments for other injuries.

#### SCOPE

The scope of this unit will include:

- Introduction and Unit Overview
- Public Health Considerations
- Functions of Disaster Medical Operations
- Establishing Medical Treatment Areas
- Conducting Head-to-Toe Assessments
- Treating Burns
- Wound Care
- Treating Fractures, Dislocations, Sprains, and Strains
- Nasal Injuries
- Treating Cold-Related Injuries
- Treating Heat-Related Injuries
- Bites and Stings
- Unit Summary

# ESTIMATED COMPLETION TIME

3 hours

## TRAINING METHODS

The lead instructor will begin this session by welcoming the participants to Unit 4: Disaster Medical Operations — Part 2, and will introduce the instructors for the session. The instructor will then present a brief review of Disaster Medical Operations — Part 1, covering the "killers" and triage procedures. Next, the instructor will present a brief overview of the unit topics. This section will end with a presentation of the unit learning objectives.

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# TRAINING METHODS (CONTINUED)

Then, the instructor will present the public health considerations for disaster medical operations, including sanitation, hygiene, and water purification.

Then, the instructor will present an overview of how disaster medical operations are organized and the responsibilities of each operational function.

The instructor will then discuss where to establish a treatment area and how the treatment area should be organized.

Next, the instructor will explain and demonstrate the procedures for conducting head-to-toe patient assessments using another instructor, a participant, or a mannequin. The participants will then be assigned into pairs so that they can practice head-to-toe patient assessments under observation. The instructors will observe the participants to ensure that they are performing the skills as taught.

Next, the instructor will describe the treatment of burns and the care of wounds to avoid infections. Topics will include the difference between bandages and dressings and bandaging techniques. The instructor will demonstrate using dressings to control bleeding and bandaging techniques using the mannequin.

The next section will deal with the treatment of fractures, sprains, and strains. An exercise will give the participants the opportunity to practice applying splints. The exercise will be followed by segments on nasal injuries, how to diagnose and treat hypothermia, heat-related injuries, and insect bites and stings. The unit will conclude with a summary.

#### RESOURCES REQUIRED

- Community Emergency Response Team Instructor Guide
- Community Emergency Response Team Participant Manual
- PowerPoint slides 4-0 through 4-57

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#### **EQUIPMENT**

In addition to the equipment listed at the front of this Instructor Guide, you will need the following equipment for this unit:

- A computer with PowerPoint software
- A computer projector and screen
- One mannequin (optional)
- One stretcher
- Non-latex examination gloves (1 pair per participant)
- 4- by 4-inch dressings (1 for each participant)
- One triangular bandage per participant
- Splinting material (cardboard, magazines, pieces of lath, pillows, towels, etc.)
- Note cards
- Duct tape

#### **PREPARATION**

Working with a representative of the community in which you will be teaching, identify any potentially culturally sensitive topics in this module. Develop strategies for presenting such topics in ways that will be engaging and appropriate for the participants.

For example, in some cultures, discussing death is taboo. Physical contact is another potentially sensitive topic that participants will encounter in this module with the *head-to-toe* assessment activity.

Prepare participants by introducing such topics gradually and with an awareness of the sensitivity of the audience. Avoid making jokes or being flippant regarding such topics.

### **Notes** A suggested time plan for this unit is as follows:

Introduction and Unit Overview	15 minutes
Public Health Considerations	5 minutes
Functions of Disaster Medical Operations	5 minutes
Establishing Medical Treatment Areas	15 minutes
Conducting Head-to-Toe Assessments	25 minutes
Treating Burns	20 minutes
Wound Care	20 minutes
Treating Fractures, Dislocations, Sprains, and Strains	40 minutes
Nasal Injuries	10 minutes
Treating Cold-Related Injuries	5 minutes
Treating Heat-Related Injuries	5 minutes
Insect Bites and Stings	5 minutes
Unit Summary	

Total Time: 3 hours

CERT BASIC TRAINING: INSTRUCTOR GUIDE

# Unit 4: Disaster Medical Operations — Part 2

# Disaster Medical Operations — Part 2 CERT Basic Training Unit 4

**INSTRUCTOR GUIDANCE** 

#### Display Slide 4-0

**ॐ** FEMA



#### **Display Slide 4-1**

#### Introductions and Unit Overview

#### Welcome

Introduce this unit by welcoming the participants to Unit 4 of the *CERT Basic Training*.

CONTENT

Introduce the instructors for this session and ask any new instructors to describe briefly their experience in medical operations.

Review the main points from Unit 3:

Airway obstruction, excessive bleeding, and shock are "killers." Victims with signs of these life-threatening conditions must receive immediate treatment.

#### **INSTRUCTOR GUIDANCE** CONTENT Triage has proven to be an effective way to evaluate CERT Sizeup and prioritize the treatment of mass casualties in a disaster situation. 1. Gather Facts 2. Assess Damage 3. Consider Probabilities 4. Assess Your Situation Remind the participants that, as always, sizeup is a 5. Establish Priorities critical component of any disaster operation: 6. Make Decisions 7. Develop Plan of Action 8. Take Action **Gather Facts** 9. Evaluate Progress Assess and Communicate ₩ FEMA CERT Basic Training Unit 3 Disaster Medical Operations - Part 2 Consider Probabilities **Display Slide 4-2** Assess Your Own Situation **Establish Priorities** Make Decisions Develop Plan of Action Take Action Evaluate Progress Briefly review Disaster Medical Operations — Part 1. What method is used to open the airway of a victim? Correct response: Head-Tilt/Chin-Lift What is the first action to take when approaching a victim? Correct response: Survey the area.

CERT BASIC TRAINING: INSTRUCTOR GUIDE

INSTRUCTOR GUIDANCE	CONTENT
<b>?</b>	What techniques are available to aid in the control of bleeding?
Correct responses:	
<ul><li>Direct pressure</li><li>Elevation</li><li>Pressure points</li></ul>	
?	When approaching a victim, you should always do three things before treatment. What should you do?
Correct response:	
<ul><li>Introduce yourself.</li><li>Name your affiliation.</li><li>Ask permission to treat.</li></ul>	
?	What safety equipment should CERT members ALWAYS wear?
Correct responses:	
<ul> <li>Helmet</li> <li>Goggles</li> <li>Gloves (work and non-latex exam)</li> <li>N95 mask</li> <li>Sturdy shoes or boots</li> </ul>	
?	Does anyone have questions about the information presented in the previous unit?

# Unit Objectives Take appropriate sanitation measures to help protect public health Perform head-to-toe patient assessments Establish a treatment area Apply splints to suspected fractures and sprains Employ basic treatments for other injuries CERT EMACH TRANSPORT CERT EMAC TRANSPORT Display Slide 4-3

#### Unit Objectives

Tell the group that at the end of this unit, they should be able to:

CONTENT

- Take appropriate sanitation measures to help protect public health.
- Perform head-to-toe patient assessments.
- Establish a treatment area.
- Apply splints to suspected fractures and sprains.
- Employ basic treatments for other injuries.

#### **Unit Topics**

Introduce the unit topics by telling the participants that this unit will provide them with the information for performing treatment, setting up a medical treatment area, and transporting victims.

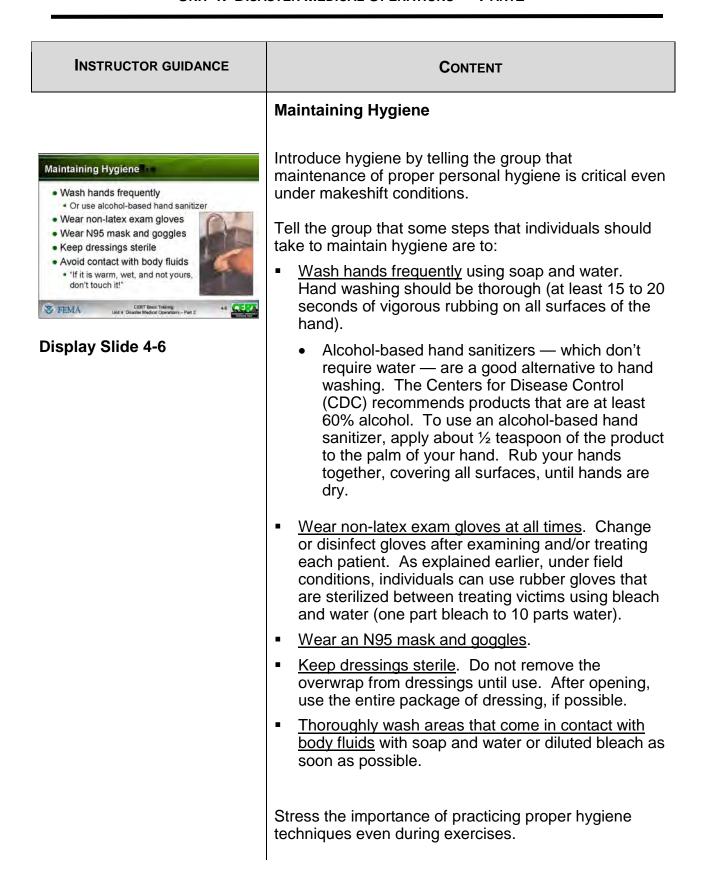


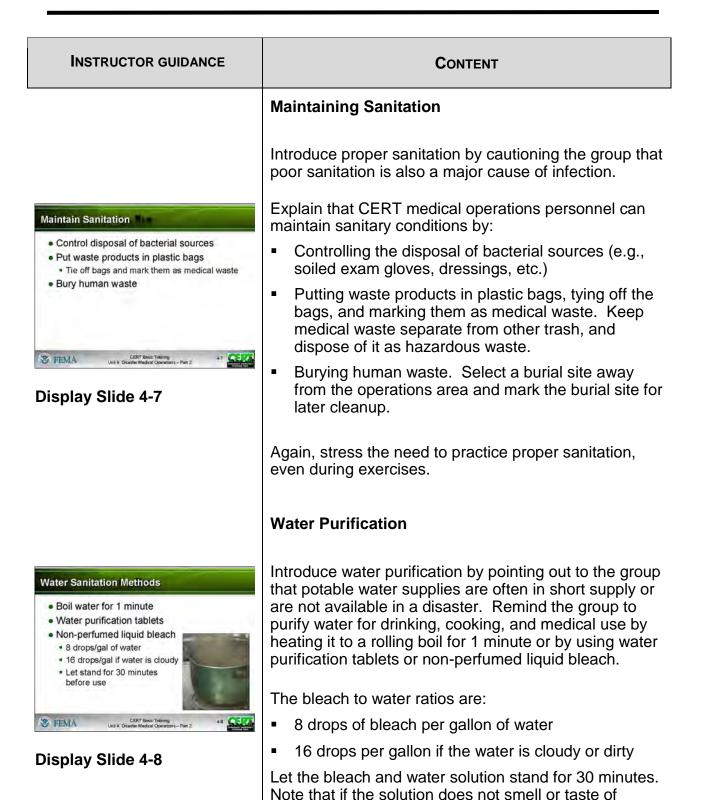
Explain that the unit topics are:

- Public Health Considerations
- Functions of Disaster Medical Operations
- Establishing Medical Treatment Areas
- Conducting Head-to-Toe Assessments
- Treating Burns
- Wound Care
- Treating Fractures, Dislocations, Sprains, and Strains
- Nasal Injuries
- Treating Cold-Related Injuries
- Treating Heat-Related Injuries
- Bites and Stings

#### Display Slide 4-4

INSTRUCTOR GUIDANCE	CONTENT
	Emphasize the need for practice by telling the participants that they will have the opportunity to practice many of the treatment techniques that they will learn.
<b>?</b>	Does anyone have any questions about what will be covered in this unit?
	Public Health Considerations
	Introduce this topic by reminding the group that, when disaster victims are sheltered together for treatment, public health becomes a concern. Measures must be taken, both by individual CERT members and CERT programs, to avoid the spread of disease.
Public Health Considerations	Explain that the primary public health measures include:
<ul><li>Maintaining proper hygiene</li><li>Maintaining proper sanitation</li></ul>	Maintaining proper hygiene
<ul> <li>Purifying water (if necessary)</li> <li>Preventing spread of disease</li> </ul>	Maintaining proper sanitation
of disease	<ul><li>Purifying water (if necessary)</li><li>Preventing the spread of disease</li></ul>
FEMA Use 4 Disaster Medical Operations Part 2	- Treventing the spread of disease
Display Slide 4-5	
Troping Charles	





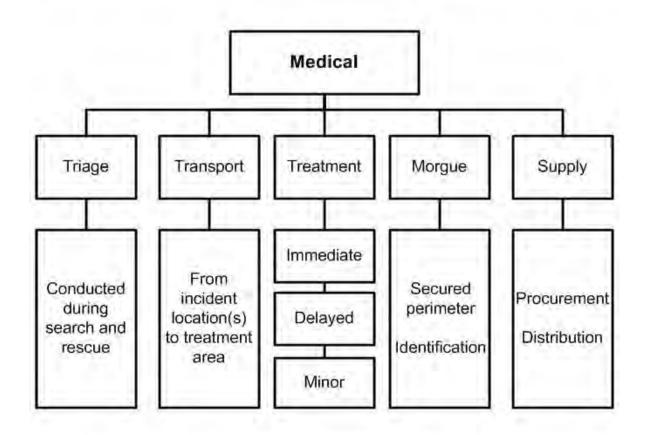
bleach, add another six drops of bleach, and let the

solution stand for 15 minutes before using.

INSTRUCTOR GUIDANCE	CONTENT
	Also tell the participants that rescuers should not put anything on wounds other than purified water. The use of other solutions (e.g., hydrogen peroxide) on wounds must be the decision of trained medical personnel.
	Preventing the Spread of Disease
	Stress that CERT members must use non-latex exam gloves, goggles, and an N95 mask during all medical operations and that they must cover all open wounds as a way of preventing the spread of infection.
?	Does anyone have any questions about the public health considerations related to disaster medical operations?
	Functions of Disaster Medical Operations
Functions of Disaster Medical Operations	Point out that there are five major functions of disaster medical operations:
<ul> <li>Triage</li> <li>Treatment</li> <li>Transport</li> <li>Morgue</li> <li>Supply</li> </ul>	<ul> <li>Triage: The initial assessment and sorting of victims for treatment based on the severity of their injuries</li> </ul>
• Supply	<ul> <li>Treatment: The disaster medical services provided to victims</li> </ul>
FEMA CERT Basic Training Unit 4: Disaster Medical Operations - Part 2	<ul> <li><u>Transport</u>: The movement of victims from incident location to the treatment area</li> </ul>
Display Slide 4-9	Morgue: The temporary holding area for victims who have died at the treatment area. Those who are tagged as "Dead" during triage are not removed from the incident site.
	<ul> <li>Supply: The hub for crucial supply procurement and distribution</li> </ul>

INSTRUCTOR GUIDANCE	CONTENT
PM, P. 4-5	Refer the participants to the <i>Disaster Medical Operations Organization</i> chart in the Participant Manual.  Explain that triage and transport are functions of both search and rescue operations and medical operations.
PM, P. 4-5	Disaster Medical Operations Organization

#### Disaster Medical Operations Organization



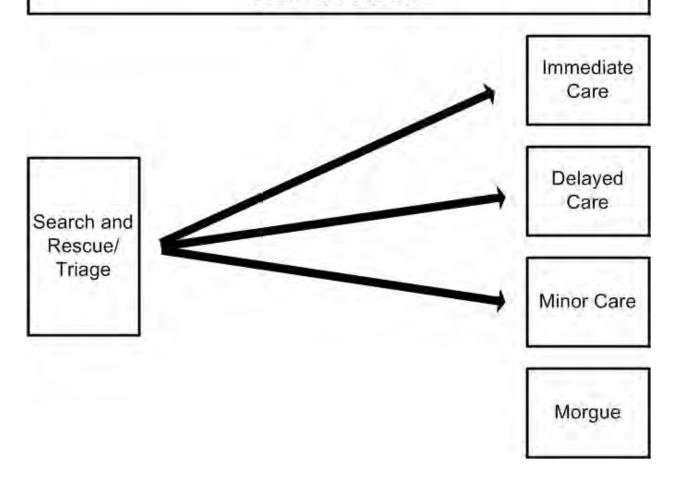
Disaster Medical Operations Organization showing the functions of disaster medical operations: Triage, Transport, Treatment, Morgue, and Supply

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#### INSTRUCTOR GUIDANCE CONTENT Establishing Medical Treatment Areas Tell participants that because time is critical when Establish a Medical Treatment Area CERTs activate, CERT medical operations personnel · Select site and set up will need to select a site and set up a treatment area as treatment area as soon as injured victims are soon as injured victims are confirmed. confirmed · When determining best location(s) for treatment Determining the best location(s) for the CERT area, consider: Safety of rescuers and treatment area should include the following overall · Most effective use of considerations: Safety for rescuers and victims **ॐ** FEMA Most effective use of resources, e.g., CERT **Display Slide 4-10** members themselves, time, medical supplies Safety for Rescuers and Victims Present some "what-if" situations to illustrate the Explain that as victims are located, rescued, and principles demonstrated by the triaged, they are moved to a location where they can graphic. be treated. The severity of the damage and the safety of the immediate environment determine where the initial CERT treatment area should be located. Remind participants that in all cases their individual safety is the number one priority. In structures with light damage, CERT members triage the victims as they are located. Further medical treatment is performed in a safe location inside the structure where victims are organized according to the extent of their injuries. In structures with moderate damage, CERT members also triage the victims as they are located; however, victims are sent to a medical treatment location that is a safe distance from the incident location. Victims are organized according to the extent of their injuries.

INSTRUCTOR GUIDANCE	CONTENT
PM, P. 4-7	Tell participants that whether the treatment area is set up inside or a safe distance from the structure, a morgue may need to be set up as a temporary holding area for victims who die at the treatment area.  Refer the participants to the <i>Flow of Patients</i> chart in the Participant Manual.
PM, P. 4-7	Flow of Patients

### Flow of Patients



# 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 CERT Beact Training Link 4 Disartine Medical Coperations - Part 2

INSTRUCTOR GUIDANCE

#### **CONTENT**

Explain that in addition to the severity of the damage to the structure where victims are found, there are two other important safety considerations:

- The treatment area itself must be free of hazards and debris.
- The site should be close to but uphill and upwind from the hazard zone.

#### **Display Slide 4-11**

# To help meet the challenge of limited resources, CERT may need to establish: Decentralized medical treatment location (more than one location). Centralized medical treatment location (one location). CERT Base Training LERT Base Training A-12

#### Most Effective Use of CERT Resources

Explain that, in addition to the safety of rescuers and victims, a second overall consideration for setting up treatment areas is how to make the best use of CERT resources, e.g., CERT members themselves, time, medical supplies, and equipment.

Tell participants that, to help meet the challenge of limited resources, particularly if initial treatment operations will continue for some time, CERT may need decentralized treatment locations and/or may establish one central medical treatment location, depending on the circumstances.

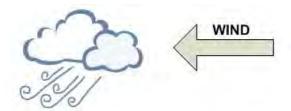
**CERT BASIC TRAINING: INSTRUCTOR GUIDE** 

#### **Display Slide 4-12**

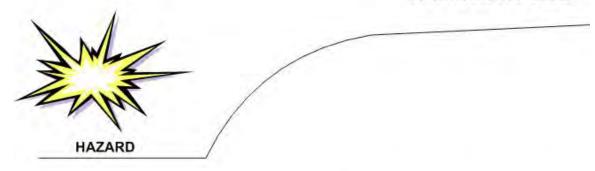
Instructor Guidance	CONTENT
	The CERT may need to include one or both in their medical operations plan:
	Decentralized Treatment Sites: In a widespread event with many injured, it is sometimes necessary to set up and maintain more than one medical treatment location, especially when a central treatment location would be a considerable distance from the initial treatment site.
	<ul> <li>A medical treatment location would be set up close to, but a safe distance from, each of the damage sites. Each of the treatment locations would include areas for Immediate, Delayed, and Minor victims and a morgue.</li> </ul>
	<ul> <li>Victims remain under treatment at the location until they can be transported to a location for professional medical care or to the CERT's main treatment area.</li> </ul>
	<ul> <li>Centralized Treatment Site: In an event with one or a few injured victims at each of a number of sites, the CERT may need to establish one central medical treatment location. A centralized location may need to be set up even when there are decentralized sites established.</li> </ul>
	<ul> <li>The location would include treatment areas for Immediate, Delayed, and Minor victims, and a morgue.</li> </ul>
	<ul> <li>Victims are moved from where they were rescued, triaged, and initially treated to the central location, and remain under treatment there until they can be transported to a location for professional medical treatment.</li> </ul>
	<ul> <li>A central medical treatment location allows for effective use of resources since a limited number of CERT medical operation personnel in one location can take care of a greater number of victims.</li> </ul>

INSTRUCTOR GUIDANCE	CONTENT
	<ul> <li>EMS or other medical professionals will generally be able to transport the injured more efficiently from one central location than from multiple decentralized locations.</li> </ul>
	Whether a treatment site is centralized or one of a number of decentralized sites, the location(s) selected should be:
	<ul> <li>Accessible by transportation vehicles (ambulances, trucks, helicopters, etc.)</li> </ul>
	Expandable
PM, P. 4-10	Refer the participants to the <i>Treatment Area Site</i> Selection diagram in the Participant Manual.





TREATMENT SITE



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

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# Treatment Area Layout • Four treatment areas: • "I" for Immediate care • "D" for Delayed care • "M" for Minor Injuries/walking wounded • "DEAD" for the morgue

INSTRUCTOR GUIDANCE

#### Treatment Area Layout

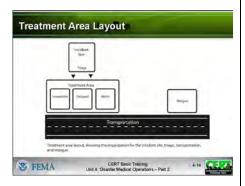
Introduce this section by stressing that the treatment area must be protected and clearly delineated. Signs should be used to identify the subdivisions of the area:

CONTENT

- "I" for Immediate care
- "D" for Delayed care
- "M" for Minor injuries/walking wounded
- "DEAD" for the morgue

#### **Display Slide 4-13**

If your program uses colored tarps to delineate medical treatment areas, explain the use of the tarps. Point out that a clearly marked treatment area will help in placing victims in the correct location.



Explain that the "I" and "D" areas should be relatively close to each other to allow:

- Verbal communication between workers in the treatment areas
- Shared access to medical supplies (which should be cached in a central location)
- Easy transfer of patients whose status has changed

Emphasize that victims who have been identified with minor injuries may choose to stay at the treatment area or leave. If they stay, they can assist CERT personnel. If they leave, it should be documented.

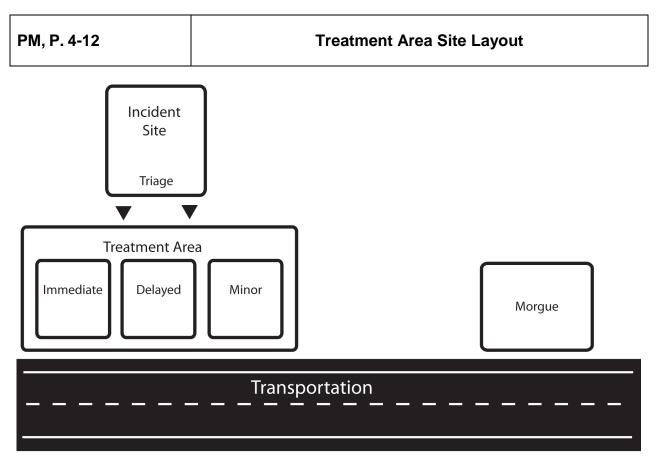
Explain that patients in the treatment area should be positioned in a head-to-toe configuration, with 2 to 3 feet between victims.

Stress to the participants that the morgue site should be secure, away from and not visible from the treatment area.

#### **Display Slide 4-14**

INSTRUCTOR GUIDANCE	CONTENT
	Finally, explain that this system will provide:
	Effective use of space
	<ul> <li>Effective use of available personnel. As a worker finishes one head-to-toe assessment, he or she turns around and finds the head of the next patient.</li> </ul>
PM, P. 4-12	Refer the participants to the <i>Treatment Area Layout</i> diagram in the Participant Manual.
	Note that the distance shown between the Incident Site/Triage and the Treatment Area will depend on whether or not the treatment location is site specific or more centralized in the CERT's service area.

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Treatment area layout, showing the organization for the incident site, triage, transportation, and morgue

INSTRUCTOR GUIDANCE	CONTENT
Treatment Area Organization  Assign treatment leader to each treatment area Document thoroughly Available identifying information Description (age, sex, body build, estimated height) Clothing Injuries Transfer location  CERT Bisse Trianing Little Total Medical Operations - Pea 2  The State of the Company	Introduce this section by telling the participants that the CERT must assign leaders to maintain control in each of the medical treatment areas. These leaders will:  Ensure orderly victim placement  Direct assistants to conduct head-to-toe assessments  Emphasize the need for thorough documentation of victims in the treatment area, including:  Available identifying information  Description (age, sex, body build, estimated height)  Clothing  Injuries  Treatment  Transfer location  Recommend strongly that the participants take part in practice exercises so that they can develop a good operational plan and practice rapid treatment area setup.  Does anyone have any questions about treatment area site selection or organization?  Tell the participants that next they will learn about head-to-toe assessments.  Explain that the last unit dealt with the procedures conducted in triage and that this unit will focus on treatment of triaged victims.

CERT BASIC TRAINING: INSTRUCTOR GUIDE

INSTRUCTOR GUIDANCE	CONTENT
	Conducting Head-to-Toe Assessments
	Introduce this topic by telling the group that the first steps that they will take when working with a victim will be to conduct triage and rapid treatment. After all victims in an area have been triaged and moved to a medical treatment area, CERT members will begin a thorough head-to-toe assessment of the victim's condition.
	Note that techniques for moving victims will be covered in Unit 5.
	Remind the group that, during triage, they looked for "the killers."
	Airway obstruction
	Excessive bleeding
	Signs of shock
	Stress that a head-to-toe assessment goes beyond the "killers" to try to gain more information to determine the nature of the victim's injury. The entire assessment must be performed before initiating treatment.

# Head-to-Toe Assessment Objectives of head-to-toe assessment: Determine extent of injuries Determine type of treatment needed Document injuries CERT Base Training Line 4 Disaster Medical Operations - Part 2

#### **Display Slide 4-16**

(Field Conditions) If you wish, suggest that, if the medical team runs out of non-latex exam gloves, they can use rubber gloves and clean them between treating victims in a bucket of bleach-and-water solution (1 part bleach to 10 parts water) to reduce the risk of cross contamination.

#### CONTENT

#### **Objectives of Head-to-Toe Assessments**

Explain that the objectives of a head-to-toe assessment are to:

- Determine, as clearly as possible, the extent of injuries
- Determine what type of treatment is needed
- Document injuries

Stress the importance of wearing safety equipment when conducting head-to-toe assessments.

CERT BASIC TRAINING: INSTRUCTOR GUIDE

# DCAP-BTLS Deformities Contusions Abrasions Punctures Burns Tenderness Lacerations Swelling FEMA Lint 4- Disaster Medical Operations - Peat 2 4-17

INSTRUCTOR GUIDANCE

#### **Display Slide 4-17**

#### CONTENT

#### What to Look for in Head-to-Toe Assessments

Tell the participants that the medical community uses the acronym DCAP-BTLS to remember what to look for when conducting a rapid assessment. DCAP-BTLS stands for the following:

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

Explain that, when conducting a head-to-toe assessment, CERT members should look for DCAP-BTLS in all parts of the body.

Remind the participants to provide IMMEDIATE treatment for life-threatening injuries.

Emphasize that the participants should pay careful attention to how people have been hurt (the mechanism of injury) because it provides insight to probable injuries suffered.

#### INSTRUCTOR GUIDANCE CONTENT Where and When to Conduct a Head-to-Toe Assessment Explain that a head-to-toe assessment can be done in Where and When place in a lightly damaged building. If the building is · Light damage: assess in place moderately damaged, the victim should be moved to a · Moderate damage: move to treatment safe zone or to the treatment area for the head-to-toe area first assessment · Assess and tag everyone . Both verbal and hands on FEMA CERT Block Training Unit 2: Disaster Medical Operations - Part 2: **Display Slide 4-18** Tell the students that you will discuss light, moderate, and heavy damage in Unit 5. How to Conduct a Head-to-Toe Assessment Tell the participants that, whenever possible, they should ask the person about any injuries, pain, bleeding, or other symptoms. Stress that, if the victim is conscious, CERT members should always ask permission to conduct the assessment. The victim has the right to refuse treatment. Emphasize the importance of talking with the conscious patient to reduce anxiety. Explain that head-to-toe assessments should be: Conducted on all victims, even those who seem all right Verbal (if the patient is able to speak) Hands-on. Do not be afraid to remove clothing to look.

CERT BASIC TRAINING: INSTRUCTOR GUIDE

# Conducting Head-to-Toe Assessment Pay careful attention Look, listen, and feel Check own hands for patient bleeding If you suspect a spinal injury in unconscious victims, treat accordingly Check PMS in all extremities Look for medical identification

#### **Display Slide 4-19**



#### **Display Slide 4-20**

#### CONTENT

Stress the need for conducting head-to-toe assessments systematically; doing so will make the procedure quicker and more accurate with each assessment. Remember to:

- Pay careful attention
- Look, listen, and feel for anything unusual
- Suspect a spinal injury in all unconscious victims and treat accordingly

Remind the group to check their own hands for patient bleeding as they perform the head-to-toe assessment.

Check body parts from the top to the bottom for continuity of bones and soft tissue injuries (DCAP-BTLS) in the following order:

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

Tell the participants that while conducting a head-to-toe assessment, CERT members should always check for:

- PMS (Pulse, Movement, Sensation) in all extremities
- Medical ID emblems on bracelet or on neck chain

# Closed-Head, Neck, Spinal Injuries Do no harm Minimize movement of head and neck Keep spine in straight line Stabilize head

#### **Display Slide 4-21**

#### CONTENT

#### Closed-Head, Neck, and Spinal Injuries

Introduce this section by explaining that when conducting head-to-toe assessments, rescuers may come across victims who have or may have suffered closed-head, neck, or spinal injuries.

Define a closed-head injury for the participants as a concussion-type injury, as opposed to a laceration, although lacerations can be an indication that the victim has suffered a closed-head injury.

Tell the group that the main objective when CERT members encounter suspected injuries to the head or spine is to do no harm. They should minimize movement of the head and spine while treating any other life-threatening conditions.

Tell the group to keep the spine in a straight line when doing the head-to-toe assessment.

Tell the participants that the signs of a closed-head, neck, or spinal injury most often include:

- Change in consciousness
- Inability to move one or more body parts
- Severe pain or pressure in head, neck, or back
- Tingling or numbness in extremities
- Difficulty breathing or seeing
- Heavy bleeding, bruising, or deformity of the head or spine
- Blood or fluid in the nose or ears
- Bruising behind the ear
- "Raccoon" eyes (bruising around eyes)

INSTRUCTOR GUIDANCE	CONTENT
PM, P. 4-18	"Uneven" pupils     Seizures     Nausea or vomiting     Victim found under collapsed building material or heavy debris  Stress that if the victim is exhibiting any of these signs, he or she should be treated as having a closed-head, neck, or spinal injury.  Refer the participants to the list of signs in the Participant Manual.

# PM, P. 4-18 Signs of a Closed-Head, Neck, or Spinal Injury

The signs of a closed-head, neck, or spinal injury most often include:

- Change in consciousness
- Inability to move one or more body parts
- Severe pain or pressure in the head, neck, or back
- Tingling or numbness in extremities
- Difficulty breathing or seeing
- Heavy bleeding, bruising, or deformity of the head or spine
- Blood or fluid in the nose or ears
- Bruising behind the ear
- "Raccoon" eyes (bruising around eyes)
- "Uneven" pupils
- Seizures
- Nausea or vomiting
- Victim found under collapsed building material or heavy debris

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INSTRUCTOR GUIDANCE	CONTENT
	Stabilizing the Head
	Explain that in a disaster environment, ideal equipment is rarely available. CERT members may need to be creative by:
Demonstrate "creative" in-line stabilization, using a table and towels.	<ul> <li>Looking for materials that can be used as a backboard — a door, desktop, building materials — anything that might be available</li> </ul>
Ask the participants to brainstorm about materials in the classroom or in their vehicles that they might use to	<ul> <li>Looking for items that can be used to stabilize the head on the board — towels, draperies, or clothing — by tucking them snugly on either side of the head to immobilize it</li> </ul>
stabilize a head on a board.	Moving victims should only be done for the safety of the rescuer and victim or when professional help will be delayed and a medical treatment area is established to care for multiple victims.
	Stress that triage and head-to-toe assessments in a disaster setting are not day-to-day operations. Explain that, if the rescuer or victim is in immediate danger, safety is more important than any potential spinal injury. Rescuer and victim safety is the priority.
	Explain that techniques for moving victims with suspected spinal injury will be covered in Unit 5.
	Introduce the head-to-toe assessment demonstration.
Ask the group if someone would volunteer to be the	Demonstrate Head-to-Toe Assessment
"victim" in your demonstration of a head-to-toe assessment. Another instructor could also be the "victim."	Demonstrate the head-to-toe assessment procedure, explaining each step to the class. Describe what the rescuer should look for at each step, and how and where the rescuer should place his or her hands in each step to best identify any injuries.

INSTRUCTOR GUIDANCE	CONTENT
***	Emphasize the importance of doing the procedure in the same order on every victim.
	Does anyone have any questions about the head-to-toe assessment?
	Tell the group that they will now practice the procedure.
	Exercise: Conducting Head-to-Toe Assessments
This exercise should be completed as many times as possible with different "victims."	<u>Purpose</u> : This exercise allows the participants to practice conducting head-to-toe assessments on each other.
	<u>Instructions</u> : Follow the steps below to facilitate this exercise:
	Assign the group to work in pairs. Attempt to pair each participant with someone with whom he or she is relatively unfamiliar. This helps to simulate a head-to-toe assessment in a disaster environment.
	Ask the person on the right to be the victim and the person on the left to be the rescuer.
Observe each pair and correct improper techniques.	Ask the victims to lie on the floor on their backs and close their eyes.
	<ol> <li>Ask the rescuer to conduct a head-to-toe     assessment on the victim, following the procedure     demonstrated earlier. Have the rescuer repeat the     head-to-toe assessment.</li> </ol>
	5. After the rescuer has made at least two observed head-to-toe assessments, ask the victim and rescuer to change roles.

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INSTRUCTOR GUIDANCE	CONTENT
	Allow each new rescuer at least two observed head-to-toe assessments.
	7. After all of the participants have had the opportunity to be the rescuer, discuss any problems or incorrect techniques that may have been demonstrated initially. Explain how to avoid the problems during emergencies.
?	Does anyone have any additional questions about conducting head-to-toe assessments?
	Tell the group that the remainder of this unit will deal with the treatment of injuries.
	Treating Burns
Treating Burns	Remind the participants that, as always, the first step in treating burns is to conduct a thorough sizeup.
Conduct thorough sizeup     Treat with first aid     Cool burned area     Cover with sterile cloth to reduce risk of	A few examples of burn-related sizeup questions to ask are:
infection	What caused the burn?
	Is the danger still present?
FEMA Lief 4 Disaster Medical Operations - Part 2	When did the burning cease?
Display Slide 4-22	
	Tell the group that the objectives of first aid treatment for burns are to:
	Cool the burned area
	<ul> <li>Cover with a sterile cloth to reduce the risk of infection (by keeping fluids in and germs out)</li> </ul>

#### INSTRUCTOR GUIDANCE CONTENT Explain that burns may be caused by heat, chemicals, **Burn Severity** electrical current, and radiation. The severity of a burn depends on the: · Factors that affect burn severity: . Temperature of burning agent · Period of time victim exposed Temperature of the burning agent · Area of body affected · Size of area burned Period of time that the victim was exposed . Depth of burn Area of the body that was affected Size of the area burned **₹** FEMA CERT Basic Training Unit 4: Disaster Medical Operations – Part 2 Depth of the burn **Display Slide 4-23** Tell the group to exercise extreme caution around victims who appear to have burns when there is no obvious cause for the burns. These burns may indicate chemical burns, which present a risk to the rescuer. **Burn Classifications** Explain that the skin has three layers: Burn Classifications The epidermis, or outer layer of skin, contains nerve · Superficial: epidermis endings and is penetrated by hairs. · Partial Thickness: dermis and epidermis • Full Thickness: subcutaneous layer and all layers above The dermis, or middle layer of skin, contains blood vessels, oil glands, hair follicles, and sweat glands. The subcutaneous layer, or innermost layer, contains blood vessels and overlies the muscles. **☞** FEMA CERT Basic Training Unit 4: Disaster Medical Operations - Part 2 Display Slide 4-24 Depending on the severity, burns may affect all three layers of skin. Refer the participants to the chart titled *Burn* PM, P. 4-21 Classification, in the Participant Manual. Tell the group that burns are classified as superficial, partial

severity.

thickness, and full thickness depending on their

INSTRUCTOR GUIDANCE	CONTENT
PM, P. 4-22	Refer the group to the <i>List of Guidelines for Treating Burns</i> in the Participant Manual. Review the guidelines with the group.

PM, P. 4-21	Burn Classification
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Classification	Skin Layers Affected	Signs
Superficial	<ul><li>Epidermis</li></ul>	<ul><li>Reddened, dry skin</li><li>Pain</li><li>Swelling (possible)</li></ul>
Partial Thickness	<ul><li>Epidermis</li><li>Partial destruction of dermis</li></ul>	<ul> <li>Reddened, blistered skin</li> <li>Wet appearance</li> <li>Pain</li> <li>Swelling (possible)</li> </ul>
Full Thickness	<ul> <li>Complete destruction of epidermis and dermis</li> <li>Possible subcutaneous damage (destroys all layers of skin and some or all underlying structures)</li> </ul>	<ul> <li>Whitened, leathery, or charred (brown or black)</li> <li>Painful or relatively painless</li> </ul>

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PM, P. 22
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- Remove the victim from the burning source. Put out any flames and remove smoldering clothing unless it is stuck to the skin.
- Cool skin or clothing, if they are still hot, by immersing them in cool water for not more than 1 minute or covering with clean compresses that have been soaked in cool water and wrung out. Cooling sources include water from the bathroom or kitchen; garden hose; and soaked towels, sheets, or other cloths. Treat all victims of full thickness burns for shock.

Infants, young children, and older persons, and persons with severe burns, are more susceptible to hypothermia. Therefore, rescuers should use caution when applying cool dressings on such persons. A rule of thumb is do not cool more than 15% of the body surface area (the size of one arm) at once, to reduce the chances of hypothermia.

- Cover loosely with dry, sterile dressings to keep air out, reduce pain, and prevent infection.
- Wrap fingers and toes loosely and individually when treating severe burns to the hands and feet.
- Loosen clothing near the affected area. Remove jewelry if necessary, taking care to document what was removed, when, and to whom it was given.
- Elevate burned extremities higher than the heart.
- Do not use ice. Ice causes vessel constriction.
- Do <u>not</u> apply antiseptics, ointments, or other remedies.
- Do <u>not</u> remove shreds of tissue, break blisters, or remove adhered particles of clothing. (Cut burned-in clothing around the burn.)

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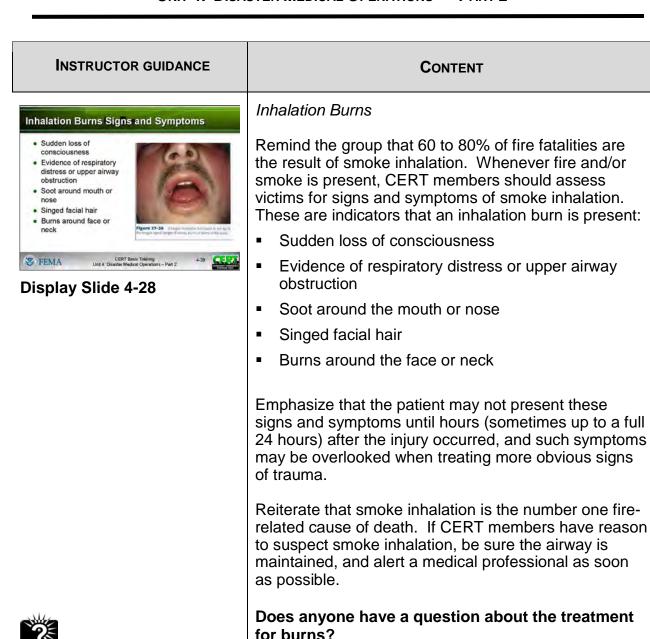
#### **INSTRUCTOR GUIDANCE** CONTENT DOs and DON'Ts of Burn Treatment When treating a burn victim, **DO**: Burn Treatment: DOs Cool skin or clothing if they are still hot. . When treating a burn victim, DO: · Cool skin or clothing if they are still hot Cover loosely with dry, sterile dressings to keep air · Cover burn loosely with dry, sterile dressings out, reduce pain, and prevent infection. to keep air out, reduce pain, and prevent infection Elevate burned extremities Elevate burned extremities higher than the heart. ₹ FEMA CERT Glass: Training Unit # Disaster Medical Operations - Part 2 **Display Slide 4-25** When treating a burn victim: **Burn Treatment: DON'Ts Do NOT** use ice. Ice causes vessel constriction. When treating a burn victim, DO NOT: Use ice **Do NOT** apply antiseptics, ointments, or other · Apply antiseptics, ointments, or other remedies. remedies Remove shreds of tissue, break blisters, or remove adhered particles of clothing **Do NOT** remove shreds of tissue, break blisters, or remove adhered particles of clothing. (Cut burnedin clothing around the burn.) ₹ FEMA CERT Basic Training Unit 4 Disaster Medical Operations - Part 2 **Display Slide 4-26** Debunk the myth about using any ointment or salve on a burn. Salve will hold heat in the burn area and later have to be scrubbed off. Caution the group that infants, young children, and older persons, and persons with severe burns, are more susceptible to hypothermia. Therefore, rescuers should use caution when applying cool dressings on such persons. A rule of thumb is do not cool more than

once, to prevent hypothermia.

15% of the body surface area (the size of one arm) at

INSTRUCTOR GUIDANCE	CONTENT
Treatment for Chemical Burns  Remove cause of burn + affected clothing/jewelry  If irritant is dry, gently brush away as much as possible  Always brush away from eyes, victim, and you  Flush with lots of cool running water  Apply cool, wet compress to relieve pain  Cover wound loosely with dry, sterile or clean dressing  Treat for shock if appropriate  CERT Base Training  Treat Solide 4-27  Display Slide 4-27	Guidelines for Treating Chemical and Inhalation Burns
	State that chemical and inhalation burns vary from traditional heat-related burns in their origin and treatment. Keep in mind that suspicion of either chemical or inhalation burns elevates the victim's status to "I."
	Chemical Burns
	Explain that unlike more traditional burns, chemical burns do not result from extreme heat, and therefore treatment differs greatly.
	Tell the participants that such burns are not always obvious. They should consider chemical burns as a possibility if the victim's skin is burning and there is no sign of a fire. If chemical burns are suspected:
	<ol> <li>Protect yourself from contact with the substance.         Use your protective gear — especially goggles,         mask, and gloves.</li> </ol>
	Ensure that any affected clothing or jewelry is removed.
	If the irritant is dry, gently brush away as much as possible. Always brush away from the eyes and away from the victim and you.
	4. Use lots of cool running water to flush the chemical from the skin for 15 minutes until emergency help arrives. The running water will dilute the chemical fast enough to prevent the injury from getting worse.
	5. Apply cool, wet compress to relieve pain.
	6. Cover the wound very loosely with a dry, sterile or clean cloth so that the cloth will not stick to the wound.
	7. Treat for shock if appropriate.

CERT BASIC TRAINING: INSTRUCTOR GUIDE



INSTRUCTOR GUIDANCE	CONTENT
	Explain that in the next section, the participants will learn to treat other injuries that are common after disasters:  Lacerations  Amputations and impaled objects  Fractures, dislocations, sprains, and strains  Nasal injuries  Cold-related injuries  Heat-related injuries  Insect bites/stings

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# Control bleeding Clean wound Apply dressing and bandage CERT Basic Training Linit 4-Disaster Medical Operations - Part 2 4-29 Apply Services Apply 14-29 CERT Basic Training Linit 4-Disaster Medical Operations - Part 2 4-29 CERT Basic Training Linit 4-Disaster Medical Operations - Part 2

**INSTRUCTOR GUIDANCE** 

#### **Display Slide 4-29**



#### **Display Slide 4-30**

Remind the participants that to sterilize water using non-perfumed bleach, they should use the following ratios:

- 8 drops of bleach per gallon of water
- 16 drops if the water is cloudy

Allow the mixture to sit for 30 minutes before use.

#### Wound Care

This section will focus on cleaning and bandaging to control infection.

CONTENT

Tell the group that the main treatment for wounds includes:

- Control bleeding
- Clean the wound
- Apply dressing and bandage

Add the reminder that treatment for controlling bleeding was covered during the last session. Explain that the focus of this section is on cleaning and bandaging, which will help to prevent secondary infection.

#### Cleaning and Bandaging Wounds

Explain that wounds should be cleaned by irrigating with clean, room temperature water.

NEVER use hydrogen peroxide to irrigate the wound.

INSTRUCTOR GUIDANCE	CONTENT
Demonstrate the procedure for cleaning wounds using the mannequin or another instructor.	Emphasize that the participants should <u>not</u> scrub the wound. Mention that a bulb syringe is useful for irrigating wounds. In a disaster, a turkey baster may also be useful.
	Tell the group that, when the wound is thoroughly cleaned, they will need to apply a dressing and bandage to help keep it clean and control bleeding.
	Explain the difference between a dressing and a bandage:
	<ul> <li>A dressing is applied directly to the wound.</li> <li>Whenever possible, a dressing should be sterile.</li> </ul>
	<ul> <li>A bandage holds the dressing in place.</li> </ul>
Demonstrate the correct procedure for dressing and bandaging a wound.	Point out that, if a wound is still bleeding, the bandage should place enough pressure on the wound to help control bleeding without interfering with circulation.
Demonstrate some techniques for tying a bandage if no tape is available.	
	Rules of Dressing
Rules of Dressing	Explain that the participants should follow these rules:
If active bleeding:     Redress OVER existing dressing     If no active bleeding:     Remove bandage and dressing to flush wound	<ol> <li>If there is active bleeding (i.e., if the dressing is soaked with blood), redress <u>over</u> the existing dressing and maintain pressure and elevation to control bleeding.</li> </ol>
Check for infection every 4-6 hours  CEST See: Training	<ol><li>In the absence of active bleeding, remove the dressings, flush the wound, and then check for signs of infection at least every 4 to 6 hours.</li></ol>
SFEMA Chief a Disarder Medical Operations - Pain 2  Display Slide 4-31	
-	

# Signs of Infection • Signs of possible infection • Swelling around wound site • Discoloration • Discharge from wound • Red striations from wound site Lint 4 Deserter Medical Operations – Pert 2

### **Display Slide 4-32**

# Control bleeding; treat shock If amputated body part is found: Save tissue parts, wrapped in clean material and placed in plastic bag Keep tissue parts cool, but NOT directly on ice Keep severed part with victim CERT Black Tremps List 4 Dearth Medical Operations - Pag 2 430

Display Slide 4-33

### CONTENT

Signs of possible infection include:

- Swelling around the wound site
- Discoloration
- Discharge from the wound
- Red striations from the wound site

If necessary and based on reassessment and signs of infection, change the treatment priority (e.g., from Delayed to Immediate).

### **Amputations**

Emphasize that the main treatments for an amputation (the traumatic severing of a limb or other body part) are to:

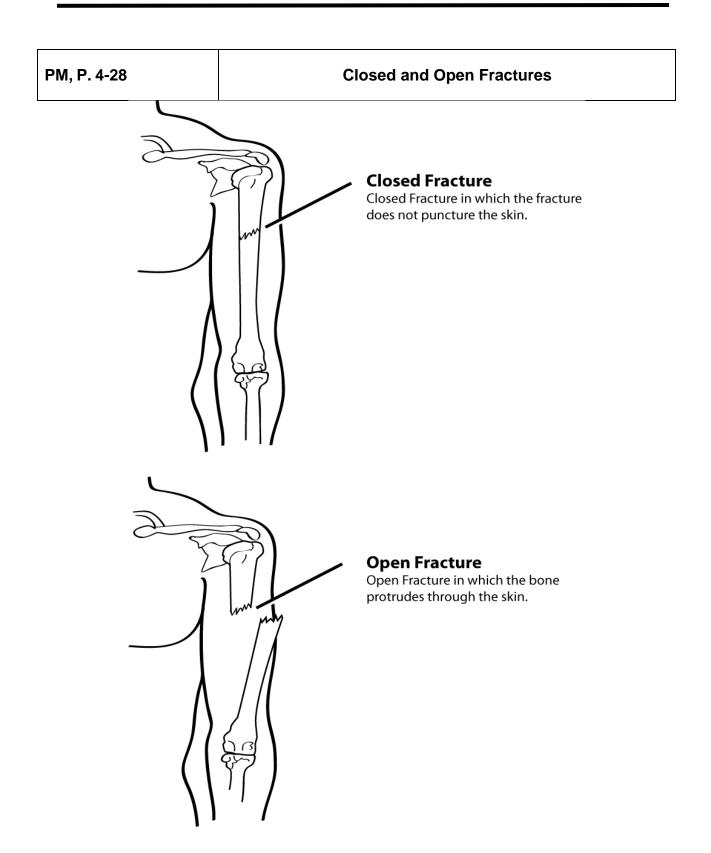
- Control bleeding
- Treat shock

Stress that when the severed body part can be located, CERT members should:

- Save tissue parts, wrapped in clean material and placed in a plastic bag, if available. Label them with the date, time, and victim's name.
- Keep the tissue parts cool, but NOT in direct contact with ice
- Keep the severed part with the victim

INSTRUCTOR GUIDANCE	CONTENT			
Impaled Objects  • When foreign object is impaled in patient's body:  • Immobilize affected body part  • Do not attempt to move or remove  • Try to control bleeding at entrance wound  • Clean and dress wound, making sure to stabilize impaled object   ***CERT Base Thating**  CERT Ba	Impaled Objects  Tell the group that they may also encounter some victims who have foreign objects lodged in their bodies — usually as the result of flying debris during the disaster.  Explain that, when a foreign object is impaled in a patient's body, the participants should:  Immobilize the affected body part  Not attempt to move or remove the object, unless it is obstructing the airway  Try to control bleeding at the entrance wound without placing undue pressure on the foreign object  Clean and dress the wound making sure to stabilize the impaled object. Wrap bulky dressings around the object to keep it from moving.  Does anyone have questions about wound care?  Tell the participants that the next topic will address treatment for fractures, dislocations, sprains, and strains.			

INSTRUCTOR GUIDANCE	CONTENT		
	Treating Fractures, Dislocations, Sprains, and Strains		
Fractures, Dislocations, Sprains, Strains  Immobilize injury and joints immediately above and below injury site  If uncertain of injury type, treat as fracture	Tell the group that the objective when treating a suspected fracture, sprain, or strain is to immobilize the injury and the joints immediately above and below the injury site.		
CERT Base Training Leas a Desirtor Medical Operations - Part 2 4-36	Point out that because it is difficult to distinguish among fractures, sprains, or strains, if uncertain of the type of injury, CERT members should treat the injury as a fracture.		
Display Slide 4-35			
	Fractures		
PM, P. 4-28	Introduce this section by explaining that a fracture is a complete break, a chip, or a crack in a bone. There are several types of fractures (refer the participants to the illustrations titled <i>Closed and Open Fractures</i> in the Participant Manual):		
Types of Fractures Control of Con	<ul> <li>A <u>closed fracture</u> is a broken bone with no associated wound. First aid treatment for closed fractures may require only splinting.</li> </ul>		
FEMA Unit 4 Constitute Petr 2  436	An <u>open fracture</u> is a broken bone with some kind of wound that allows contaminants to enter into or around the fracture site.		
Display Slide 4-36			

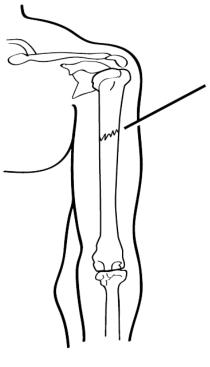


INSTRUCTOR GUIDANCE	CONTENT			
	Treating an Open Fracture			
	Explain that open fractures are more dangerous than closed fractures because they pose a significant risk of severe bleeding and infection. Therefore, they are a higher priority and need to be checked more frequently.			
Treating Open Fractures	Stress that when treating an open fracture:			
Do not draw exposed bone ends back into tissue  Do not irrigate wound  Cover wound with sterile dressing	<ul> <li>Do not draw the exposed bone ends back into the tissue.</li> </ul>			
Splint fracture without disturbing wound     Place moist dressing over bone end	Do <u>not</u> irrigate the wound.			
S FEMA CLERT Basic Yaming Line 4 Chaister Medical Convention - Pail 2  Line 4 Chaister Medical Convention - Pail 2  4-37  Line 4 Chaister Medical Convention - Pail 2				
	Continue by telling the group that they should:			
	Cover the wound with a sterile dressing			
	Splint the fracture without disturbing the wound			
	<ul> <li>Place a moist 4 by 4-inch dressing over the bone end to keep it from drying out</li> </ul>			
	Tell the group that splinting procedures will be covered later in this unit.			
PM, P. 4-30	Refer the participants to the illustrations titled Displaced and Nondisplaced Fractures in the Participant Manual.			
Displaced and Nondisplaced Fractures	Explain that if the limb is angled, then there is a displaced fracture. Explain that displaced fractures may be described by the degree of displacement of the bone fragments.			
SERT Basic Training  Lint 4 Disaster Medical Operations - Part 2  4:38	Explain that <u>nondisplaced fractures</u> are difficult to identify, with the main signs being pain and swelling. Stress that the participants should treat a suspected fracture as a fracture until professional treatment is available.			
Display Slide 4-38				

CERT BASIC TRAINING: INSTRUCTOR GUIDE JANUARY 2011 PAGE 4-47

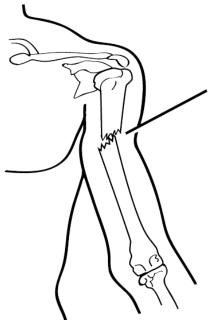
### PM, P. 4-30

### **Displaced and Nondisplaced Fractures**



### **Nondisplaced Fracture**

Nondisplaced Fracture in which the fractured bone remains aligned.



### **Displaced Fracture**

Displaced Fracture in which the fractured bone is no longer aligned.

INSTRUCTOR GUIDANCE	CONTENT		
	Dislocations		
Dislocations  Dislocation is injury to ligaments around joint  So severe that it permits separation of bone from its normal position in joint  Treatment Immobilize; do NOT relocate Check PMS before and after splinting/immobilization  CERT Exact Telegraph (Use a Charles Telegraph (Use a Charles Medica Charles Telegraph)  Display Slide 4-39	Introduce this section by telling the group that dislocations are another common injury in emergencies.  Explain that a dislocation is an injury to the ligaments around a joint that is so severe that it permits a separation of the bone from its normal position in a joint.  Tell the participants that the signs of a dislocation are similar to those of a fracture and that a suspected dislocation should be treated like a fracture.  Emphasize that, if dislocation is suspected, be sure to assess PMS (Pulse, Movement, Sensation) in the affected limb before and after splinting/immobilization. If PMS is compromised, the patient's treatment priority is elevated to "I."  Stress that the participants should not try to relocate a suspected dislocation. They should immobilize the joint until professional medical help is available.  Sprains and Strains  Introduce this section by explaining that a sprain involves a stretching or tearing of ligaments at a joint and is usually caused by stretching or extending the joint beyond its normal limits.  Point out that a sprain is considered a partial dislocation, although the bone either remains in place or is able to fall back into place after the injury.		
	,		

### INSTRUCTOR GUIDANCE CONTENT Tell the group that the most common signs of a sprain Signs of Sprain are: Tenderness at site Tenderness at the site of the injury Swelling and bruising Restricted use Swelling and/or bruising or loss of use Restricted use or loss of use CERT Basic Training Unit 4 Disaster Medical Operations – Part 2 **₹** FEMA **Display Slide 4-40** Remind the group that the signs of a sprain are similar to those of a nondisplaced fracture. Therefore, they should not try to treat the injury other than by immobilization and elevation. Tell the group that a strain involves a stretching and/or tearing of muscles or tendons. Strains most often involve the muscles in the neck, back, thigh, or calf. Point out that in some cases, strains may be difficult to distinguish from sprains or fractures. Whether an injury is a strain, sprain, or fracture, treat the injury as if it is a fracture. Does anyone have any questions about fractures, dislocations, sprains, or strains?

# INSTRUCTOR GUIDANCE CONTENT



### **Display Slide 4-41**

Remind the participants to be creative when looking for splinting materials. For example, consider using the victim's t-shirt as a makeshift sling. Remove the shirt and cut the lower portion of the shirt from armpit to armpit. Use the remaining band of fabric as a sling by placing one end under the injured arm and the other end over the victim's head.

### **Splinting**

Introduce this topic by explaining that splinting is the most common procedure for immobilizing an injury.

Point out that cardboard is the material typically used for makeshift splints but a variety of materials can be used, including:

- Soft materials. Towels, blankets, or pillows, tied with bandaging materials or soft cloths
- Rigid materials. A board, metal strip, folded magazine or newspaper, or other rigid item

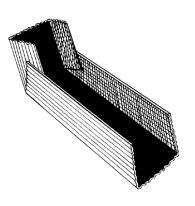
Add that <u>anatomical splints</u> may also be created by securing a fractured bone to an adjacent unfractured bone. Anatomical splints are usually reserved for fingers and toes, but, in an emergency, legs may also be splinted together.

Soft materials should be used to fill the gap between the splinting material and the body part.

INSTRUCTOR GUIDANCE	CONTENT			
Demonstrate the correct procedures for splinting the	During the demonstration, be sure to point out the guidelines for splinting:			
upper and lower leg.  Splinting Guidelines	<ol> <li>Support the injured area above and below the site of the injury, including the joints.</li> </ol>			
Support injured area above and below injury     Assess PMS in extremity	Assess PMS in the extremity before initiating the splint.			
<ol> <li>Splint injury in position that you find it</li> <li>Don't try to realign bones or joints</li> <li>Fill voids to stabilize and immobilize</li> </ol>	3. If possible, splint the injury in the position that you find it.			
<ol> <li>Immobilize above and below injury</li> <li>After splinting, reassess PMS</li> </ol>	4. Don't try to realign bones or joints.			
CERT Glace Training Use 2 Duration Medical Operations - Part 2	5. Fill the voids to further stabilize and immobilize the injury.			
Display Slide 4-42	6. Immobilize above and below the injury.			
	7. After splinting, reassess PMS and evaluate against initial PMS assessment.			
	Tell the participants that, with this type of injury, there will be swelling. They should remove restrictive clothing, shoes, and jewelry when necessary to prevent these items from acting as unintended tourniquets.			
PM, PP. 4-33 AND 4-34	Refer the participants to the pages titled <i>Splint Illustrations</i> in the Participant Manual.			

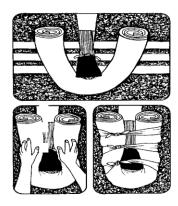
PM, PP. 4-33 and 4-34

### **Splint Illustrations**



### **Cardboard Splint**

Cardboard Splint in which the edges of the cardboard are turned up to form a "mold" in which the injured limb can rest.



### **Splinting Using a Towel**

Splinting using a towel, in which the towel is rolled up and wrapped around the limb, then tied in place.

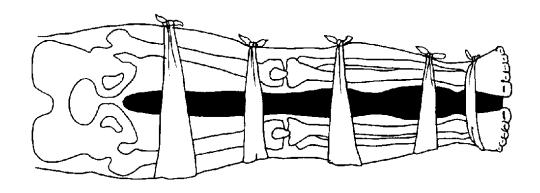


**Pillow splint** 

Pillow splint, in which the pillow is wrapped around the limb and tied.

**PM, PP. 4-33** and **4-34** 

### **Splint Illustrations**



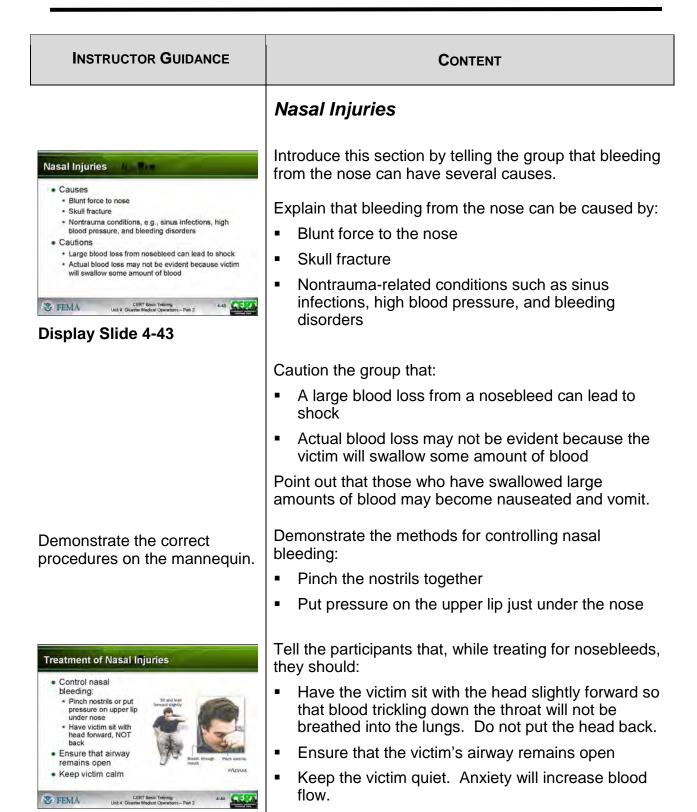
### **Anatomical Splint**

Anatomical splint in which the injured leg is tied at intervals to the non-injured leg, using a blanket as padding between the legs.

PAGE 4-54

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INSTRUCTOR GUIDANCE	CONTENT		
	Exercise: Splinting		
	<u>Purpose</u> : This exercise allows the participants to practice on each other the procedures for splinting. Use cardboard, duct tape, other splinting material, and gauze.		
Observe each group and correct improper technique. Be sure to check for bandages that are too tight or too loose.	Instructions: Follow the steps below to facilitate this exercise:		
	Assign the group to work in pairs. Ask the participants to switch partners from the previous exercise.		
	Ask one person to be the victim and one person to be the rescuer.		
	3. Ask the victims to lie on the floor on their backs or sit in a chair.		
	4. Ask the rescuer to apply a splint on the victim's upper arm using the procedure demonstrated earlier. Then, ask the rescuers to apply a splint to the victim's lower leg.		
	5. After the rescuer has made several observed attempts at splinting, ask the victim and the rescuer to change roles.		
	Allow each new rescuer at least one observed attempt to apply the splint.		
	7. After all of the participants have had the opportunity to be the rescuer, discuss any problems or incorrect techniques that were observed. Explain how to avoid the problems in emergency situations.		
<b>?</b>	Does anyone have any questions about correct procedures for splinting?		
	Tell the group that the next section will address treatment for nasal injuries.		



Display Slide 4-44

### INSTRUCTOR GUIDANCE CONTENT Does anyone have any questions about any of the injuries covered to this point in the unit? Tell the group that the next section will address treatment for cold-related injuries. Treating Cold-Related Injuries Introduce this topic by explaining that cold-related Cold-Related Injuries injuries include: Hypothermia : Hypothermia, which is a condition that occurs when · Occurs when body's temperature drops below normal the body's temperature drops below normal · Frostbite: · Occurs when extreme cold shuts down blood Frostbite, which occurs when extreme cold shuts flow to extremities, causing tissue death down blood flow to extremities, causing tissue death CERT Basic Training Unit 3 Disaster Medical Operations – Part 2 ₩ FEMA Display Slide 4-45 Hypothermia Tell the group that hypothermia may be caused by exposure to cold air or water or by inadequate food combined with inadequate clothing and/or heat, especially in older people. Point out that the primary signs and symptoms of Symptoms of Hypothermia hypothermia are: . Body temperature of A body temperature of 95° F (37° C) or lower 95° F or lower Redness or blueness of skin Redness or blueness of the skin Numbness and shivering Numbness accompanied by shivering · Slurred speech · Unpredictable behavior Listlessness Display Slide 4-46

	CONTENT			
Add that, in later stages, hypoth accompanied by:	nermia will be			
<ul> <li>Slurred speech</li> </ul>				
<ul> <li>Unpredictable behavior</li> </ul>				
<ul> <li>Listlessness</li> </ul>				
only a few minutes, participants				
Place unconscious victim in recovery position     Place victim in warm bath      Wrap the victim in a blanket cover the head and neck.	or sleeping bag and			
■ Protect the victim against the	e weather.			
Display Slide 4-47  Provide warm, sweet drinks victims. Do not offer alcoho				
<ul> <li>Do not attempt to use massa body parts.</li> </ul>	age to warm affected			
Place an unconscious victim position:	in the recovery			
Place the victim's arm the right angle against the great facing up.				
2. Move the victim's other a chest and neck, with the hand resting against his	back of the victim's			
3. Grab a hold of the knee for pull it up until the knee is on the floor.	•			
4. Pull the knee toward you body while holding the vi against his or her cheek.	ctim's hand in place			
5. Position the victim's leg a the floor so that the victin side.				

INSTRUCTOR GUIDANCE	CONTENT				
	If the victim is conscious, place him or her in a warm bath.				
	Tell the participants not to allow the victim to walk around even when he or she appears to be fully recovered. If the victim must be moved outdoors, they should cover the victim's head and face.				
	Frostbite				
	Explain to the group that a person's blood vessels constrict in cold weather in an effort to preserve body heat. In extreme cold, the body will further constrict blood vessels in the extremities in an effort to shunt blood toward the core organs (heart, lungs, intestines, etc.). The combination of inadequate circulation and extreme temperatures will cause tissue in these extremities to freeze, and, in some cases, tissue death will result. Frostbite is most common in the hands, nose, ears, and feet.				
Symptoms of Frostbite	Tell the participants that there are several key signs and symptoms of frostbite:				
Skin discoloration     Burning or tingling sensation	Skin discoloration (red, white, purple, black)				
Partial or complete numbness	<ul> <li>Burning or tingling sensation, at times not localized to the injury site</li> </ul>				
FIGURE 29-8 downs and inlater formations with the second state of	<ul> <li>Partial or complete numbness</li> </ul>				
See FEMA CERT Basic Training Line 4 - On the CERT Basic Training Line 4 - On safety Medical Operations - Part 2					
Display Slide 4-48					

# INSTRUCTOR GUIDANCE Frostbite Treatment Immerse injured area in warm (NOT hot) water Warm slowly! Do NOT allow part to re-freeze Do NOT attempt to use massage Wrap affected body parts in dry, sterile dressing

### **Display Slide 4-49**



### CONTENT

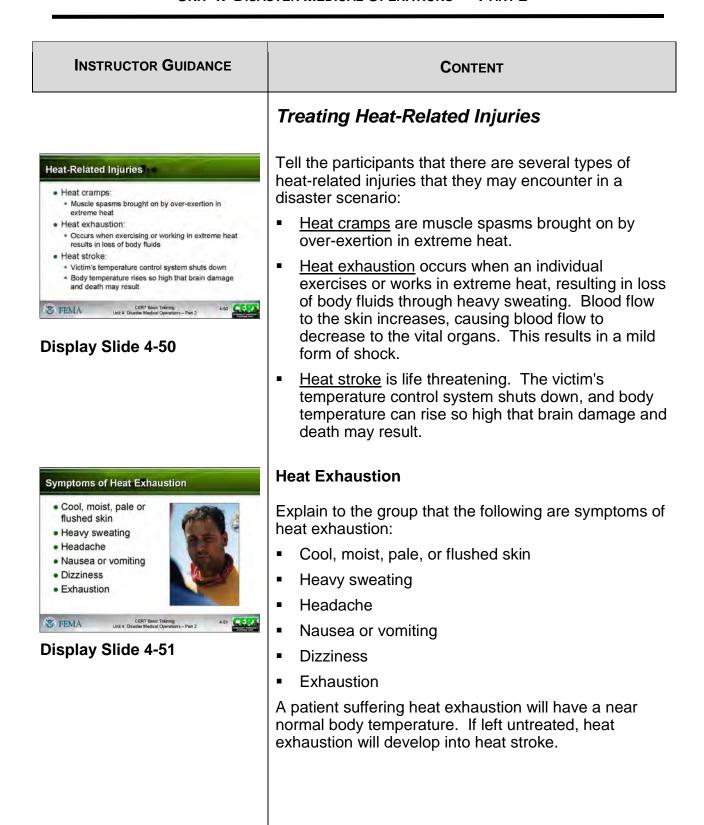
Explain to the participants that a patient suffering from frostbite must be warmed slowly! Thawing the frozen extremity too rapidly can cause chilled blood to flow to the heart, shocking and potentially stopping it.

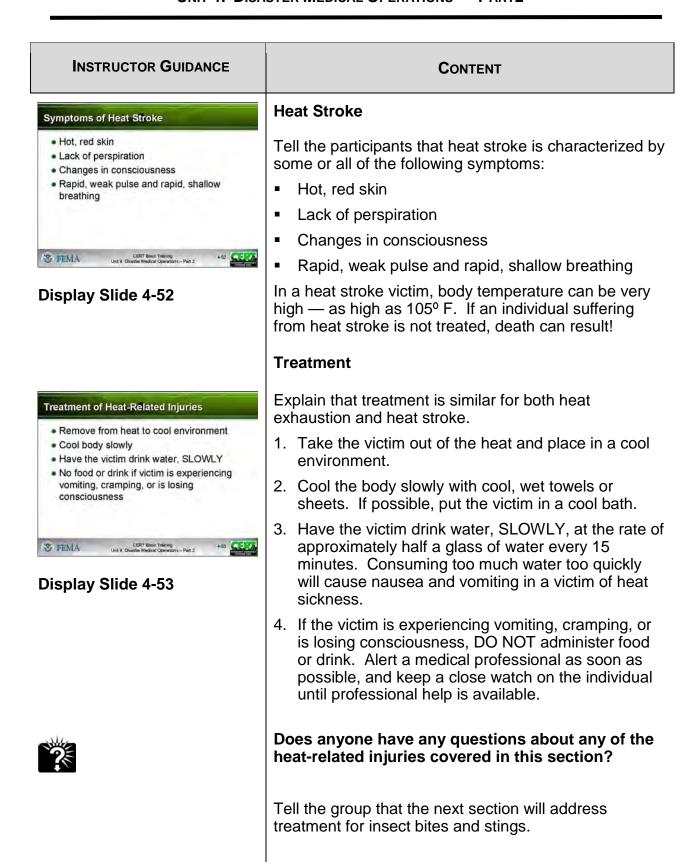
- Immerse injured area in warm (NOT hot) water, approximately 107.6° F.
- Do NOT allow the body part to re-freeze as this will exacerbate the injury.
- Do NOT attempt to use massage to warm affected body parts.

Tell the participants to wrap affected body parts in dry, sterile dressing. Again, it is vital this task be completed carefully. Frostbite results in the formation of ice crystals in the tissue; rubbing could potentially cause a great deal of damage!

### Does anyone have any questions about coldrelated injuries?

Explain that heat-related injuries will be discussed in the next section.





Instructor Guidance	CONTENT		
	Bites and Stings		
	Remind the participants that in a disaster environment, everything is shaken from normalcy, including insects and animals. In this time of chaos, insect bites and stings may be more common than is typical as these creatures, like people, are under additional stress.		
Discuss insects and/or animals that pose a particular threat to your locality.	Tell the group that, when conducting a head-to-toe assessment, they should look for signs of insect bites and stings. The specific symptoms vary depending on the type of creature, but, generally, bites and stings will be accompanied by redness and itching, tingling or burning at the site of the injury, and often a welt on the skin at the site.		
Treatment for Bites/Stings	Explain that, in general, treatment for insect bites and stings follows these steps:		
If bite or sting is suspected, and situation is non-emergency: Remove stinger if still present by scraping edge of credit card or other stiff, straightedged object across stinger Wash site thoroughly with soap and water Place ice on site for 10 minutes on and 10 minutes off	1. Remove the stinger if still present by scraping the edge of a credit card or other stiff, straight-edged object across the stinger. Do not use tweezers; these may squeeze the venom sac and increase the amount of venom released.		
S FEMA CHIEF Country Medical Operations - Piert 2	2. Wash the site thoroughly with soap and water.		
Display Slide 4-54	3. Place ice (wrapped in a washcloth) on the site of the sting for 10 minutes and then off for 10 minutes. Repeat this process.		
	Tell the participants that they may help the victim take his or her own allergy medicine (Benadryl, etc.), but that they may NOT dispense medications.		

# Anaphylaxis Check airway and breathing Calm individual Remove constrictive clothing and jewelry Find and help administer victim's Epi-pen Watch for signs of shock and treat appropriately

INSTRUCTOR GUIDANCE

### **Display Slide 4-55**

Demonstrate how to administer an Epi-pen. If possible, pass one around the room to familiarize the group with it.

Emphasize that CERT members do not administer medications, including overthe-counter products such as aspirin. CERT members can assist victims in administering their own medications (e.g., Epi-pen).



### CONTENT

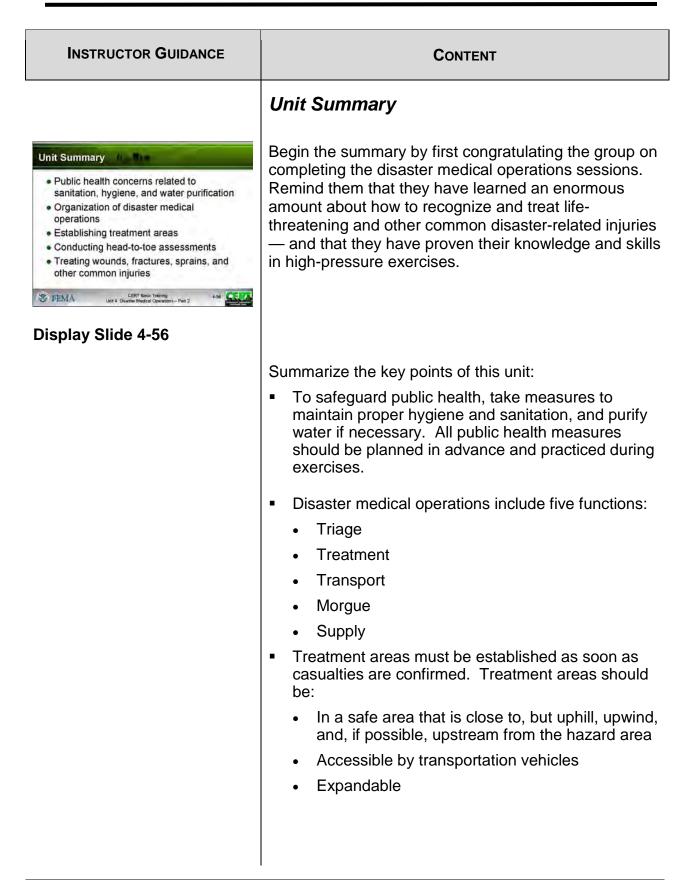
### **Bites and Stings and Allergic Reactions**

Tell the participants that the greatest concern with any insect bite or sting is a severe allergic reaction, or anaphylaxis. Anaphylaxis occurs when an allergic reaction becomes so severe that the airway is compromised. If you suspect anaphylaxis:

- 1. Check airway and breathing.
- 2. Calm the individual.
- 3. Remove constrictive clothing and jewelry as the body often swells in response to the allergen.
- If possible, find and help administer a victim's Epipen. Many severe allergy sufferers carry one at all times.
  - a. DO NOT administer medicine aside from the Epi-pen. This includes pain relievers, allergy medicine, etc.
- 5. Watch for signs of shock and treat appropriately.

Remind the participants to keep a close watch on the individual's airway and breathing. Seek professional medical help as soon as possible.

Does anyone have any questions about any of the injuries covered in this section?



INSTRUCTOR GUIDANCE	CONTENT			
	Depending on the circumstances, a CERT may establish a central medical treatment location and/or treatment locations at incident sites where many victims have been injured.			
	Head-to-toe assessments should be verbal and hands-on. Always conduct head-to-toe assessments in the same way — beginning with the head and moving toward the feet. If injuries to the head, neck, or spine are suspected, the main objective is to not cause additional injury. Use in- line stabilization and a backboard if the victim must be moved.			
	Burns are classified as superficial, partial thickness, or full thickness depending on severity and the depth of skin layers involved. Treatment for burns involves removing the source of the burn, cooling the burn, and covering it. For full thickness burns, always treat for shock.			
	The main first aid treatment for wounds consists of:			
	<ul> <li>Controlling bleeding</li> </ul>			
	<ul> <li>Cleaning</li> </ul>			
	<ul> <li>Dressing and bandaging</li> </ul>			
	In the absence of active bleeding, dressings must be removed and the wound checked for infection at least every 4 to 6 hours. If there is active bleeding, a new dressing should be placed <u>over</u> the existing dressing.			
	<ul> <li>Fractures, dislocations, sprains, and strains may have similar signs. Treat all suspected fractures, sprains, and strains by immobilizing the affected area using a splint.</li> </ul>			
	<ul> <li>The key to treatment of cold-related injuries such as hypothermia and frostbite is to warm the victim slowly.</li> </ul>			

INSTRUCTOR GUIDANCE	CONTENT			
	Anaphylaxis is the most critical concern when an insect bite is suspected. Be prepared to assist the victim in using an Epi-pen and make sure to monitor the victim's airway until professional help arrives.			
	Remind the group that there is much more to learn about medical operations than could possibly be presented in two 2- to 3-hour sessions. Recommend strongly that the participants attend additional training that is offered through the American Red Cross or through community colleges.			
	Remind the group also that disaster medical operations is a team effort and that, like all teams, they must practice together so that they can function as a team under pressure. Encourage the participants to attend exercise simulations whenever they are offered locally.			

# INSTRUCTOR GUIDANCE CONTENT **Homework Assignment** Ask the group to read and become familiar with the unit Homework Assignment that will be covered in the next session. • Read unit to be covered in next session · Bring necessary supplies for next session Tell them to try practicing a rapid head-to-toe · Wear appropriate clothes for next session assessment on a friend or family member. Don't forget Practice complete head-to-toe to document! assessment on friend or family member **ॐ** FEMA **Display Slide 4-57** Thank all of the participants for attending the session and remind the group of the date and time of the next session, if necessary.

# UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

In this unit you will learn about:

- Search and Rescue Sizeup: How to size up the situation in which the search and rescue teams will operate.
- Conducting Interior and Exterior Search Operations: How to search systematically for disaster victims.
- Conducting Rescue Operations: Safe techniques for lifting, leveraging, cribbing, and victim removal.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

### **OBJECTIVES**

At the conclusion of this unit, the participants should be able to:

- Identify sizeup requirements for potential search and rescue situations.
- Describe the most common techniques for searching, both interior and exterior.
- Use safe techniques for debris removal and victim extrication.
- Describe ways to protect rescuers during search and rescue.

### SCOPE

The topics that will be discussed in this unit are:

- Introduction and Unit Overview
- Safety During Search and Rescue Operations
- Conducting Interior and Exterior Search Operations
- Conducting Rescue Operations
- Unit Summary

# ESTIMATED COMPLETION TIME

2 hours 30 minutes

## TRAINING METHODS

The lead instructor will begin this session by welcoming the participants to Unit 5: Light Search and Rescue Operations, and will introduce the instructors for the unit. The instructor will then present a brief overview of this unit, including making the distinction between search and rescue, the goals of search and rescue, search and rescue priorities, and the steps involved in effective search and rescue for both interior and exterior areas.

Next, the instructor will review the sizeup process as it applies to search and rescue. At this time, the instructor will emphasize the most dangerous construction-related hazards. The instructor will emphasize the importance of rescuer safety in all sizeup decisions. Participants will complete a sizeup exercise using either the scenarios provided or locally prepared scenarios.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# TRAINING METHODS (CONTINUED)

The next section will deal with search techniques for locating potential victims. The instructor will identify the types of voids and collapses that CERT members should avoid and the methods that searchers can use for locating victims and documenting their positions within lightly or moderately damaged structures.

Finally, the instructor will describe rescue techniques and methods for lifting, debris removal, and finally, victim removal. The instructors will demonstrate leveraging and cribbing. The instructors will also demonstrate using lifts and drags as victim removal techniques, and the participants will practice those techniques under instructor observation. At the end of this section, the group will participate in a simulation involving both debris removal and victim removal.

### RESOURCES REQUIRED

- Community Emergency Response Team Instructor Guide
- Community Emergency Response Team Participant Manual
- PowerPoint slides 5-0 through 5-48

## OTHER RESOURCES

If time permits, all or portions of the 32-minute video *CERT Training:* Safety in the Post-Disaster Environment are recommended for this unit. The video provides an overview of safety considerations for CERT responders and is available for download at the national CERT Web site: <a href="https://www.citizencorps.gov/cert">www.citizencorps.gov/cert</a>.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

#### **EQUIPMENT**

In addition to the equipment listed at the front of this Instructor Guide, you will need the following equipment for this session. The number of each item needed for practicing victim extrication and carries will depend on the number of groups practicing these skills at the same time.

- A computer with PowerPoint software
- A computer projector and screen
- Mannequin(s) or rescue dummy(ies) for extrication
- Blankets for victim carries
- Appropriate chairs for victim carries
- Large, flat objects (e.g., table) and pieces of wood for leveraging and cribbing
- Pry bars or long 2" x 4" pieces of lumber

### **PREPARATION**

For the exercise titled *Gathering Facts*, a scenario has already been developed. The scenario appears in the Participant Manual and on page 5-18 in this Instructor Guide. You should feel free to alter the scenario to reflect the community's needs.

The exercise titled *Search* and *Rescue Sizeup* requires the preparation of scenarios that are realistic for your community. This exercise appears in the Participant Manual and on page 5-35 in this Instructor Guide. Be sure to prepare the scenarios in advance of the session and have copies for each participant. Include the following types of information in the scenarios:

- Type of event
- Intensity, severity, and duration
- Occupancy affected
- Current and forecast weather conditions
- Time of day and week
- Other factors that may affect search and rescue operations

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

## Preparation (CONTINUED)

Information that is provided about assessment of probable damage in relation to types of construction focuses primarily on earthquake damage. For other types of disasters (e.g., tornadoes, hurricanes, or floods) likely to occur in your area, obtain and add information about their probable impact on various types of construction.

### **NOTES**

Remember as you work through this unit with the group to stress the role of the CERT in search and rescue. The participants <u>must</u> come away from the training with an understanding of their limitations and the attitude that their safety is paramount, even above that of the victims.

A suggested time plan for this unit is as follows:

Introduction and Unit Overview	5 minutes
Safety During Search and Rescue Operations	45 minutes
Conducting Interior and Exterior Search Operations	35 minutes
Conducting Rescue Operations	60 minutes
Unit Summary	5 minutes

Total Time: 2 hours 30 minutes

For the purposes of time and comprehension, this unit may be divided into two units and taught separately. Should you choose to do this, you are advised to teach through "Conducting Interior and Exterior Search Operations" in the first session and resume with "Conducting Rescue Operations" in the second session.

### **REMARKS**

Search and rescue sizeup is based on the model introduced in Unit 2: Fire Safety and Utility Controls. Review the sizeup section carefully and develop examples of damage levels based on the hazards faced and the types of structures that are common to your community. Provide these examples at appropriate points in the instruction to illustrate important learning points.

# Unit 5: Light Search and Rescue Operations

### **INSTRUCTOR GUIDANCE**

### CONTENT



### **Display Slide 5-0**

### Introductions and Overview

### Welcome

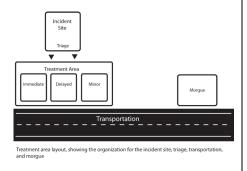
Introduce this session by welcoming the participants to Unit 5 of the *CERT Basic Training*.

Introduce the instructors for this session and ask any new instructors to describe briefly their experience with search and rescue operations.

Briefly review the fire safety lesson.



### Correct response:



Who can explain or diagram a good arrangement for the treatment area in relation to the incident site and transportation availability?

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	Content
<b>?</b> €	What are you looking for in a head-to-toe assessment?
Correct response:	
<ul> <li>Deformities</li> <li>Contusions (bruising)</li> <li>Abrasions</li> <li>Punctures</li> <li>Burns</li> <li>Tenderness</li> <li>Lacerations</li> <li>Swelling</li> </ul>	
<b>?</b>	What are your objectives when treating burns?
Correct response:	
<ul> <li>Cool the burned area.</li> <li>Cover with a sterile cloth to reduce the risk of infection (to keep fluids in and germs out).</li> </ul>	
	How do you dress a wound when there is active bleeding?
Correct response:	
Redress <u>over</u> the existing dressing and maintain pressure and elevation to control bleeding.	

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	Content
**	If you are not sure whether it is a fracture or a sprain, what should you do?
Correct response:	
Immobilize the affected area using a splint.	
Search and Rescue  Consists of three separate operations Sizeup: Using 9-step, continual model Search: Locating victims and documenting Rescue: Extricating victims  CERT factor Training Und S. Light Search and Rescue Operations  Page 10	Unit Overview  Explain that search and rescue consists of three separate operations:  Sizeup involves assessing the situation and determining a safe action plan (using the 9-step sizeup model).  Search involves locating victims and documenting their location.  Rescue involves the procedures and methods required to extricate the victims.  Point out that previous disasters have shown that the first response to trapped victims immediately after almost every disaster is by spontaneous, untrained, and well-intentioned persons who rush to the site of a collapse in an attempt to free the victims.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

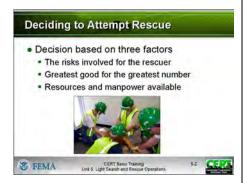
# INSTRUCTOR GUIDANCE CONTENT

Use the example from the earthquake in Mexico City, where spontaneous efforts saved 700 lives — but cost the lives of more than 100 people — to add emphasis to this discussion.

Point out that the Mexico City example is not isolated, but is part of a larger pattern of behavior in emergencies, ranging from accidental drowning in which the wouldbe rescuer also drowns, to the massive influx of often untrained volunteers following major disasters.

Emphasize that, more often than not, these spontaneous rescue efforts result in serious injuries and compounded problems.

Point out that rescue efforts should be planned and practiced in advance. People, including rescuers, have died when the rescuers weren't prepared and trained.



### Display Slide 5-2

### **Deciding to Attempt Rescue**

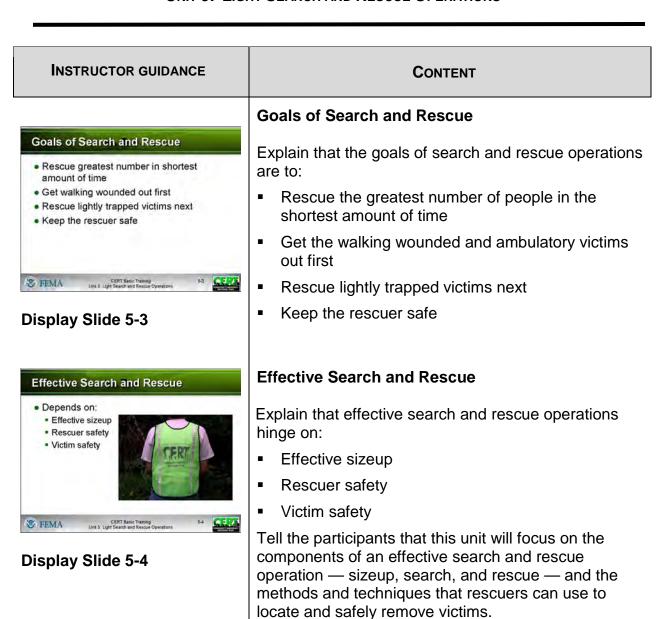
Explain that the decision to attempt a rescue should be based on three factors:

- The risks involved to the rescuer
- The overall goal of doing the greatest good for the greatest number of people

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Resources and manpower available

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**



#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

#### **INSTRUCTOR GUIDANCE** CONTENT **Unit Objectives** Unit Objectives · Identify sizeup requirements Tell the participants that at the end of this unit, they Describe most common search techniques should be able to: Use safe techniques for debris removal · Use safe techniques for victim extrication Identify sizeup requirements for potential search · Describe ways to protect rescuers and rescue situations Describe the most common techniques for searching, both interior and exterior **₹** FEMA CERT Basic Training Link 6: Light Search and Rescue Op Use safe techniques for debris removal and victim Display Slide 5-5 extrication Describe ways to protect rescuers during search and rescue operations **Unit Topics** Unit Topics Safety During Search and Rescue Preview the unit topics by telling the group that the Operations unit will provide them with the knowledge and skills . Conducting Interior and Exterior Searches Conducting Rescue Operations that they will need: Safety During Search and Rescue Operations Conducting Interior and Exterior Searches ₹ FEMA CERT Basic Training Link B. Lishi Search and Rescur O **Conducting Rescue Operations** Display Slide 5-6 Does anyone have any questions about what will be covered in this unit?

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

#### INSTRUCTOR GUIDANCE CONTENT Safety During Search and Rescue CERT Sizeup II. **Operations** 1. Gather Facts 2. Assess Damage Introduce search and rescue techniques by re-3. Consider Probabilities 4. Assess Your Situation emphasizing the importance of CERT safety 5. Establish Priorities measures, including appropriate PPE, use of the 6. Make Decisions 7. Develop Plan of Action buddy system, and knowing your limitations. 8. Take Action 9. Evaluate Progress ₹ FEMA Display Slide 5-7 **CERT Search and Rescue Sizeup** Remind the participants that, like every other CERT operation, search and rescue requires sizeup at the beginning of the operation and continually as long as the operation continues. If you have not yet taught Unit Review the 9 steps of the continual sizeup process 2, you will have to explain the that was presented in Unit 2. 9 steps of sizeup in more 1. Gather facts depth now. 2. Assess damage 3. Consider probabilities 4. Assess your situation 5. Establish priorities 6. Make decisions 7. Develop a plan of action 8. Take action 9. Evaluate progress Stress the need for a Safety Officer if the decision is made to take action.

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
PM, P. 5-5 through 5-7	Refer the participants to the CERT Search and Rescue Sizeup Checklist in the Participant Manual, and review the steps briefly.
	Tell the group that this section will focus on sizeup as it relates to both interior and exterior search and rescue operations.

PM, P. 5-5 through 5-7	CERT Search and Rescue Sizeup Checklist

Ste	Step 1: Gather Facts				
Tir	Time				
•	Does the time of day or week affect search and rescue efforts?	Yes 🗌	No 🗌		
	How?				
Ту	pe of Construction and Terrain				
•	What type(s) of structure(s) is (are) involved?				
•	What type(s) of construction is (are) involved?				
•	What type(s) of terrain is (are) involved?				
Oc	ccupancy				
•	Are the structures occupied?	Yes 🗌	No 🗌		
	If yes, how many people are likely to be affected?				
•	Are there special considerations (e.g., children, elderly)?	Yes 🗌	No 🗌		
	If yes, what are the special considerations?				
We	eather				
•	Will weather conditions affect your safety?	Yes 🗌	No 🗌		
	If yes, how will your safety be affected?				

•	Will weather conditions affect the search and rescue situation?	Yes 🗌	No 🗌
	If yes, how will the search and rescue situation be affected?		
На	zards		
•	Are hazardous materials involved?	Yes	No 🗌
	If yes, at what location?		
•	Are any other types of hazards involved?	Yes 🗌	No 🗌
	If yes, what other hazards?		
Ste	ep 2: Assess and Communicate the Damage		
•	For structural searches, take a lap around the building. Is the damage beyond the CERT's capability?	Yes 🗌	No 🗌
	If yes, what special requirements or qualifications are required?		
•	Have the facts and the initial damage assessment been communicated to the appropriate person(s)?	Yes	No 🗌
Ste	ep 3: Consider Probabilities		
•	Is the situation stable?	Yes 🗌	No 🗌
•	Is there great risk or potential for more disaster activity that will impact personal safety?	Yes 🗌	No 🗌
	If yes, what are the known risks?		

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•	What else could go wrong?		
St	ep 4: Assess Your Own Situation		
•	What resources are available with which you can attempt the search and rescue?		
•	What equipment is available?		
St	ep 5: Establish Priorities		
•	Can a search and rescue be <i>safely</i> attempted by CERT members?	Yes 🗌	No 🗆
	If no, do not attempt a search and rescue.		
•	Are there other, more pressing needs at the moment?	Yes 🗌	No 🗆
	If yes, list.		
Step 6: Make Decisions			
•	Where will deployment of available resources do the most good while maintaining an adequate margin of safety?		
St	ep 7: Develop Plan of Action		
•	Determine how personnel and other resources should be deployed.		
St	ep 8: Take Action		
-	Put the plan into effect.		

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

#### **Step 9: Evaluate Progress**

- Continually size up the situation to identify changes in the:
  - Scope of the problem
  - Safety risks
  - Resource availability

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

#### **INSTRUCTOR GUIDANCE**

#### CONTENT



#### **Display Slide 5-8**

Provide and discuss locally relevant examples of planning factors to develop an understanding of the effects of each factor.

Mention that the amount of damage likely to be found in different types of construction will be covered in a few minutes.

#### **Step 1: Gather Facts**

Introduce Step 1 by telling the group that the facts of the situation must guide their search and rescue efforts.

When gathering facts, CERT members need to consider:

- The time of the event and day of the week. At night, more people will be in their homes, so the greatest need for search and rescue will be in residential settings. Conversely, during the day, people will be at work, so the need will be in commercial buildings.
  - Search and rescue operations may also be affected by where people are located in their homes and the amount of daylight available.
- Construction type and terrain. Some types of construction are more susceptible to damage than others. The type of terrain will affect how the search is conducted.
- Occupancy. The purpose for which the structure was designed may indicate the likely number of victims and their location.
- Weather. Severe weather will have an effect on victims and rescuers alike and will certainly hamper rescue efforts. Forecasts of severe weather should be considered as a limiting factor on the time period during which search and rescue can occur.
- <u>Hazards</u>. Knowledge of other potential hazards in the general and immediate areas is important to search and rescue efforts. For example, if a gas leak is suspected, taking the time to locate and shut off the gas can have a big impact in terms of loss of life.

INSTRUCTOR GUIDANCE	CONTENT
PM, P. 5-9	Refer the group to <i>Scenario</i> in the Participant Manual and introduce the <i>Gathering Facts</i> exercise.
	Exercise: Gathering Facts
Use the following steps to facilitate this exercise, keeping in mind that this scenario is only an example and may be changed to fit your	Purpose: Explain that this exercise is an interactive activity to give the participants the opportunity to consider some of the facts that CERT search and rescue teams will need to gather during sizeup.
community's needs.	<u>Instructions:</u>
	Refer the participants to <i>Scenario</i> in the Participant Manual.
	Ask the group to brainstorm the following questions:
	What does this scenario tell you about the probable density for the affected area?
	What does this scenario tell you about the facts that must be gathered?
	What impact could these facts have on search and rescue operations?
	What kinds of search and rescue operations are probable?
	What, if any, are the constraints that search and rescue personnel may face in this scenario?
	Can these constraints be overcome within the established CERT mission? If so, how?
	3. Record the group's responses on chart paper.
	Discuss the group's responses and provide feedback regarding strengths and possible improvements in their planning.

PM, P. 5-9	Scenario
------------	----------

At 2:30 p.m. on Tuesday, August 9, a squall line passed through your town. Because of the difference in barometric pressure on either side of the front, the squall line was preceded by a "gust front" with straight-line winds of more than 70 miles per hour. The gust front was followed by continued strong winds and extremely heavy rain. Electricity was knocked out throughout the town.

You activate in accordance with your CERT program's standard operating procedures (SOPs). On the way to the staging area at the local high school, you notice considerable damage, including felled trees and utility lines. Many streets are impassable, making you take a roundabout route to the high school. As you make your way to the staging area, you see that the roof has blown off of a large portion of a local strip shopping center and that the exterior wall on the west end of the structure has collapsed.

After reaching the staging area, you check in with the Logistics Team Leader, who assigns you to Search and Rescue Team 2. Although CERT members cannot venture into the section of the shopping center that has collapsed, Search and Rescue Team 2 will be searching near the collapsed area to see if there are victims in that area.

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# Assess and Communicate Damage The CERT mission changes if: Damage is light Damage is moderate Damage is heavy

CERT

INSTRUCTOR GUIDANCE

#### **Display Slide 5-9**

**ॐ** FEMA

The following information on probable damage and the table titled *Probable Severity* and *Type of Earthquake* Damage Based on Construction Type on page 5-14 in the Participant Manual relate to earthquakes.

If other types of disasters (e.g., tornadoes, hurricanes, or floods) are likely in your area, add information about the probable impact on various types of construction and what you would consider light, moderate, and heavy damage to structures.

#### CONTENT

#### **Step 2: Assess and Communicate Damage**

Introduce Step 2 by pointing out that there are general guidelines for assessing damage in interior searches and exterior searches. When in doubt about the condition of a building, CERT members should always use the more cautious assessment. If unsure about whether a building is moderately or heavily damaged, CERTs should assume heavy damage.

Emphasize, however, that the CERT mission changes depending on the amount of structural damage.

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	Explain how the CERT mission for interior searches changes if:  Damage is light (superficial or cosmetic damage, superficial cracks or breaks in the wall surface, minor damage to the interior contents)  The CERT mission is to locate; triage; treat airway, major bleeding, and shock; continue sizeup; and document.  Damage is moderate (visible signs of damage, decorative work damaged or fallen, many visible cracks in the wall surface, major damage to interior content, building is on its foundation)  The CERT mission is to locate; treat airway, major bleeding, and shock; evacuate; warn others; continue sizeup while minimizing the number of rescuers and time spent inside the structure.  Damage is heavy (partial or total collapse, tilting, obvious structural instability, building off its foundation, heavy smoke or fire, hazardous materials inside, gas leaks, rising or moving water)  The CERT mission is to secure the building perimeter and warn others of the danger in entering the building.  Explain that CERT members are not to enter a building with heavy damage under any circumstances.

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# Superficial Broken windows Superficial cracks or breaks in wall surface Minor damage to the interior contents Safe to enter and remain

CERT Basic Training Link 5: Light Search and Rescue Op

INSTRUCTOR GUIDANCE

#### **Display Slide 5-10**

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#### **Display Slide 5-11**



#### **Display Slide 5-12**

#### CONTENT

#### Light Damage

Explain that the damage shown in the slide constitutes light damage.

- Superficial damage
- Broken windows
- Superficial cracks or breaks in the wall surface, for example, fallen or cracked plaster
- Minor damage to the interior contents

#### Moderate Damage

Explain that the damage shown in the slide constitutes moderate damage.

- Visible signs of damage
- Decorative work damaged or fallen
- Many visible cracks or breaks in the wall surface
- Major damage to interior contents
- Building still on foundation

#### Heavy Damage

Explain that the damage shown in the slide constitutes heavy damage.

- Partial or total collapse
- Tilting
- Obvious structural instability
- Building off foundation

Reemphasize that CERT members must not enter a building with heavy damage <u>under any circumstances</u>.

INSTRUCTOR GUIDANCE	CONTENT
Mention that, later in this session, the participants will learn more about formulating rescue strategies based on the damage assessment.	
	Assessing Damage
	Explain that assessing damage of a building or structure will require an examination from all sides. Urge participants to do an initial "lap around."
	Explain that, in assessing damage, CERT personnel must consider probable levels of damage based on the type and age of construction. In addition to a visual assessment, rescuers should also "listen" to damaged structures. If a building is creaking or "groaning," it is unstable and should not be entered.
PM, P. 5-13	Refer the participants to <i>Probable Severity and Type</i> of Earthquake Damage Based on Construction Type in the Participant Manual.
More detailed search methodology will be discussed later in this unit.	Tell the participants that, in some instances, an exterior search is required and a grid search should be employed.
	Communicating Damage
	Tell participants to describe different locations within and around the structure by using the ABCD standard, with A corresponding to the front of the building and B, C, and D representing the sides of the building moving clockwise from A.

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	Using this system, the area inside of a structure can be further broken down by quadrants to facilitate communication. For instance, a hazard or victim located closest to the A and B sides of the structure is in the A/B quadrant.
	Stress that the participants must communicate their findings to the CERT command post or responding agencies.

# PM, P. 5-13 Probable Severity and Type of Earthquake Damage Based on Construction Type

Construction Type	Description	Probable Damage Areas	Severity
Single-Family Dwelling	<ul><li>Wood frame</li></ul>	<ul><li>Masonry chimney</li><li>Utilities</li></ul>	Light
	■ Pre-1933	<ul><li>Foundation movement</li><li>Utilities</li><li>Porches</li></ul>	Moderate
	<ul><li>Hillside</li></ul>	<ul><li>Unique hazards</li><li>Ground failure</li></ul>	Heavy
Multiple-Family Dwelling	<ul> <li>Up-and-down and/or side-by-side living units</li> </ul>	<ul><li>Soft first floor</li><li>Utilities</li></ul>	Moderate
Unreinforced Brick	<ul> <li>Pre-1933 construction</li> <li>Lime or sand mortar</li> <li>"King Row" or "Soldier Row" (bricks turned on end every 5-7 rows)</li> <li>Reinforcing plates</li> <li>Arched windows and doors</li> <li>Recessed windows and doors</li> </ul>	■ Walls collapse, then roof	Heavy
Tilt-Up	<ul> <li>Large warehouses and plants</li> <li>Concrete slabs lifted into place</li> <li>Walls inset approximately 6-8 inches</li> <li>Lightweight roof construction</li> </ul>	■ Roof collapses, then walls	Heavy
High-Rise	Steel reinforced	<ul><li>Broken glass</li><li>Content movement</li><li>Exterior trim and fascia</li></ul>	Light

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# Sizeup: Step 3 Consider Probabilities How stable is the situation? What else could go wrong? What does it mean for the search and rescue? CERT Sales Training LINI Light Search and Rescar Operations 5-13

#### **Display Slide 5-13**

#### CONTENT

#### **Step 3: Consider Probabilities**

Stress that, because the CERTs will be working in such close proximity to the dangerous situation, considering what will probably happen and what could happen are of critical importance. Urge the participants to identify potentially life-threatening hazards and ask:

- How stable is the situation? Even within a structure that appears from the outside to have only minimal or moderate damage, nonstructural damage or instability inside the structure can pose real danger to the rescue team. CERT members should think about what they already know about the structure that's been damaged. Are lawn chemicals, paints, or other potentially hazardous materials stored within the structure? How are they stored? Where are they? It won't take CERT members much time to answer these types of questions, but the answers could make a huge difference in how they approach the search.
- What else could go wrong? Based on the information gathered during Steps 1 and 2 of the sizeup, CERT members should take a few moments to play "What if?" to try to identify additional risks that they may face. What if the electricity fails during the search? What if a wall that appears stable shifts and collapses? Applying "Murphy's Law" to the situation could save CERT members' lives.

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

What does it all mean for the search and rescue Based on the probabilities, CERTs should thin about what they can do to reduce the risks associated with the probabilities that they have identified. Is a spotter necessary to look for movement that could indicate a possible collar and warn the rescue team? Is some remedial action required to stabilize nonstructural hazar before beginning the search? CERT search a	s ese
rescue teams must remember that their own s is the first priority.	
Sizeup: Step 4 Step 4: Assess Your Situation	
• What resources are needed? • What resources are available?  steps until the decision is made to begin the search and rescue operation (or that the situation is unsated to be search and rescue operation).	process, with each step building upon the previous steps until the decision is made to begin the search and rescue operation (or that the situation is unsafe). Then, urge the group to draw on everything they've learned from Steps 1 through 3 to assess their
Display Slide 5-14 Whether the situation is safe enough to contin	ıe
<ul> <li>The risks that rescuers will face if they continue.</li> <li>What resources will be needed to conduct the operation safely and what resources are availant to the operation safely and what resources is extremely important to search and rescue operations.</li> <li>When you talk about "resources," what are your referring to?</li> <li>Acknowledge the group's responses. If not mention by the participants, say that search and rescue resources include personnel, tools, and equipments.</li> </ul>	uble u

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
PM, P. 5-15	Refer the participants to the table titled Search and Rescue Resource Planning Questions in the Participant Manual.

PM, P. 5-15	Search and Rescue Resource Planning Questions
-------------	---

Resource	Planning Questions
Personnel	<ul> <li>How many trained CERT members are available for this operation?</li> <li>Who lives and/or works in the area?</li> <li>During which hours are these people most likely to be available?</li> <li>What skills or hobbies do they have that might be useful in search and rescue operations?</li> <li>What might be the most effective means of mobilizing their efforts?</li> </ul>
Equipment	<ul> <li>What equipment is available locally that might be useful for search and rescue?</li> <li>Where is it located?</li> <li>How can it be accessed?</li> <li>On which structures (or types of structures) might it be most effective?</li> </ul>
Tools	What tools are available that might be useful for lifting, moving, or cutting disaster debris?

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#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# Rescue Resources Personnel Firefighters Police Nurse, M.D. Contractor Tools Crowbars Auto jacks Chainsaws Equipment CERT Saco Training Unt 5 Light Steach and Rescue Operations 8-18

#### Display Slide 5-15

Provide the participants with examples of tools and equipment that they might need for search and rescue operations.

#### CONTENT

#### Rescue Resources

Tell the group that search and rescue resources include:

#### Personnel

- How many CERT members are available for this operation?
- In addition, who lives and/or works in the area?
- When are they likely to be available?
- Do they have skills that might be useful in search and rescue operations?
- How can their efforts be mobilized?

Drawing on personnel resources that may be available, even if only to watch the situation and free CERT resources for tasks requiring specialized training, can make search and rescue operations more efficient.

#### Equipment

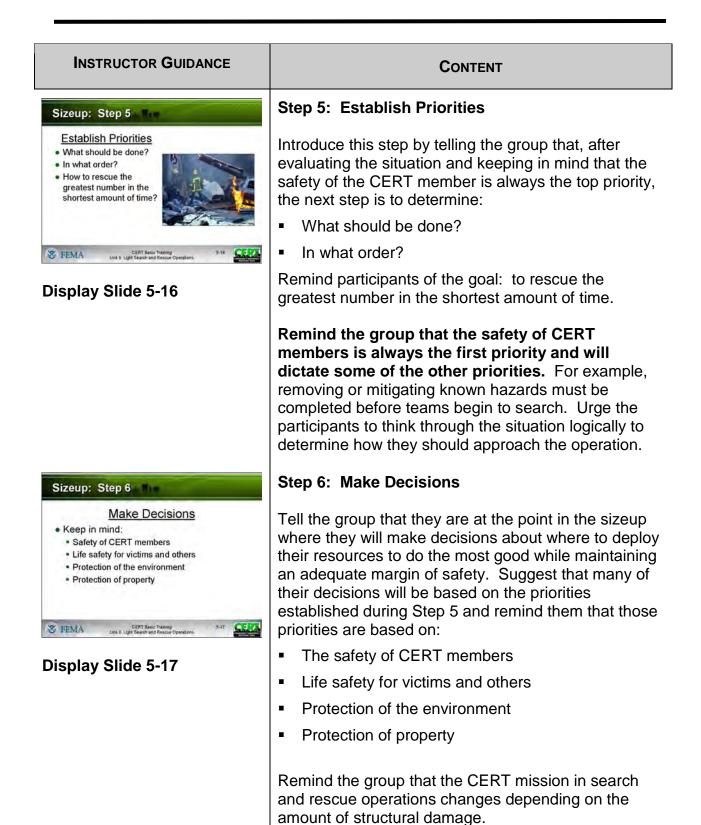
- What equipment is available that might be useful for search and rescue?
- Where is it located?
- How can it be accessed?
- On which structures (or types of structures) might it be most effective?

#### Tools

 What tools are available that might be useful for lifting, moving, or cutting debris?

Point out that considering each of these questions will facilitate action planning.

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**



# INSTRUCTOR GUIDANCE Sizeup: Step 7 Develop Plan of Action Focus operation on established priorities and decisions Provide for documentation to give to responding agencies Provide for documentation to become part of CERT records

#### **Display Slide 5-18**

#### CONTENT

#### Step 7: Develop Plan of Action

Tell the group that Step 7 is where all of the information they have about the situation comes together. During Step 7, the CERT Incident Commander/Team Leader (IC/TL) will decide specifically how the team will conduct its operation, considering the highest priority tasks first.

Remind the participants that an action plan does not need to be written, but suggest that, when search and rescue operations are required, the situation is probably complex enough that a written plan of some type will be important.

Point out that a plan should:

- Help focus the operation on established priorities and decisions
- Provide for documentation to be given to responding agencies when they arrive on scene
- Provide for documentation that will become part of the record of the CERT's overall operation

Urge the participants to keep a notebook for jotting notes when developing an action plan. Any changes made to the initial plan based on new information that comes in should also be documented.

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# Sizeup: Step 8 Take Action Based on plan developed during Step 7 CERT Basic Training Unit 5 Light Seach and Record Operators 5-18

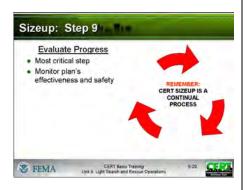
INSTRUCTOR GUIDANCE

#### CONTENT

#### **Step 8: Take Action**

Explain that the next step is to put the plan developed in Step 7 into action.

#### **Display Slide 5-19**



#### **Step 9: Evaluate Progress**

Emphasize that Step 9, Evaluate Progress, is the most critical, not only in terms of evaluating whether the plan works, but also from a safety standpoint.

Remind the group that sizeup is ongoing and that information gained during Step 9 needs to be fed back into the decision-making process for possible revision of priorities and updated action planning.

#### Display Slide 5-20



#### **Specific Safety Considerations**

Tell the group that regardless of the severity of structural damage, rescuer safety must be the primary concern.

Point out that the two most frequent causes of rescuer deaths are:

- Disorientation
- Secondary collapse

#### Display Slide 5-21

Emphasize this point.

Be prepared and make rescuer safety your top priority.

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	Сонтент
PM, P. 5-19	Refer the participants to <i>Specific Safety</i> Considerations in the Participant Manual. Caution the participants that they must follow these guidelines during all search and rescue operations:
	<ul> <li>Use a buddy system. Successful search and rescue depends on teamwork.</li> </ul>
	Be alert for hazards (e.g., power lines, natural gas leaks, hazardous materials, sharp objects, overhead objects that could fall, etc.). Never attempt to search an area where water is rising.
	Use safety equipment. Wearing gloves and a helmet will protect a rescuer's hands and head. Also, tell the group that the primary cause of rescuer problems after working in a structural collapse is breathing dust, so an N95 mask is essential.
	Tell the group that dust masks will not filter chemicals or biological agents. Stress that, if the use of chemical or biological agents is suspected, CERTs must evacuate to an upwind location and notify professional responders.
	Have backup teams available to allow rotating of teams, prevent fatigue, and ensure help if a team gets into trouble. Have teams drink fluids and eat to keep themselves fresh.

PM, P. 5-19	Specific Safety Considerations

Regardless of the severity of structural damage, rescuer safety must be the primary concern.

The two most frequent causes of rescuer deaths are:

- Disorientation
- Secondary collapse

Follow these guidelines during all search and rescue operations:

- Use a buddy system. Always work in pairs, with a third person acting as a runner.
- Be alert for hazards (e.g., power lines, natural gas leaks, hazardous materials, sharp objects, etc.).

You should never attempt to search an area where water is rising.

- Use safety equipment. Wearing gloves and a helmet will protect a rescuer's hands and head. Also, the primary cause of rescuer problems after working in a structural collapse is breathing dust, so a dust mask is essential. However, a dust mask will not filter out all harmful materials. If the presence of chemical or biological agents is suspected, CERTs must evacuate to an upwind location and notify professional responders.
- Have backup teams available to allow rotating of teams, prevent fatigue, and ensure help if a team gets into trouble. Have teams drink fluids and eat to keep themselves fresh.

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#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	Exercise: Search and Rescue Sizeup
Use the following steps to facilitate this exercise. The exercise will be based on several different types of <u>local</u> buildings (one for each small group) for the most probable type of disaster that the community will face.	<u>Purpose:</u> Explain that this exercise is an interactive activity to give the participants an opportunity to practice some of the thinking processes involved in planning and search and rescue sizeup.
	The brainstorming required will help the participants to begin to assess their neighborhoods or workplaces in terms of building structures, hazardous materials,
PM, P. 5-20	safety precautions that need to be taken, etc.
	Instructions:
	Assign the participants to groups of four or five.
	Provide each group with a local scenario (with slides, if possible) describing a local building in a disaster event that is realistic for the community.
	<ol> <li>Ask the groups to designate a recorder and, given the disaster and the specific building, answer the following questions:</li> </ol>
	What are the pertinent facts that must be gathered?
	What kind of prediction can you make regarding damage, based on the incident and the building construction?
	What probable search and rescue problems can you identify?
	What specific safety considerations can you identify?
	Ask each group to select a spokesperson to present the group's responses to the class.
	<ol> <li>Discuss each group's responses and provide feedback about how their search and rescue sizeup might be improved.</li> </ol>

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
<b>?</b>	Does anyone have any questions about anything covered to this point?
	Explain that the next section will deal with how to conduct search operations.

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#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

PM, P. 5-20 Search and Rescue Sizeup
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<u>Purpose:</u> This exercise is an interactive activity that will provide an opportunity to practice some of the thinking processes involved in planning and search and rescue sizeup.

The brainstorming required will help you to begin to assess your neighborhoods or workplaces in terms of building structures, hazardous materials, safety precautions that need to be taken, etc.

#### **Instructions:**

- 1. Assemble in groups of four or five.
- 2. Read the scenario given to you by the instructor.
- 3. Designate a recorder and, given the disaster and the specific building, answer the following questions:
  - What are the pertinent facts that must be gathered?
  - What kind of prediction can you make regarding damage, based on the incident and the building construction?
  - What probable search and rescue problems can you identify?
  - What specific safety considerations can you identify?
- 4. Select a spokesperson to present the group's responses to the class.
- 5. Discuss each group's responses and provide feedback about how their search and rescue sizeup might be improved.

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	Conducting Interior and Exterior Search Operations
	Tell the participants that, when the decision is made to initiate search operations, CERT members will inspect the area assigned by the CERT Incident Commander/Team Leader (IC/TL).
	Explain that the search operation involves two processes:
	Employing search techniques based on the sizeup
	2. Locating any victims
	Point out that by using these processes, search operations will be more efficient, thorough, and safe. They will also facilitate later rescue operations. Explain that, although the processes are related, this section will address them one at a time. Interior search operations are the most common and will be discussed first; exterior search operations will be discussed later in this unit.
	Locating Potential Victims in a Structure
Provide examples of how to use the information gathered to find out more information about areas of entrapment.	Tell the participants that the first step in locating potential victims in a structure is to conduct a sizeup of the interior of the building to gather more precise information about damage and to develop priorities and plans.
	Explain by saying that the data gathered will provide more information about possible areas of entrapment — or voids.

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

#### CONTENT **INSTRUCTOR GUIDANCE** Structural Voids Structural Voids Point out that there are several types of voids. If you see collapsed floors or walls, get out! Emphasize that, if CERT members see collapsed floors or walls, they should leave the premises immediately. 'V' Void X = Voids Lean-to Void **ॐ** FEMA GERT Basic Training Lint S. Light Search and Rescue Co CERT **Display Slide 5-22** Does anyone have any questions about the types of structural voids? **Individual Voids** Individual Voids · Spaces where victims may seek protection Explain that individual voids are spaces into which the Bathtubs victim may have crawled for protection. Examples of Underneath desks Inside cabinets individual voids include bathtubs and the space Under/next to beds underneath desks. Children may seek shelter in Inside closets smaller places like cabinets. **ॐ** FEMA CERT Tell the group that, after identifying the possible areas CERT Basic Training Unit 6 Light Search and Riscor C of entrapment, CERT members must: **Display Slide 5-23** Determine the potential number of victims Identify the most probable areas of entrapment

#### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	Point out that some of this information may be known through assessment, but CERT members may need to get some information by talking to bystanders or those who are familiar with the structure.
	Explain that CERT members should ask questions when talking with these individuals, including:
	How many people live (or work) in the building?
	Where would they be at this time?
	What is the building layout?
	What have you seen or heard?
	Has anyone come out?
	What are the normal exit routes from the building?
	Caution the group that bystanders may be confused by the event. They may tend to exaggerate potential numbers or may not even remember the event accurately. Tell the group to gather as much information as they can, though, because it will be useful for planning search priorities and implementing the search.
	Search Methodology
	Introduce this section by telling the group that an effective search methodology:
	Indicates rescuer location
	<ul> <li>Locates victims as quickly and safely as possible</li> </ul>
	Prevents duplication of effort

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

#### **INSTRUCTOR GUIDANCE**

#### CONTENT



### Search Markings

Tell the group that experienced search and rescue personnel use the following system. The same system will be used by CERTs. This will save fellow CERT members and other responders time during the search and continual sizeup of the structure.

 Upon entering a search area, you will make a mark next to the door to indicate that you are entering. Do not make the mark on the door or on the wall where the door swings. Make a single slash and write the agency or group ID at the "9 o'clock" position. Then write the date and "time in" at the "12 o'clock" position.

#### **Display Slide 5-24**

The slide above is animated. Click on the slide 3 times to show each step during the marking process. The slide below provides more detail about the information included in a marking.



Display Slide 5-25

- 2. <u>Upon exiting the search area</u>, make another slash to form an "X" (the agency or group ID will be in the left quadrant). Enter the search "time out" In the top quadrant.
  - Right quadrant: Enter the areas of the structure searched and any specific information about hazards.
  - Lower quadrant: Enter information about the victims found in the search area. "L" represents living victims, while "D" represents dead victims. The search marking on the front of a structure or building should contain the total number of victims, whereas search markings inside the structure or building will include victim totals for specific search areas. Also indicate where victims have been taken.

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

#### **INSTRUCTOR GUIDANCE**

#### CONTENT



Review the example of the completed search marking, quadrant by quadrant.

Explain what type(s) of markers the CERTs should use (e.g., lumber crayons, chalk, etc.) and suggest where to purchase markers if they are not provided.

#### **Display Slide 5-26**



### Does anyone have any questions about search markings?

# Search Methodology Call out to victims, "If anyone can hear my voice, come here" Ask any victims who do respond for more information about the building or others who may be trapped Victims might be in shock or confused

#### Search Methodology

Upon entering each space or room, <u>call out to victims</u>. Shout something like, "If anyone can hear my voice, come here." If any victims come to you, ask them for any information that they may have about the building or others who may be trapped, then give them further directions such as, "Stay here" or "Wait outside" (depending on the condition of the building).

Remember that even those who are able to get to you may be in shock and confused. When giving directions to victims, CERT members should look directly at the victims, speak in short sentences, and keep their directions simple.

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#### Display Slide 5-27

#### **INSTRUCTOR GUIDANCE**

#### CONTENT

2. Use a systematic search pattern. Ensure that all

systematic search patterns to use include:

areas of the building are covered. Examples of



- Bottom-up/top-down
  - Right wall/left wall

Emphasize that every interior space has six sides — including the floor and ceiling. Rescuers must check all six sides especially to locate hazards such as fixtures that may be hanging from the ceiling.

Display Slide 5-28

3. <u>Stop frequently to listen</u>. Listen for tapping, movement, or voices.



#### Display Slide 5-29

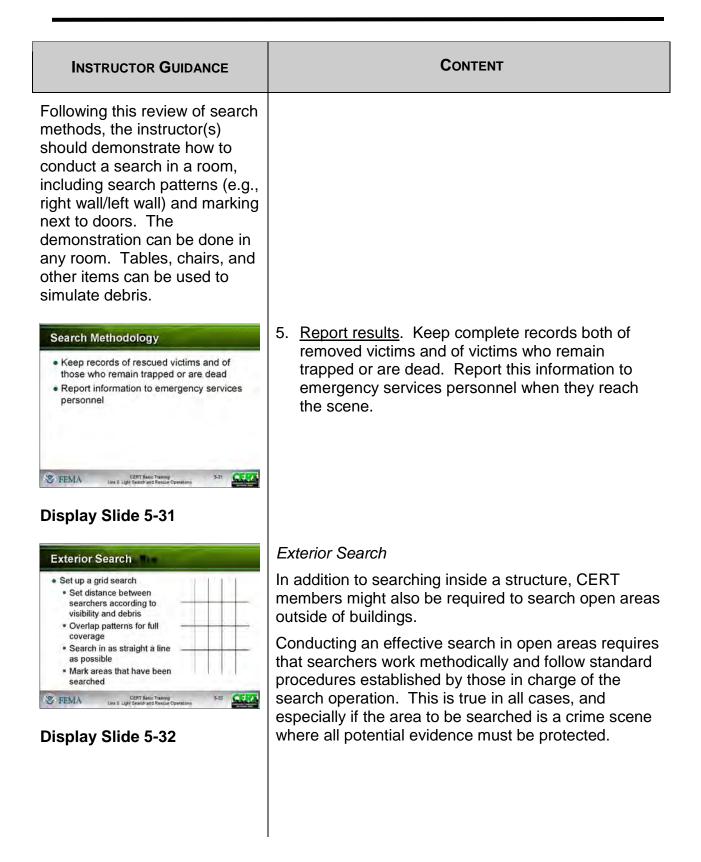


Display Slide 5-30

4. <u>Triangulate.</u> Triangulation can be used when a potential victim's location is obscured. If access permits, three rescuers, guided by victim sounds, form a triangle around the area and direct flashlights into the area. The light shining from different directions will eliminate shadows that could otherwise hide victims.

Emphasize that triangulation should not be used as an initial search method.

#### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**



### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	When searchers are needed, they assemble in a central staging area and sign in. Authorities will brief the searchers on what they will be looking for, what areas they are responsible for searching, the pattern of the search, and what they should do if they discover the missing person, evidence, or related information.  Exterior search patterns include grid, line, quadrant or zone, and spiral. A grid pattern is typically used in
	large open areas or small areas when a hands-and-knees search is conducted.
	Tell participants that these guidelines should be followed in a grid search.
	The area to be searched is viewed as a grid, with searchers initially positioned at one side of the grid.
	The distance between the searchers should be set according to visibility and debris. In all cases, searchers must remain within line of sight and voice contact with searchers on either side of them.
	It is also critical that the area to be covered by each searcher overlaps that of the searchers on either side of them.
	The searchers proceed, maintaining as straight a line as possible across the entire search area. As each searcher moves across the area, they conduct a thorough search for victims within their designated row of the grid.
	In order to ensure full coverage, CERTs must record each area that has been searched.
	Explain that a grid search might be particularly useful following a tornado or hurricane.

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
?	Are there any questions about planning and conducting search operations or the methods involved in an effective search?
	Tell the participants that the next section will deal with conducting rescue operations.
Rescue Operations	Conducting Rescue Operations
Remove objects and debris to free victims and create safe rescue environment     Triage victims	Introduce this topic by telling the participants that rescues involve three primary functions:
Remove victims     Remove debris	<ul> <li>Moving objects and debris to free victims and to create a safe rescue environment</li> </ul>
FEMA CERT Sales Training 5-33 CERT Unit S Light Search and Revoue Operations	<ul> <li>Triaging victims by checking for the "three killers," airway obstruction, major bleeding, and shock</li> </ul>
Display Slide 5-33	<ul> <li>Removing victims as safely and as quickly as possible</li> </ul>
	Stress that rescuer safety is always the top priority.
	Explain that the three primary functions of rescue will be addressed separately.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

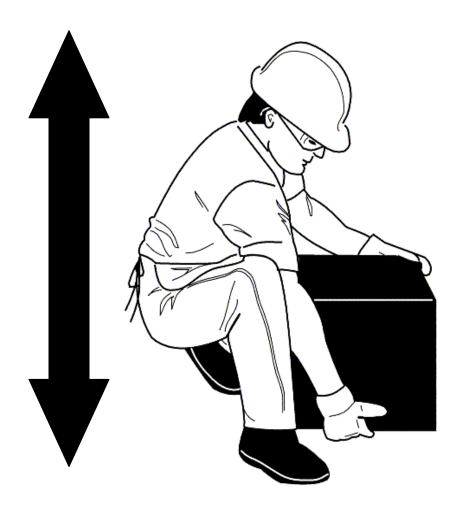
### CONTENT INSTRUCTOR GUIDANCE Creating a Safe Environment Creating a Safe Environment Maintain rescuer safety Tell participants that there are three safety . Triage in lightly and moderately considerations for all rescue operations: damaged buildings Evacuate victims as quickly as possible To maintain rescuer safety To triage in lightly and moderately damaged buildings ₩ FEMA GERT Basic Training Line E. Light Search and Rescue To evacuate victims as quickly as possible from moderately damaged buildings while minimizing **Display Slide 5-34** additional injury Emphasize that none of these can be achieved without creating as safe an environment as possible before attempting rescue. There are, therefore, certain precautions that rescuers must take to minimize risk. **Precautions to Minimize Risk** Precautions to Minimize Risk Stress that there are certain precautions that rescuers . Know your limitations must take to minimize risk and increase their chances · Follow safety procedures of achieving their rescue goals. Remove debris by: Leveraging Cribbing Know your limitations. Many volunteers have been injured or killed during rescue operations because they did not pay attention to their own physical and **ॐ** FEMA GERT Basic Training Link E. Light Search and Rescur Operato mental limitations. CERT rescuers should take the time to eat, drink fluids, rest, and relax so that they **Display Slide 5-35** can return with a clear mind and improved energy.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# CONTENT **INSTRUCTOR GUIDANCE Proper Lifting Procedures** Follow safety procedures. CERT members should always use the proper safety equipment required Back straight for the situation and follow established procedures, Bend knees including: Keep load close to body Work in pairs. Push up with legs Triage and treat only in lightly damaged buildings. In moderately damaged buildings, triage only and remove victims as quickly as possible. **Display Slide 5-36** Never enter an unstable structure. Lift by bending the knees, keeping the back straight, and pushing up with the legs. Carry the load close to the body. Lift and carry no more than is reasonable. Remove debris. Remove debris as needed to minimize risk to rescuers and to free entrapped victims. Refer the participants to the diagram titled *Proper* PM, P. 5-28 Body Positions for Lifting in the Participant Manual.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

PM, P. 5-28	Proper Body Position for Lifting
PM, P. 5-28	Proper Body Position for Lifting



Proper body position for lifting showing the back straight and lifting with the knees

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	Content
Leveraging and Cribbing  For heavy lifting Performed in tandem Helps extricate victims  CERT BASIC TRANSIT BASIC TRANSITY UNIX 5. Light Search and Record Operations  Solve FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  Solve FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  Solve FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  Solve FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  Solve FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  Solve FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  Solve FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  SOLVE FEMA  CERT BASIC TRANSITY LIGHT SEARCH AND RECORD OPERATIONS  CERT BASIC TRANSITY  CERT B	<ul> <li>Leveraging and Cribbing</li> <li>Tell the participants that they may encounter situations in which debris needs to be moved to free victims. In these situations, CERT rescuers should consider leveraging and cribbing to move and stabilize the debris until the rescue is complete.</li> <li>Leveraging is accomplished by wedging a lever under the object that needs to be moved, with a stationary object underneath it to act as a fulcrum. When the lever is forced down over the fulcrum, the far end of the lever will lift the object.</li> <li>A crib is a wooden framework used for support or strengthening. Box cribbing means arranging pairs of wood pieces alternately to form a stable rectangle.</li> </ul>
PM, PP. 5-31 through 5-33	Refer the participants to the section titled <i>Leveraging</i> and <i>Cribbing</i> in the Participant Manual, for a description of a leveraging and cribbing operation and an illustration of procedures for cribbing.
Demonstrate leveraging and cribbing for the group. Show box cribbing and "unboxed" cribbing.	Explain that leveraging and cribbing are used together by alternately lifting the object and placing cribbing materials underneath the lifted edge to stabilize it.  Safety is number one: "Lift an inch; crib an inch." Caution that leveraging and cribbing should be gradual — both for stability and to make the job easier.

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	It may also be necessary to use leveraging and cribbing at more than one location (e.g., front and back) to ensure stability. Emphasize that leveraging and cribbing at opposite ends should never be done at the same time because doing so will increase the instability of the debris. Suggest that, if leveraging is required at both ends, the participants should lift and crib at one end, then repeat the process at the other end.
	Explain that positioning the pry tool and the fulcrum correctly is critical for safe operations. The fulcrum and pry tool must be perpendicular (90 degrees) to the edge of the object being lifted. Also, attempting to leverage a heavy object using too sharp an angle is inefficient and can result in back injury.
	Caution the group that box cribbing is stable, but it requires pieces of cribbing material of relatively uniform size. When such material is not available, "unboxed" cribbing can also work effectively to support and stabilize the heavy object.
	Tell the participants that a variety of cribbing materials may be used for these procedures and provide suggestions (e.g., tires or structural debris). Emphasize the importance of improvising, and encourage them not to put form over function.
	Warn the participants that when they are able to achieve sufficient lift, they should remove the victim and reverse the leveraging and cribbing procedure to lower the object. Stress that they should never leave an unsafe condition, unless the structure or building is obviously compromised.

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

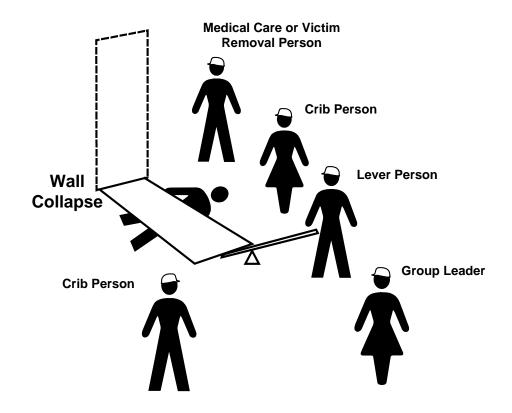
INSTRUCTOR GUIDANCE	CONTENT
	Tell the group that when they must remove debris to locate victims, they should set up a human chain and pass the debris from one person to the next. Caution them, however, to set up the chain in a position that will not interfere with rescue operations.
	Remind them to wear their PPE to protect themselves at all times. Note that kneepads can be an important addition to their PPE during rescue operations.
<b>?</b>	Ask the group several "What would you do if?" questions to ensure that they understand the material.
When asking the questions, set up a brief scenario and ask what the participants would do in that situation.	
<b>?</b> €	Does anyone have any questions about safety precautions and leveraging and cribbing during rescue operations?
	When it is clear that the participants understand the concepts, tell them that the next section will cover moving victims.

# COMMUNITY EMERGENCY RESPONSE TEAM UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

PM, P. 5-31 through 5-33 Leveraging and Cribbing
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- 1. Conduct a sizeup of the scene: Gather facts, identify hazards, and establish priorities.
- 2. Have one person in charge and formulate a plan of action, based upon the information you have received, to identify <u>how</u> and <u>where</u> to lift and crib and how the victim will be removed from underneath the debris.
- Gather necessary materials for lifting/cribbing operations: Lever, fulcrum, cribbing blocks, spacers/wedges. During an actual emergency, you may have to use creative, substitute materials.
- 4. Use cribbing materials to stabilize the object prior to lifting.
- 5. Distribute cribbing materials as necessary to be readily accessible during the lifting operation.
- 6. Prepare to lift the object: Assemble the lever and fulcrum at the previously identified location.
- 7. Assign a person to monitor and be ready to remove the victim as soon as possible.
- 8. Initiate the lift, using the lever and fulcrum for mechanical advantage.
- 9. As the object is lifted, add cribbing as needed, one layer at a time.
- 10. When the object is adequately supported, remove the lever and fulcrum. The victim may then be removed.
- 11. Unless the structure is obviously compromised and you need to evacuate immediately, reinitiate the lift and begin removing cribbing materials, reversing the process by which the crib was built.
- 12. Progressively lower the object to the ground. Always return the heavy object to a stable position unless you have to evacuate immediately.
- 13. Before you leave, remember to collect the lifting/cribbing supplies to be available for additional operations.

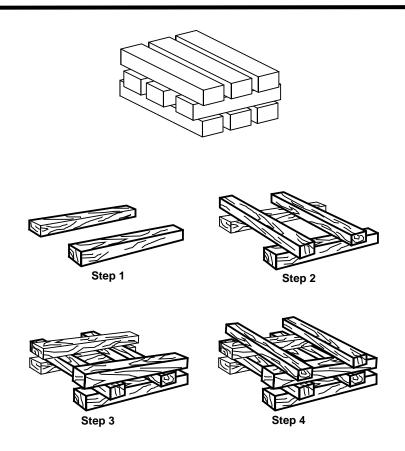
### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**



Team organization for leveraging/cribbing operation, showing the victim underneath a collapsed wall and the CERT members at the following locations:

- Group Leader: In front of collapse, positioned so that he or she can view the entire operation while remaining out of the rescuers' way
- Lever Person: At the front edge of the collapsed wall and positioned so that he or she can position a fulcrum and lever under the wall
- Crib Persons: On either side of the collapsed wall and positioned to enable the placement of cribbing as the wall is raised with the lever
- Medical Care/Victim Removal Person: Next to the Crib Person who is closest to the victim's head

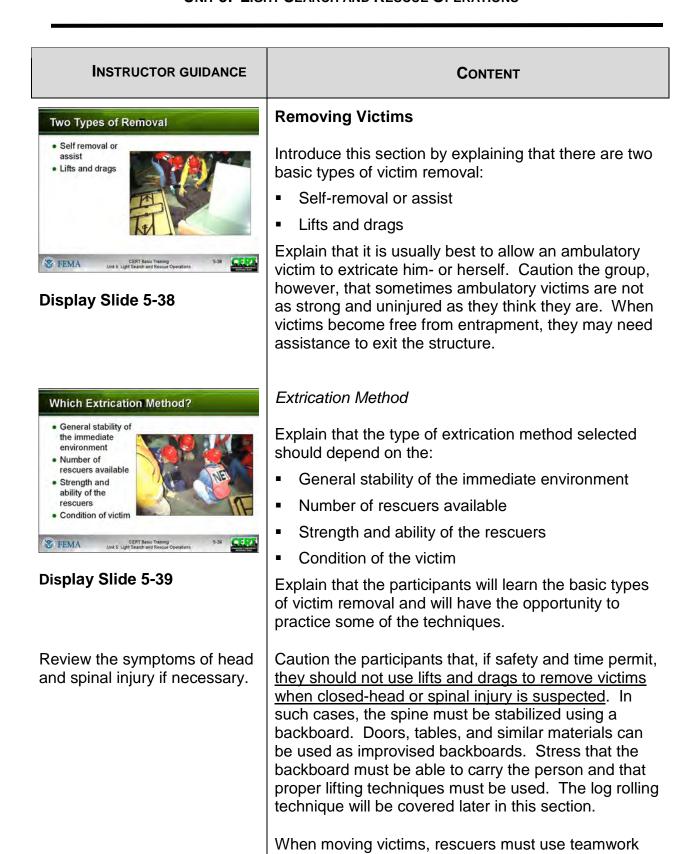
### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**



### Four steps for building box cribbing:

- **Step 1:** Position two pieces of wood parallel to each other on either side of the collapse.
- **Step 2:** Place two pieces of wood perpendicularly across the base pieces.
- **Steps 3 and 4:** Add additional layers of wood, with each perpendicular to the previous level.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**



### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

### INSTRUCTOR GUIDANCE CONTENT and communication and keep the victim's spine in a straight line. Remember, rescuer safety and the condition of the building will dictate the approach. PM, PP. 5-38 and 5-39 Point out that there are several types of lifts and carries. Refer the participants to the illustrations titled Types of Lifts and Carries in the Participant Manual. Demonstrate these carries. Then, have all participants who are physically able pair up and practice the carries themselves. Give permission for participants to opt out of any carry with which they don't feel comfortable. Remind the participants that CERT members' safety is the number one priority.



### **Display Slide 5-40**

### One-Person Arm Carry

For example, if some participants are physically able and the victim is <u>small</u>, they may use the one-person arm carry to lift and carry the victim themselves by:

- Reaching around the victim's back and under the knees
- Lifting the victim while keeping the rescuer's back straight and lifting with the legs

Consider the size of the victim and the distance he or she needs to be carried before using this carry.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**



**Display Slide 5-41** 

### CONTENT

Pack-Strap Carry

Tell the participants that another way for a single rescuer to lift a victim safely is by using the one-person pack-strap carry. Using this method, the rescuer should:

- Step 1: Stand with his or her back to the victim.
- Step 2: Place the victim's arms over the rescuer's shoulders and grab the hands in front of the rescuer's chest.
- Step 3: Hoist the victim by bending forward slightly, until the victim's feet just clear the floor.

Note: The pack-strap carry is most effective for quick removal of a victim over a short distance.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# Two-Person Carry CERT Basic Training Unit 5: Light Search and Rescue Operations 5-42

### Display Slide 5-42

Demonstrate this lift using a participant volunteer as the victim. Allow all participants who are physically able to practice the lift: Assign the participants into groups of three (two rescuers and one victim), and rotate roles so that each person has a chance to try the two rescuer positions.

### CONTENT

### Two-Person Carry

Explain that the victim's upper body will weigh more than his or her lower body; therefore, rescuers with greater body strength should be positioned at the victim's upper body.

Explain that victim removal is easier when multiple rescuers are available. With two rescuers, a victim may be removed using a two-person carry.

- Rescuer 1: Squat at the victim's head and grasp the victim from behind around the midsection. Reach under the arms and grasp the victim's left wrist with rescuer's right hand, and vice versa. Crossing the wrists creates a more secure hold on the victim and also pulls the victim's arms and elbows closer to their body. This will be helpful if the victim is carried through any narrow passages.
- Rescuer 2: Squat between the victim's knees, facing either toward or away from the victim. Note that, if the rescuers will carry the victim over uneven areas such as stairs, the rescuers will need to face each other. Grasp the outside of the victim's legs at the knees.
- Both rescuers: Rise to a standing position simultaneously, keeping backs straight and lifting with the legs. Walk the victim to safety.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# Chair Carry CERT Baso Training Unit 5: Light Search and Rescue Operations S-43

### **Display Slide 5-43**

Using a sturdy, non-swivel chair, demonstrate this carry using two instructors as rescuers and a volunteer participant as a victim.

Then, have all participants who are physically able practice the carry, working in the same three-person groups.



### **Display Slide 5-44**

### CONTENT

### Chair Carry

Demonstrate that two rescuers can also remove a victim by seating him or her on a chair:

- Rescuer 1: Cross the victim's arms in his or her lap. Facing the back of the chair, grasp the back upright.
- Rescuer 2: Grasp the two front legs of the chair.
- Both rescuers: Tilt the chair back, lift simultaneously, and walk out.

Explain that it is best to use a sturdy, non-swivel chair for this lift.

Note that, if rescuers will need to carry the victim over uneven surfaces such as stairs, the rescuers must face each other.

### Blanket Carry

Tell the participants that they can use the blanket carry for victims who cannot be removed by other means. Caution the participants that the blanket carry requires four to six rescuers to ensure stability for the victim and that one rescuer must be designated the lead person:

- Step 1: Position a blanket next to the victim, ensuring that the blanket will extend under the victim's head.
- Step 2: Tuck the blanket under the victim, and assist the victim in moving to the center of the blanket. If necessary, use the log rolling technique to position them on the blanket.

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	Step 3: With three rescuers squatting on each side, roll up the edges of the blanket against the victim to grasp a "handle." The lead person checks the team for even weight distribution and correct lifting position.
	Step 4: The lead person calls out, "Ready to lift on the count of three: One, two, three, lift."
	Step 5: The team lifts and stands in unison — keeping the victim level — and carries the victim feet first.
Ask participants to volunteer to demonstrate log rolling and the blanket carry. Make sure that	Point out that the team must also lower the victim together, using the following steps:
	Step 1: The lead person calls out, "Ready to lower on the count of three: One, two, three, <i>lower</i> ."
all participants have an opportunity to practice using the carry.	Step 2: The team lowers the victim in unison, exercising caution to keep the victim level.
	Explain that a variety of materials — such as blankets, carpets, and folded tables — can be used as improvised stretchers.
Log Rolling to The	Log Rolling
CERT Basic Training Unit 5: Light Search and Rescue Operations  5-45	Explain that log rolling should be used to move victims with a <u>suspected</u> or confirmed cervical spine injury. If the victim is unconscious, assume he or she has a cervical spine injury. The rescuer at a victim's head should give commands as fellow rescuers roll the victim as a single unit onto the blanket, backboard, or other support.
Display Slide 5-45	

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

PM, P.5-38 and 5-39

### **Types of Lifts and Carries**

### **One-Person Arm Carry**

One-Person Arm Carry, with the rescuer holding the victim around the victim's back and under the knees.



### **One-Person Pack-Strap Carry**

One-Person Pack-Strap Carry in which the rescuer places the victim's arms over his or her shoulders and grabs the victim's wrists over his or her chest, then hoists the victim by bending over slightly.



### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

### Two-Person Carry

Two-Person Carry in which Rescuer 1 squats at the victim's head and grasps the victim from behind at the midsection. Rescuer 1 should use his right hand to grab the victim's left wrist, and vice versa. Rescuer 2 squats between the victim's knees, grasping the outside of the knees. Both rescuers rise to a standing position."



### **Chair Carry**

Chair Carry in which the victim is placed in a sturdy, non-swivel chair and tilted backward as rescuers lift the victim. This carry requires two rescuers. If possible, secure victim to the chair.



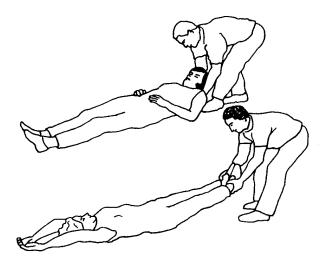
Note that, if rescuers will need to carry victim over uneven surfaces, such as stairs, the rescuers must face each other.

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
PM, P. 5-41	Point out that rescuers can also drag a victim out of a confined area by grasping either under the arms or the feet and pulling across the floor. Refer the participants to the diagram titled <i>Correct Drag Techniques</i> in the Participant Manual for an illustration. Caution the participants, however, that unless there is no other way to remove the victim and the victim's removal is time critical, they should not use this drag when debris may cause additional injury.
Blanket Drag to The	Explain that, when necessary, one rescuer can use the blanket drag by following these steps:  Step 1: Wrap the victim in a blanket.  Step 2: Squat down and grasp an edge of the
FEMA CERT Basic Training Unit 5: Light Search and Rescue Operations  5-46	blanket.  Step 3: Drag the victim across the floor.
Display Slide 5-46	
<b>?</b>	Does anyone have any questions about rescue operations or victim removal?
	Explain that the participants will now have an opportunity to practice some of the victim removal techniques.

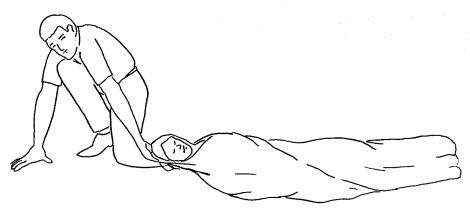
### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

PM, P.5-41 Correct Drag Techniques	
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**Correct Drag Technique** 

Correct drag technique, showing the rescuer grasping the victim by either the feet or shoulders and dragging him or her clear of the hazard



**Blanket Drag** 

Blanket drag, showing the victim wrapped in a blanket with the rescuer squatting at the victim's head. The rescuer grasps the blanket behind the victim's head and drags him or her clear of the hazard.

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
Instructor(s) should move from team to team and offer coaching as needed.  Ask the teams to stay together for the next activity of the class, the Victim Extrication exercise.	Exercise: Victim Carries  Purpose: Explain that this exercise will provide participants with an opportunity to practice different drags and carries to safely move victims.  Instructions:  1. Break the class into teams of seven.  2. Tell all teams to practice each of the carries.  • Tell class that members of each team will volunteer to be "victims."  • Explain that the "victims" and "rescuers" must trade off roles so that everyone on the team
	<ul> <li>has an opportunity to practice the drags and carries as a "rescuer."</li> <li>Emphasize that each person must pay attention to their own limitations. Each person should attempt only those drags or carries that will be safe for them to perform.</li> <li>3. Provide blankets, chairs, and back boards, if available, and encourage students to use each item as they practice performing drags and carries.</li> <li>4. Make sure teams trade off "victim" and "rescuer"</li> </ul>
	roles so that everyone on each team has a chance to practice the drags and carries.  5. Emphasize that participants know their own limits! Tell participants not to attempt any lift or carry that will not be safe for the rescuer and the victim.

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	Content
This exercise is best conducted by two instructors. Instructors should provide guidance to each team as they perform their extrication.  A more realistic scenario can be created by using two or three rooms simultaneously, so that there are several "rescues" occurring at once.  Mannequins or rescue dummies should be used as the entrapped victims at the "collapse sites," allowing all members of the group to practice as rescuers.  If there are more groups of seven then there are "collapse sites," have one group observe while another conducts extrication at one site. When groups rotate, observers and rescuers will switch.  Instructors should observe each group and correct errors that they see.	Purpose: Explain that this exercise will provide the participants with an opportunity to practice the removal of entrapped victims from a damage site, using leveraging/cribbing and drags and carries. Participants will be assigned to groups and told to do a room search, locate victims, and remove the victims.  Instructions:  1. Assign the participants to groups of seven. 2. Arrange the victims at the "collapse site(s)," using desks, shelves, etc., to represent debris. Place other items haphazardly around the victims. Make sure that there are items available that can serve as levers (e.g., 2 by 4s), fulcrums, and cribbing material. 3. Instruct the groups to: a. Enter their respective "collapse site" rooms b. Do a room search c. Locate the victims and use leveraging and cribbing procedures to free them d. Use appropriate lifts and drags to remove the victims from the room (and, if possible, from the building)  4. Rearrange the victims and "debris," and repeat the exercise until each participant has had an opportunity to practice being a rescuer and each team has practiced at two "collapse sites."  Discuss the exercise with the entire group, focusing on any differences between the teams' techniques and experiences.

### **UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS**

# Instructor Guidance Unit Summary • You should know: • How to decide whether to attempt rescue • The objectives of interior and exterior search and rescue • How to perform search and rescue sizeup • Building markings • Rescue functions • How to remove debris • How to extricate victims CERT Search Training Unit S. Light Search and Rescue Coperations Serial Search and Rescue Coperations

### Display Slide 5-47

### CONTENT

### **Unit Summary**

Summarize the key points in this unit:

- The decision to attempt a rescue should be based on:
  - The risks involved
  - Achievement of the overall goal of doing the greatest good for the greatest number
- The objectives of interior and exterior search and rescue are to:
  - Maintain rescuer safety at all times
  - Rescue the greatest number of people in the shortest amount of time
  - Get the walking wounded and ambulatory victims out first
  - Rescue the lightly trapped victims next
- Remind the participants that CERTs are restricted to light search and rescue. Their mission when dealing with heavily damaged structures or situations that are clearly unsafe (e.g., rising or swiftly moving water) is to warn others.
- Search and rescue sizeup follows the same process as sizeup for other CERT operations.
   Sizeup continues throughout search and rescue efforts and provides information about how to proceed. Should sizeup indicate that evacuation of the team is necessary, the CERT mission is to ensure safety and organization during the evacuation.

### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	When the decision to begin search operations is made, CERT searchers must:
	<ul> <li>Employ appropriate search techniques</li> </ul>
	<ul> <li>Locate any victims and check for the "three killers"</li> </ul>
	<ul> <li>Locating victims means completing a sizeup of the building interior to identify areas of entrapment, then conducting a search that:</li> </ul>
	<ul> <li>Is systematic and thorough</li> </ul>
	<ul> <li>Avoids unnecessary duplication of effort</li> </ul>
	Documents results
	Rescue involves three main functions:
	<ul> <li>Creating a safe environment</li> </ul>
	Triaging or stabilizing victims
	<ul> <li>Removing victims based on the sizeup</li> </ul>
	Rescue operations hinge on maintaining rescuer safety, which requires CERT members to recognize their own limitations. CERT members should <i>never</i> attempt anything that exceeds their limitations at that point in time.
	Leveraging and cribbing may be used to lift heavy debris and give access to trapped victims.

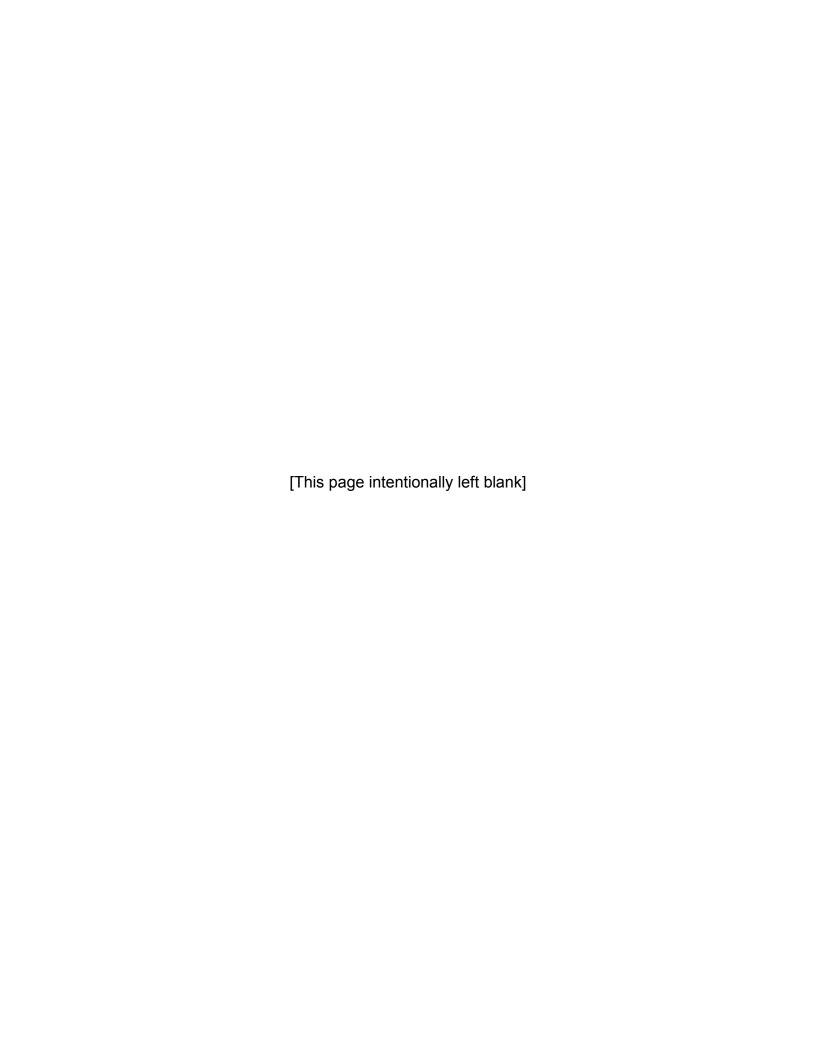
### UNIT 5: LIGHT SEARCH AND RESCUE OPERATIONS

INSTRUCTOR GUIDANCE	CONTENT
	Victims can be removed in a number of ways, depending on:  Their condition  The number of rescuers available  The strength and ability of the rescuers  The stability of the environment  Remind the participants of the lifts and drags that they found easier to accomplish and suggest that they use those drags and carries when circumstances permit.  If the building's condition allows, victims with suspected head or spinal injury should be stabilized on some type of backboard before being removed. When possible, these removals should be deferred to
?	trained EMS personnel.  Does anyone have any questions about anything covered in this unit?
Homework Assignment	Homework Assignment
1. Read unit to be covered in next session 2. Bring necessary supplies to next session 3. Wear appropriate clothes to next session  CERT Sale: Training  LINLE Light Search and Rescue Operations  5-48	Ask the group to read and become familiar with the unit that will be covered in the next session.  Thank the participants for attending the session.  Remind them of the time and location of the next session, if necessary.
Display Slide 5-48	

# **UNIT 6: CERT ORGANIZATION**

In this unit you will learn about:

- **CERT Organization:** How to organize and deploy CERT resources according to CERT organizational principles.
- Rescuer Safety: How to protect your own safety and your buddy's during search and rescue.
- Documentation: Strategies for documenting situation and resource status.
- Team Organization: A tabletop exercise to apply your knowledge of team organization.



### **UNIT 6: CERT ORGANIZATION**

### **OBJECTIVES**

At the conclusion of this unit, the participants should be able to:

- Describe the CERT structure.
- Identify how CERTs interrelate with the Incident Command System (ICS).
- Explain documentation requirements.

### SCOPE

The topics that will be discussed in this unit are:

- Introduction and Unit Overview
- CERT Organization
- CERT Mobilization
- Documentation
- Activity: ICS Functions
- Tabletop Exercise
- Unit Summary

# ESTIMATED COMPLETION TIME

1 hour 45 minutes

# TRAINING METHODS

The lead instructor will begin this session by welcoming the participants to Unit 6: CERT Organization, and will introduce the instructors for the session. The instructor will then present a brief overview of this session.

Next, the instructor will introduce the concept of the CERT organization — its objectives, history, and characteristics — and how CERT efforts fit into the overall Incident Command System (ICS).

Next, the instructor will review how CERTs mobilize in a disaster situation. The instructor will introduce CERT decision-making, emphasizing the primary concern for rescuer safety. This discussion will include how CERT strategies are affected by the severity of structural damage.

Then, the instructor will describe CERT documentation requirements. The emphasis will be on the importance of CERT documentation. The instructor will introduce some of the forms that CERTs can use to document different types of information.

### **UNIT 6: CERT ORGANIZATION**

# TRAINING METHODS (CONTINUED)

Next, the instructor will conduct a brief activity during which the participants will match the five ICS functions with situations that could arise during a CERT deployment.

After all of the material is presented and discussed, the participants will take part in a tabletop exercise that will provide experience in CERT planning and tactics. The plan developed during the tabletop exercise will form the basis for the full-scale exercise in which the groups will participate during the final session.

### RESOURCES REQUIRED

- Community Emergency Response Team Instructor Guide
- Community Emergency Response Team Participant Manual
- PowerPoint Slides 6-0 through 6-21

### OTHER RESOURCES

If time permits, the 19-minute video *CERT in Action* is recommended for this unit. The video portrays a CERT activating and setting up an ICS immediately following a major storm and conducting search, rescue, and medical operations according to CERT protocols. The video is available for download at the national CERT Web site, www.citizencorps.gov/CERT/.

### **EQUIPMENT**

The following additional equipment is required for this unit:

- A computer with PowerPoint software
- A computer projector and screen

### **PREPARATION**

<u>Crime scene protocols</u>. Consider whether or not you want to include basic crime scene protocols in this unit. If so, arrange for that information to be delivered.

<u>Forms.</u> A set of CERT documentation forms is included in the Instructor Guide and in the Participant Manual. Other options may also be used. If your local program decides to use any of the forms listed below, before conducting this unit replace the forms in this unit of the Instructor Guide and the Participant Manual. It is useful to include a blank form and an example of the same form with information filled in.

 Some local CERT programs develop their own CERT documentation forms and/or adapt forms used by the agency that sponsors the CERT program.

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### **UNIT 6: CERT ORGANIZATION**

# Preparation (Continued)

- Other CERT programs use forms originally developed by the Los Angeles CERT Program. These samples and other forms are available at <a href="https://www.cert-la.com/forms/forms.htm">www.cert-la.com/forms/forms.htm</a>. The forms should be adapted to fit your program needs.
- The National Incident Management System (NIMS) requires adoption of the Incident Command System (ICS). If your department's NIMS compliance plan includes the use of ICS forms, some of these forms could be considered for CERTs as well. All of the ICS forms are available at www.fs.fed.us/fire/planning/nist/ics\_forms.htm.

<u>Tabletop exercise.</u> For the tabletop exercise at the end of this unit, choose a situation that might occur in your community and to which your CERT would be deployed. Select and integrate into the exercise the hazards that your CERT members would face in the event. Select an actual location in your community and create maps of the scene to make the scenario more realistic.

As part of the exercise, you may wish to develop a list of potential situations that could occur in your community and ask the participants to prioritize their responses based on the goal of doing the greatest good for the greatest number.

<u>Culturally Sensitive Topics.</u> Working with a representative of the community in which you will be teaching, identify any potentially culturally sensitive topics in this module. Develop strategies for presenting any such topics in ways that will engage, rather than offend, participants.

In particular, look at ways to make the end-of-unit tabletop exercise culturally appropriate to the target audience. Consider how participants may react to discussions of leadership and other ICS roles. Some audiences may find the chain-of-command structure to be rigid and uncomfortable. Be sure to explain the critical importance of all ICS roles, and point out that the incident commander role is no more or less important than any other role. Focus on the concept of teamwork and the importance of team structure in a disaster.

# C COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

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# **Unit 6: CERT Organization**



### Display Slide 6-0

# Introductions and Unit Overview

CONTENT

### Welcome

Welcome the participants to Unit 6 of the *CERT Basic Training*.

Introduce the instructors for this unit and ask any new instructors to describe briefly their experience with CERT organization.

Remind the participants that in previous units they learned specific strategies and tasks to use in specific situations. Tell them that in this session they will use that knowledge in a team environment, using the CERT organization as a foundation.

Remind the group that they recently learned about teamwork during medical triage and search and rescue operations. Point out that team organization concepts can help them both operationally and psychologically. Working together and looking out for each other are important aspects of successful teams.

### **UNIT 6: CERT ORGANIZATION**

INSTRUCTOR GUIDANCE	CONTENT
	Briefly review Light Search and Rescue Operations.
?	What is one of the objectives of interior and exterior searches?
<ul> <li>Correct response:</li> <li>Maintain rescuer safety at all times.</li> <li>Rescue the greatest number of people in the shortest amount of time.</li> <li>Get the walking wounded and ambulatory victims out first.</li> <li>Rescue the lightly trapped victims next.</li> </ul>	What is the CERT mission for an interior search if the damage to the building is heavy?
Correct response:  Secure the perimeter and warn others.	

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### **UNIT 6: CERT ORGANIZATION**

INSTRUCTOR GUIDANCE	CONTENT
<b>?</b> **	There are some specific techniques to follow when conducting an interior search. What are they?
Correct response:	
<ul> <li>When you enter a space or room, call out to victims.</li> <li>Use a systematic search pattern.</li> <li>Check six sides.</li> <li>Stop frequently to listen.</li> <li>Triangulate.</li> <li>Document and report.</li> </ul>	
<b>?</b>	What is one way to remove debris and get access to trapped victims?
Correct response:	
Leveraging and cribbing	
Correct response:	There are several ways to remove a victim who can't walk on his or her own. How should you move a victim with a suspected cervical spine injury?
As a team, use the log rolling technique to roll the victim as a single unit onto a blanket, backboard, or other support, e.g., door or table.	

### **UNIT 6: CERT ORGANIZATION**

### **INSTRUCTOR GUIDANCE** CONTENT **Unit Objectives** Unit Objectives Tell the participants that at the end of this unit, they · Describe the CERT structure should be able to: · Identify how CERTs interrelate with ICS · Explain documentation requirements Describe the CERT structure. Identify how CERTs interrelate with the Incident Command System (ICS). Explain documentation requirements. **ॐ** FEMA CERT Basic Training Unit 6: CERT Organization CERT

### **Display Slide 6-1**



Display Slide 6-2

### **Unit Topics**

Preview the unit topics by telling the group that this unit will provide them with a thorough understanding of CERT organization and policy.

- **CERT Organization**
- **CERT Mobilization**
- Documentation

Note that effective CERT operations, like all aspects of emergency response, rely on effective communication.

Ask the group to note how frequently effective communication underlies the operational guidance to be covered in this unit.

#### **UNIT 6: CERT ORGANIZATION**

# **INSTRUCTOR GUIDANCE** CONTENT Principles of Onscene Management CERT Organization · Maintain the safety of disaster workers · Provide clear leadership and organizational structure **Principles of Onscene Management** · Improve effectiveness of rescue efforts Explain to the participants that onscene management in a disaster situation has three primary goals: Maintain the safety of disaster workers. The CERT GLU. ₩ FEMA CERT Basic Training Unit 6: CERT Organization Incident Commander/Team Leader (IC/TL) must continually prioritize response activities based on Display Slide 6-3 the team's capability and training and the principle that rescuer safety is the number one concern. CERT functional leadership assigns activities and accounts for team members. CERT members work in the buddy system and respond based on their sizeup of the situations that they encounter. Provide clear leadership and organizational structure by developing a chain of command and roles that are known by all team members. Each CERT member has only one person that he or she takes direction from and responds to. Improve the effectiveness of rescue efforts. Disaster information is collected and responses are prioritized based on rescuer safety and doing the greatest good for the greatest number according to the team's capabilities and training. Point out that the CERT organization is based on the Incident Command System (ICS), which is a proven management system used by emergency responders.

#### **UNIT 6: CERT ORGANIZATION**

# INSTRUCTOR GUIDANCE CERT Onscene Management • Well-defined management structure • Manageable span of control • Common terminology • Effective communication • Consolidated action plans • Comprehensive resource management • Accountability

## **Display Slide 6-4**

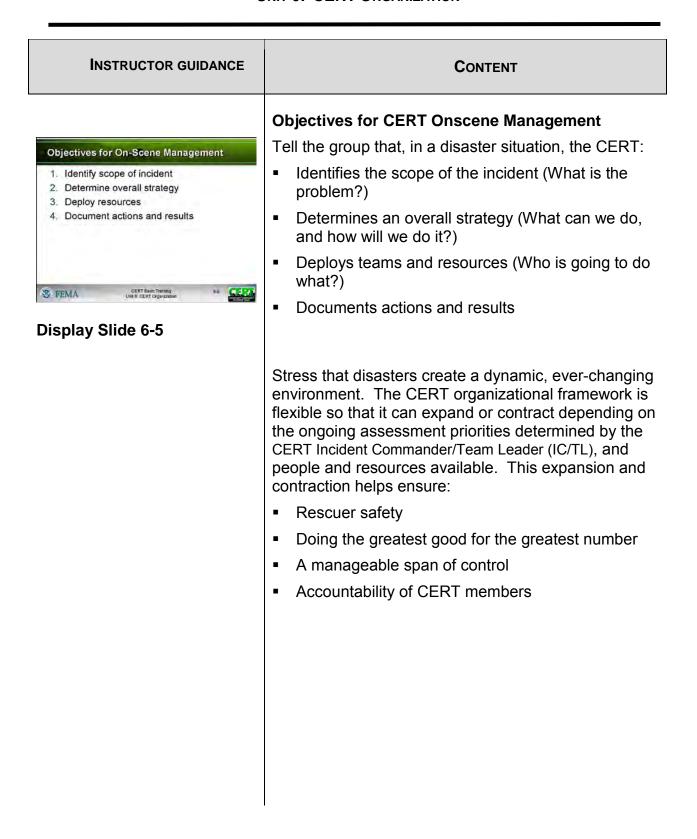
You may want to review some of the key terminology used by CERT (e.g., delayed, immediate, minor, dead; light, moderate, and heavy damage, etc.).

#### CONTENT

## **CERT Onscene Management**

Tell the participants that the specific CERT organizational structure and protocols provide:

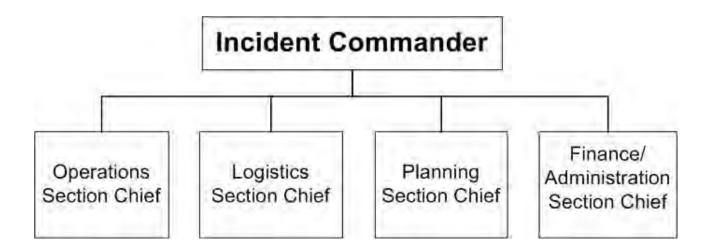
- A well-defined management structure (e.g., leadership, functional areas, reporting chain, working in teams)
- A manageable span of control that provides for a desirable rescuer-to-supervisor ratio of between three and seven rescuers per supervisor
- Common terminology that contributes to effective communication and shared understanding
- Effective communication among team members and with professional responders, including the use of radios
- Consolidated action plans that coordinate strategic goals, tactical objectives, and support activities
- Comprehensive resource management that facilitates application of available resources to the incident in a timely manner
- Accountability



#### **UNIT 6: CERT ORGANIZATION**

# **INSTRUCTOR GUIDANCE** CONTENT Incident Command System **Incident Command System** Tell the group that the Incident Command System Incident Commander (ICS) is the system used by emergency response agencies to manage emergency operations. When Finance/ dministration ection Chief Planning CERTs activate, they become part of that system. Explain that the basic ICS structure for CERT is established by the person who arrives first on the S FEMA CERT Basic Training Unit 6 CERT Organization CERT scene. This person becomes the Incident Commander/Team Leader (IC/TL). Initially, the IC/TL Display Slide 6-6 may handle all of the command positions of ICS but, as the incident evolves, he or she may assign personnel as needed to the four ICS Command Functions: **Operations Section Chief** Logistics Section Chief Planning Section Chief Finance/Administration Section Chief Emphasize to participants that through an effective ICS, all CERT members report through a chain of command to the IC/TL. The IC/TL reports to the first fire or law enforcement official at their location and takes direction from that person until otherwise directed or until the CERT is relieved. PM, P. 6-5 Refer the participants to the organization chart ICS Command Function Organization Chart in the Participant Manual and on the following page in the Instructor Guide.

PM, P. 6-5	ICS Command Function Organization Chart



# **UNIT 6: CERT ORGANIZATION**

Instructor Guidance	CONTENT	
	Emphasize that CERTs will typically require the Operations, Planning, and Logistics functions. The CERT Incident Commander/Team Leader (IC/TL) is responsible for handling or delegating each function.  Say that, as the incident expands, it may be necessary to assign other personnel in each section to handle specific aspects of the response while	
Emphasize this point.	maintaining an effective span of control.  Explain <u>briefly</u> the responsibilities of each standard ICS function. Be sure to emphasize that, though there are a number of detailed responsibilities under each ICS function, the system itself is straightforward.	
	CERT Incident Commander/Team Leader	
	<ul> <li>Provides overall leadership for incident response</li> </ul>	
	Ensures incident safety	
	Establishes incident objectives	
	<ul> <li>Is responsible for all functions until delegated</li> </ul>	
	<ul> <li>Delegates authority to others</li> </ul>	
	<ul> <li>Provides information to internal and external parties</li> </ul>	
	<ul> <li>Establishes and maintains liaison with other responders (e.g., fire, law enforcement, public works, other CERTs)</li> </ul>	
	Takes direction from agency official	
	Operations Section	
	<ul> <li>Directs and coordinates all incident tactical operations</li> </ul>	
	<ul> <li>Is typically one of the first functions to be assigned</li> </ul>	

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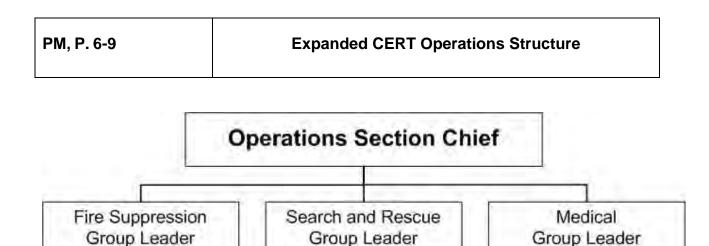
INSTRUCTOR GUIDANCE	CONTENT
	Planning Section  Tracks resource status (e. g., number of CERT members who have "reported for duty")  Tracks situation status  Prepares the Team's action plan  Develops alternative strategies  Provides documentation services  Logistics Section  Provides communications  Provides food and medical support to Team members  Manages supplies and facilities  Finance and Administration Section  Contract negotiation and monitoring  Timekeeping  Cost analysis  Compensation for injury or damage to property  Explain that Finance and Administration is a function in the formal Incident Command System; however, CERTs will have very limited need, if any, for this function.

#### **UNIT 6: CERT ORGANIZATION**

# INSTRUCTOR GUIDANCE CONTENT CERT Operations **CERT Operations** Command structure Explain to the group the following points about the CERT Incident Commander/Team Leader principles of ICS and how CERTs follow these (IC/TL) Command Post protocols: · Expanded structure as needed Each CERT must establish a command structure. The CERT Incident Commander/Team Leader (IC/TL) directs team activities. During activation ₹ FEMA CERT Basic Training Unit 6 CERT Organization CERT. for a disaster, the first person at a predesignated staging area assumes this responsibility. The Display Slide 6-7 initial IC/TL may hand off this role to a predesignated leader when that person arrives. The location established by the CERT IC/TL as the central point for command and control of the incident is called the Command Post for the CERT. The IC/TL stays in the Command Post. If the IC/TL has to leave, the responsibility of IC/TL must be delegated to someone in the Command Post. Using the ICS structure, CERT members are assigned to assist with a range of functions: Logistics — managing resources, services, and supplies Planning/Intelligence — collecting and displaying information; collecting and compiling documentation Operations — conducting fire suppression, medical operations, search and rescue

INSTRUCTOR GUIDANCE	CONTENT
	In all situations, each unit assigned <u>must have an identified leader</u> to supervise tasks being performed, to account for team members, and to report information to his or her designated leader. In all situations, a manageable span of control is three to seven team members reporting to their designated leader.
PM, P. 6-9	Refer the participants to the diagram <i>Expanded CERT Operations Structure</i> in the Participant Manual and on the following page of the Instructor Guide.

## **UNIT 6: CERT ORGANIZATION**



Search & Rescue

Team A

Search & Rescue

Team B

Search & Rescue

Team C

Medical

Team A

Medical

Team B

Medical

Team C

Fire Suppression

Team A

Fire Suppression

Team B

Fire Suppression

Team C

CERT operations section structure, showing the Operations Section Chief at the top and the three Group Leaders underneath

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#### **UNIT 6: CERT ORGANIZATION**

# INSTRUCTOR GUIDANCE CONTENT Dealing with the Media **Dealing with the Media** Refer media Explain that CERT members should refer any media inquiries to CERT inquiries to the CERT IC/TL. The IC/TL should then IC/TL Do not let media refer the media inquiries to the Public Information inhibit CERT goals Be careful about Officer of the CERTs' sponsoring organization. information released If the Public Information Officer of the sponsoring organization refers media to the CERT IC/TL or otherwise authorizes them to speak with the media, the **ॐ** FEMA CERT IC/TL should: Display Slide 6-8 Refrain from addressing the media until doing so will no longer inhibit or delay the team's ability to do the greatest good for the greatest number in the shortest amount of time Establish an area for briefing the media if necessary Be careful about the information he or she releases. making sure it is both accurate and approved for release, while also keeping in mind victims' right to privacy Not feel compelled to answer every question asked If your CERT has basic protocols for how to handle a crime scene, discuss those here. Does anyone have any questions about CERT structure or ICS?

#### **UNIT 6: CERT ORGANIZATION**

# NIMS Compliance Ability to work together IS-100.a: Introduction to ICS IS-700.b: Introduction to NIMS http://training.fema.g ov/IS/NIMS.asp

## Display Slide 6-9

Encourage participants to complete both IS-100 and IS-700. Remind them if your program requires CERT participants to complete IS-100 or 700 before they are considered official CERT members.

#### CONTENT

## **NIMS Compliance**

Conclude the discussion of ICS by noting that the Incident Command System is part of the National Incident Management System (NIMS). NIMS provides a consistent, comprehensive approach to incident management. It applies at all jurisdictional levels and across all emergency management functions and types of incidents.

Explain that NIMS was established so that first responders, including CERT members, from different jurisdictions and disciplines can work together better to respond to disasters and emergencies.

- To meet NIMS standards, CERT members must complete both the IS-100.a (Introduction to Incident Command System) and IS-700.b (Introduction to National Incident Management System [NIMS]) courses.
- Both independent study courses are available online from FEMA at <a href="http://training.fema.gov/IS/NIMS.asp">http://training.fema.gov/IS/NIMS.asp</a>.

Tell the participants that the next topic will be CERT mobilization.

Explain that some of the information will be a review of topics covered in Unit 5: Light Search and Rescue Operations.

#### **UNIT 6: CERT ORGANIZATION**

# CERT Mobilization CERTs take care of themselves, their families, their homes, their neighbors Proceed to predesignated staging area IC/TL is established, organizes the group IC/TL prioritizes actions Organization is flexible and evolves based on new information

## **Display Slide 6-10**

This description provides an explanation for CERT deployment based on the concept of a response to a catastrophic disaster. Each community needs to develop its unique standard operating procedure for CERT.

#### CONTENT

### **CERT Mobilization**

Introduce CERT mobilization by pointing out how CERTs mobilize when an incident occurs. Immediately following the incident, CERT members take care of themselves, their families, their homes, and their neighbors.

- If the standard operating procedure (SOP) calls for self-activation, CERT members proceed to the predesignated staging area with their disaster supplies. Along the way, they make damage assessments that would be helpful for the CERT IC/TL's decision-making.
- The first CERT member at the staging area becomes the initial IC/TL for the response. As other CERT members arrive, the CERT IC/TL may pass leadership to someone else. The CERT IC/TL establishes operations to ensure effective communication, to maintain span of control, to maintain accountability, and to do the greatest good for the greatest number without placing CERT members in harm's way.
- One of the CERT IC/TL's first decisions will be to locate the team's command post. The staging area may become the command post; however, if another location would be safer or otherwise better, the command post should be set up there.
- As intelligence is collected and assessed, the IC/TL must prioritize actions and work with the Section Chiefs or leaders. The CERT organization is flexible and evolves based on new information.

# **UNIT 6: CERT ORGANIZATION**

INSTRUCTOR GUIDANCE	CONTENT	
	Remind the group that, following an incident, information — and, therefore, priorities — may be changing rapidly. Communication between the CERT IC/TL and response teams ensures that CERTs do not overextend their resources or supplies.	
Rescuer Safety  Rescuer safety is first priority Heavy damage = No rescue Moderate damage = Locate, triage, evacuate Light damage = Locate, triage, continue sizeup, and document  CERT Base Travitor Use S CERT Day Side 6-11	Rescuer Safety Introduce rescuer safety by telling the participants that effective emergency scene management requires the formulation and communication of strategic goals and tactical objectives to do the most good for the greatest number while maintaining the safety of rescue personnel.  Remind the group that rescuer safety is paramount. The first question to ask is, "Is it safe for the CERT members to attempt the rescue?"  Emphasize that the answer to this question is based mainly on the degree of damage:  If the damage is heavy: No rescue should be attempted. Use tape around the area or mark the area as heavy damage. CERT members do not have any legal authority to stop or restrict someone who wants to enter an area. At best, CERT members can warn others about the danger and inform the CERT IC/TL immediately if it is known that people are in the building.	

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INSTRUCTOR GUIDANCE	CONTENT
	<ul> <li>If the damage is moderate: Locate, triage (quickly evaluate, and treat Immediates for airway obstruction, bleeding, and shock), and immediately evacuate victims to a safe area while minimizing both the number of rescuers inside the building and the amount of time that they remain inside.</li> <li>If the damage is light: Locate, triage, continue sizeup, and document.</li> </ul>
PM, P. 6-12	Refer the participants to the chart <i>CERT Rescue</i> Efforts Based on Degree of Damage in the Participant Manual and on the following page in the Instructor Guide. Specific strategies are identified for rescue efforts based on degree of damage. Review the strategies listed in the chart.
	Explain to the group that the extent of involvement for the various CERT functional teams varies depending on the level of damage encountered.

# C COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

PM, P. 6-12	CERT Rescue Efforts Based on Degree of Damage

Degree of Damage	Should Rescue Be Attempted?	
Heavy	No. Too dangerous to enter. Warn people to stay away. Inform the CERT Incident Commander/Team Leader (IC/TL) immediately if it is known that people are in the building.	
Moderate	Yes, but perform only quick and safe removals; limit onsite medical care to checking for breathing, stopping major bleeding, and treating for shock. Minimize the number of rescuers inside the building.	
Light	Yes. Locate, triage, continue sizeup, and document.	

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## **UNIT 6: CERT ORGANIZATION**

Instructor Guidance	CONTENT
PM, P. 6-13	Refer the participants to the figure titled <i>CERT Tasks Based on Damage Level</i> in the Participant Manual and on the following page in the Instructor Guide.

PM, P. 6-13	CERT Tasks Based on Damage Level

# **Light Damage Site**

Fire	Search & Rescue	Medical (on site)	Medical (off site)
- Shut off utilities as needed - Extinguish small fires - Document	- Locate - Triage - Treat airway/major bleeding - Continue sizeup - Document	Triage again     Move to treatment area     Head-to-toe assessment     Treatment     Facilitate transport as needed     Document	- Triage again - Head-to-toe assessment - Treatment - Facilitate transport as needed - Document

#### **Moderate Damage Site**

Fire	Search & Rescue	Medical (nearby)	Medical (off site)
Shut off utilities if safe Extinguish small fires Document	- Locate - Triage - Treat airway/major bleeding - Evacuate - Warn others - Continue sizeup - Document	Triage again     Move to treatment area (nearby safe location)     Head-to-toe assessment     Treatment     Facilitate transport as needed     Document	- Triage again - Head-to-toe assessment - Treatment - Facilitate transport as needer - Document
	Heav	y Damage Site	

Fire	Exterior Search & Rescue Only
- Shut off utilities if safe - Document	Mark area for heavy damage     Warn others     Gather information     Inform CERT IC/TL immediately     Document

Tasks required of Fire, Search and Rescue, Medical, and Treatment Area teams based on the degree of damage to the structure.

# **UNIT 6: CERT ORGANIZATION**

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#### **UNIT 6: CERT ORGANIZATION**

# Section Chiefs Provide Command Post with information Command Post Documents situation status Incident locations Access routes Identified hazards Support locations

### Display Slide 6-12



Record the participants' responses on chart paper and conduct a brief discussion based on their remarks.

#### CONTENT

### **Documentation**

Introduce the need to document by emphasizing the importance of documentation and communication about the disaster situation and resource status.

Stress that efficient flow of information makes it possible for resources to be deployed effectively and for professional emergency services to be applied appropriately.

# Why do you need to document what happens in an incident?

Recap the discussion by explaining that documentation can serve several purposes:

- The CERT IC/TL will know what is happening throughout the incident.
- The CERT IC/TL will have written information to pass on to the professional responders when they arrive.
- The CERT will be able to show how many volunteer hours it provided to the sponsoring agency or entity.
- Liability exposure will be documented.
- Communication will be improved:
  - Between the functional areas
  - Between shifts

INSTRUCTOR GUIDANCE	CONTENT
INSTRUCTOR GUIDANCE	Explain that, under the CERT structure, each level of organization has documentation responsibilities:  Section Chiefs are responsible for providing the Command Post with ongoing information about damage assessment, group status, and ongoing needs.  The Command Post is responsible for documenting the situation status, including:  Incident locations  Access routes  Identified hazards  Support locations  Note that support locations include:  A staging area  A medical treatment and triage area  A morgue, if there are fatalities  Stress that this information is vital for tracking the overall situation and that the CERT IC/TL must be ready to provide the documentation to the first professional responders on the scene.

#### **UNIT 6: CERT ORGANIZATION**

#### **INSTRUCTOR GUIDANCE**

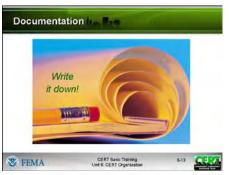
#### CONTENT

Explain that the most important thing to do is to write

Say that every entity such as a functional team or staging location must have a scribe to record

can be written down on a piece of paper.

down what happened. The information can be written down on the sample forms provided in this unit or it



everything. The IC/TL typically designates the scribe and provides some simple instructions.

**Display Slide 6-13** 

## **Documentation Forms**



Display Slide 6-14

Explain that there are eight standard forms that can be used to facilitate documentation and information flow. The forms are functionally consistent with Incident Command System (ICS) forms and are designed to be NIMS compliant.

The CERT forms are:

- Damage Assessment
- Personnel Resources Sign-In
- Incident/Assignment Tracking Log
- Briefing Assignment
- Victim Treatment Area Record
- Communications Log
- Equipment Inventory
- General Message

# **UNIT 6: CERT ORGANIZATION**

INSTRUCTOR GUIDANCE	CONTENT
	Reinforce with participants that scribes can produce useful, high-quality documentation without using the forms as long as they take detailed notes of all activities.
PM, P. 6-16 and 6-17	Refer the participants to the table Forms Used for Response Documentation in the Participant Manual and on the following pages of the Instructor Guide for examples.

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PM, P. 6-16 AND 6-17
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Form	Purpose
Damage Assessment [CERT Form #1]	<ul> <li>Completed by CERT members as they travel through the area to the CERT's staging location, then given to the CERT IC/TL; provides a summary of overall hazards in selected areas, including:</li> </ul>
	Fires
	Utility hazards
	Structural damage
	<ul> <li>Injuries and casualties</li> </ul>
	Available access
	Essential for prioritizing and formulating action plans
Personnel Resources Sign-In	Used to sign in CERT members as they arrive at the staging location; provides information about:
[CERT Form #2]	Who is on site
	When they arrived
	When they were assigned
	Their special skills
	<ul> <li>Used by staging personnel to track personnel availability</li> </ul>
Incident/Assignment Tracking Log [CERT Form #3]	<ul> <li>Used by the Command Post for keeping abreast of situation status; contains essential information for tracking the overall situation</li> </ul>
Briefing Assignment	Used by the Command Post to provide instructions to     functional teams used by teams to less their actions.
[CERT Form #4.a-b]	functional teams; used by teams to log their actions and report new damage assessment information
Victim Treatment Area Record	<ul> <li>Completed by medical treatment area personnel to record victims entering the treatment area, their condition, and their status</li> </ul>
[CERT Form #5]	,

# **UNIT 6: CERT ORGANIZATION**

Form	Purpose
Communications Log	Completed by the radio operator; used to log incoming
[CERT Form #6 (based on ICS 309)]	and outgoing transmissions
<b>Equipment Inventory</b>	Used to check out and check in CERT-managed
[CERT Form #7(based on ICS 303)]	equipment
General Message [CERT Form #8 (ICS 213)]	Used for sending messages between command levels and groups; messages should be clear and concise and should focus on such key issues as:
	Assignment completion  Additional resources required.
	Additional resources required
	Special information
	Status update

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#### **UNIT 6: CERT ORGANIZATION**

# INSTRUCTOR GUIDANCE CONTENT

# Display Slides 6-15 through 6-19

Displaying these five slides in sequence will allow you to "build" a diagram that demonstrates who owns which document and how that document is used in an event.





#### **Documentation Flow**

Explain how a CERT would use these standard documents within the context of an event. Remind participants that, even if the forms are not used, this should give them an idea of the preferred information that needs to be collected and communicated between groups.

- The <u>Damage Assessment Form</u> is completed by CERT members as they travel through the area to the CERT's staging location. The form is then given to the CERT IC/TL. The form provides a summary of overall hazards in selected areas. The information is used for prioritizing and formulating activities.
- The CERT IC/TL assembles teams and makes assignments based on the damage assessment information. This person keeps the <u>Incident/Assignment Tracking Log</u>, which is the most important tool for recording the activities of the functional teams and overall situation status.
- A scribe at the staging location signs in each volunteer using the <u>Personnel Resources Sign-In</u> <u>Form</u>, noting any particular preferred team assignments or skills. This information needs to be passed on to the Command Post.

#### **UNIT 6: CERT ORGANIZATION**

#### **INSTRUCTOR GUIDANCE**

#### CONTENT



The <u>Briefing Assignment Form</u> is shared by the Command Post and the functional team. The CERT IC/TL uses the front side of the form to communicate instructions about an incident such as address, incident type, and team objectives. The scribe of the functional team uses the back side (blank side) of the form to log team actions. The form is returned to the Command Post when the team checks in.



 The <u>Victim Treatment Area Record</u> is used to document each person brought into the treatment area and his or her condition (Immediate, Delayed, or Minor).



- The <u>Communications Log</u> is used to log incoming and outgoing transmissions; it is typically kept by the radio operator.
- The <u>Equipment Inventory</u> is kept in the area or vehicle in which equipment is stored.

**CERT BASIC TRAINING: INSTRUCTOR GUIDE** 

INSTRUCTOR GUIDANCE	CONTENT
	■ The <u>General Message</u> form is used for sending messages between any command levels and groups. The messages must be clear and concise.
PM, P. 6-20 through 6-28	Refer the participants to the documentation forms in the Participant Manual and on the following pages in the Instructor Guide. For many of the forms, one section is filled out as an example.
	Review each form briefly and describe the types of information that each should include.
	Note that area maps, site maps, and building plans are also very useful for tracking response activities.
Emphasize this point.	Explain to the participants that the forms will assist them in collecting and organizing critical information during CERT operations. However, information needs to be recorded even if the correct form is not available. That is one reason why all members need a small notebook and a pen in their personal CERT kit.

# C COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

PM, P. 6-20 THROUGH 6-28

# Forms Used for Response Documentation

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CERT FORM #1

# COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

#0
(CERT badge or other)
756
JOHN TAYLOR, SHEILA EVANS

ERT FORM #2

# C COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

ASSIGNMENT TRACKING LOG	)G	WILSC	WILSONVILLE	DAIE	##/##/##	#
ASSIGNMENT Structural damage-Tornado	ASSIGNMENT		ASSIGNMENT		ASSIGNMENT	
LOCATION SE CORNER 16th and Oak	LOCATION		LOCATION		LOCATION	
TEAM SAR1	TEAM		TEAM		TEAM	
TEAM LEADER/CONTACT # MANAWAE Shaw (242) 522-222	TEAM LEADER/CONTACT#	NTACT#	TEAM LEADER/CONTACT #	ACT#	TEAM LEADER/CONTACT#	ONTACT#
START TIME END TIME	START TIME	END TIME	START TIME	END TIME	START TIME	END TIME
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reina Jah	77		20		16	
Burt Manning	6		*		8	
Alison MoKittredge	Ŋ.		œ		4.	
lá	5		O1		5	
OBJECTIVES To conduct a search and rescue of damaged high school gym.	OBJECTIVES		овлестичея		OBJECTIVES	
RESULTS No víotíms located. Gym. líghtly damaged. Saw heavy damage to west wing of school	RESULTS		RESULTS		RESULTS	
CERT LEADER/ INCIDENT COMMANDER	Elizabeth King	GW				
SCRIBE(S) BULLIN ROBERS, lorge Garela	Savola			T	PAGE 1 OF 2	2

ERT FORM #

# COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

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TEAM	NAME		LOC	CATION										
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CERT BASIC TRAINING: INSTRUCTOR GUIDE JANUARY 2011 PAGE 6-39

CERT FORM #4.a

# C COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

# **TEAM ACTION LOG** (time stamp each action, draw map if needed) 10:52 Team arrived at the restaurant. Made our way through the debris to victim #1, Bill Baker. Conscious and in pain. Ankle was trapped under a heavy bookcase. Extricated him. Two team members carried him to treatment area. 10:54 Victim #2, Carol Loughney. Bleeding on head from falling ceiling. Walked her to treatment area. 10:55 Victim #3. Found in kitchen. Unconscious but breathing. May have broken leg. Splinted leg. Moved by stretcher to treatment area. SCRIBE Sam Ariton

PAGE 6-40 JANUARY 2011 CERT BASIC TRAINING: INSTRUCTOR GUIDE

CERT FORM #4.b

# COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

VICT	VICTIM TREATMENT AREA RECORD	CERT	MILSONVILLE	DATE #	## / ## / ##	
REATME	TREATMENT AREA LOCATION	RIDGEWAY PARK	YPARK			
TIME IN	NAME OR DESCRIPTION	TRIAGE TAG (orcle)	CONDITION/TREATMENT (update as needed)		MOVED TO	TIMEOUT
10:24 AM	Stephen Edmondson, 35 yo.	DELAY	10:30 Heavy bleeding from out at right temple—bandaged 10:45 Complained of dizziness an d nausea	рк bandaged	Sibley Hospital	12:15 PM
		IMMED DELAY MINOR				
		IMMED DELAY MINOR				
SCRIBE(S)	REGGIE OSBORN			d	PAGE 2 OF 2	

PT FORM #F

# C COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

COMMUN	IICATIONS	CERT	DATE	
L	NICATIONS OG	RADIO OPERATOR NAME	1	
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TIME	FROM	TO	MESSAGE	
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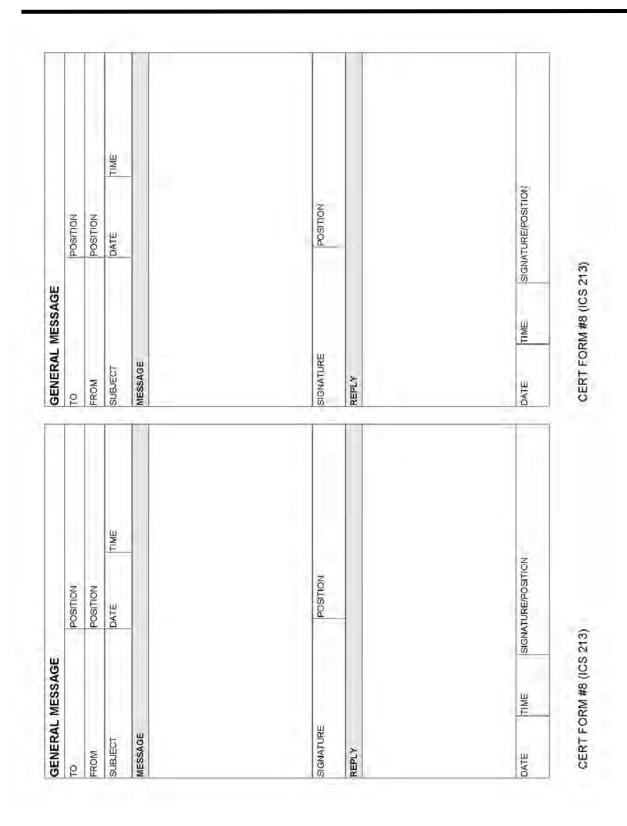
CERT FORM #6 (Based on ICS 309)

# COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

THEM DESCRIPTION	EQUIPMENT	MENT CERT	WILSONVILLE	ure.			DATE	## / ## / ##	##/#
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PAGE 1 OF 1	SCRIBE(S)	SUNA MAIN IN						PAGE	1_0F_1

CERT Form #7 (Based on ICS 303)

# C COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION



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# **UNIT 6: CERT ORGANIZATION**

INSTRUCTOR GUIDANCE	CONTENT
<b>?</b> **	Does anyone have any questions about CERT documentation requirements?
	Tell the participants that next they will work in small groups to complete an ICS review.
Use the following steps to conduct this activity.	Activity: ICS Functions
	<u>Purpose</u> : This activity will give the participants an opportunity to relate the ICS functions to specific situations.
	Instructions:
	Assign the participants to small table groups.
	Explain that this exercise will provide the group with the opportunity to decide under which ICS functions the listed activities will fall.
PM, P. 6-30 and 6-31	3. Tell the group to review the list of activities and use the initials, "IC/TL," "O," "P," or "L" to indicate which ICS function would cover each activity.
	When the groups have finished, ask a spokesperson from each group to provide the group's answers to the class.
	Remind participants that while Finance/Administration is a part of ICS, it is generally not used by CERTs.

**JANUARY 2011** 

# C COMMUNITY EMERGENCY RESPONSE TEAM UNIT 6: CERT ORGANIZATION

PM, P. 6-30 and 6-31	Activity: ICS Functions

### **Instructions:**

Using your knowledge about the five ICS functions, decide under which function the following CERT activities would fall. Some activities may involve more than one function to be completed.

Use the following key to fill in the blanks before each activity:

IC/TL = Incident Commander/Team Leader

O = Operations

P = Planning

L = Logistics

L	<ol> <li>It's dark, all the lights are out, you need additional flashlights to continue your response.</li> </ol>
L	2. The designated first aid site has a downed power line.
0	3. A neighbor reports the smell of gas in his house, but he cannot shut off the gas at the meter.
L	4. The batteries for the portable radio are dead.
P & IC/TL	5. The city wants to know the overall status of your neighborhood.
0	6. Several of your neighbors have minor injuries and need first aid.
Р	7. Fire from another neighborhood is moving toward your neighborhood.
0	8. There is a pit bull-type dog seen wandering near the first aid station.
IC/TL	9. A news crew has arrived with a camera to film your activities.

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# **UNIT 6: CERT ORGANIZATION**

P&O	10. Two hysterical neighbors are demanding help. One cannot find her adolescent child who was playing outside when the disaster struck. The other wants help moving a bookcase off of his wife. He says she's bleeding from a wound on the head.
L	11. It's starting to rain. Your command post and the first aid area are not under shelter.
Р	12. Too many people are coming to the Incident Commander to ask questions. The IC/TL asks for someone to act as a "gatekeeper."
0	13. There is a great increase of car and foot traffic through your neighborhood because other roadways are blocked.
Р	14. The IC/TL is very tired and is going to hand over responsibilities to someone else. He or she wants a report on the status of the neighborhood before doing so.
L/O	15. Many neighborhood residents have come to volunteer their help.
IC/TL	16. Reports have come in of damage and injuries in the next block. Teams must be assigned to assess the situation.
IC/TL	17. A professional responder has arrived at the scene and would like a briefing on situation status.

# **UNIT 6: CERT ORGANIZATION**

Instructor Guidance	CONTENT
	Activity: Tabletop Exercise
	Tell the group that the remainder of the unit consists of a tabletop exercise. The exercise will give the participants the opportunity to apply much of the knowledge that they have gained in this course to an actual disaster scenario.
	Introduce the "Rules of Engagement." Stress the need for following directions, communicating, and making safe decisions.
Use the following steps to conduct this exercise.	<u>Purpose</u> : This exercise is an interactive tabletop activity that gives the participants an opportunity to apply what they have learned about ICS for CERT activation.
	<u>Instructions</u> :
	Assign the participants to small table groups.
	<ol> <li>Distribute the CERT Tabletop Exercise that you have developed, and explain the objectives of the exercise.</li> </ol>
	Explain that this exercise will provide the group with experience in command decision-making.
	Remind the group that CERT command objectives are to:
	<ul> <li>Identify the scope of the incident</li> </ul>
	<ul> <li>Determine an overall CERT strategy</li> </ul>
	<ul> <li>Set priorities and deploy resources</li> </ul>

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# **UNIT 6: CERT ORGANIZATION**

Instructor Guidance	Content
	Review the participants' roles in the exercise and advise them that they will have 30 minutes to complete the exercise.
	5. At the end of the exercise, reconvene the participants into a large group to discuss the exercise results and answer any questions that the participants may have.

#### **UNIT 6: CERT ORGANIZATION**

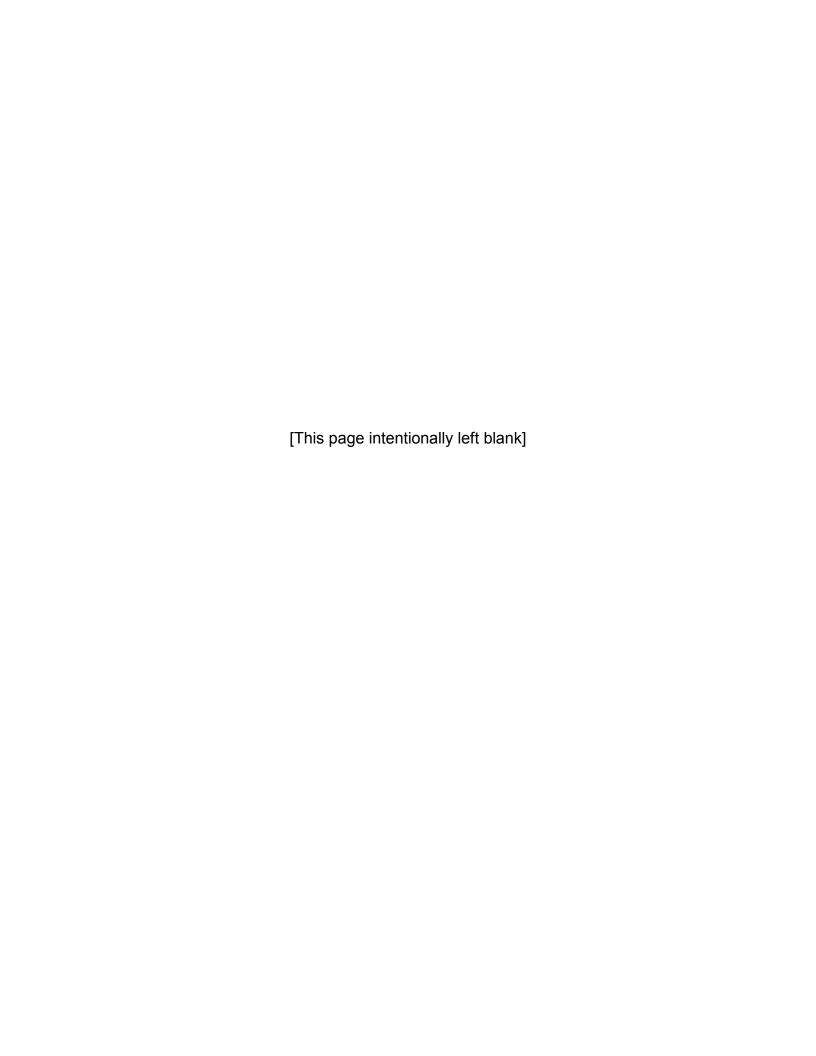
### INSTRUCTOR GUIDANCE CONTENT Unit Summary Unit Summary . ICS provides flexible means of organization . "Is it safe to attempt the rescue?" . Document and communicate information to all Summarize the key points from this unit: **CERT** levels · Provide Command Post with ongoing The ICS is the system used by emergency information about damage assessment, group response agencies and CERT to manage status, and needs Command Post documents and tracks situation emergency operations. ICS provides a flexible status means of managing personnel, facilities, CERT Base Training ONE & CERT Organization CELL. FEMA equipment, and communication and can be expanded as necessary. Display Slide 6-20 The key question that CERT Incident Commanders/Team Leaders must always ask is: "Is it safe for CERT members to attempt the rescue?" Whether or not to attempt a rescue depends on the degree of damage to the structure involved. Remind the participants that CERT members' safety is the number one priority. It is vital to document and communicate information about situation and resource status to all CERT levels. Sections, Groups, and Teams must provide the Command Post with ongoing information about damage assessment, incident status, and ongoing needs. The command post must document the situation status so that the overall disaster situation can be tracked and reported to emergency response agencies. Does anyone have any questions about anything covered in this unit?

# **UNIT 6: CERT ORGANIZATION**

Instructor Guidance	CONTENT
Homework Assignment	Homework Assignment
<ol> <li>Read unit to be covered in next session</li> <li>Bring necessary supplies to next session</li> <li>Wear appropriate clothes to next session</li> </ol>	Ask the group to read and become familiar with the unit that will be covered in the next session.
CERT Basic Training Unit 6: CERT Operation 6-21	Thank the participants for attending the session. Remind them of the time and location of the next session, if necessary.
Display Slide 6-21	







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TEAM ACTION LOG (time stamp each action; draw map if needed)
SCRIBE

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TIME IN	NAME OR DESCRIPTION	TRIAGE TAG (circle)	CONDITION/TREATMENT (update as needed)		MOVED TO	TIME OUT
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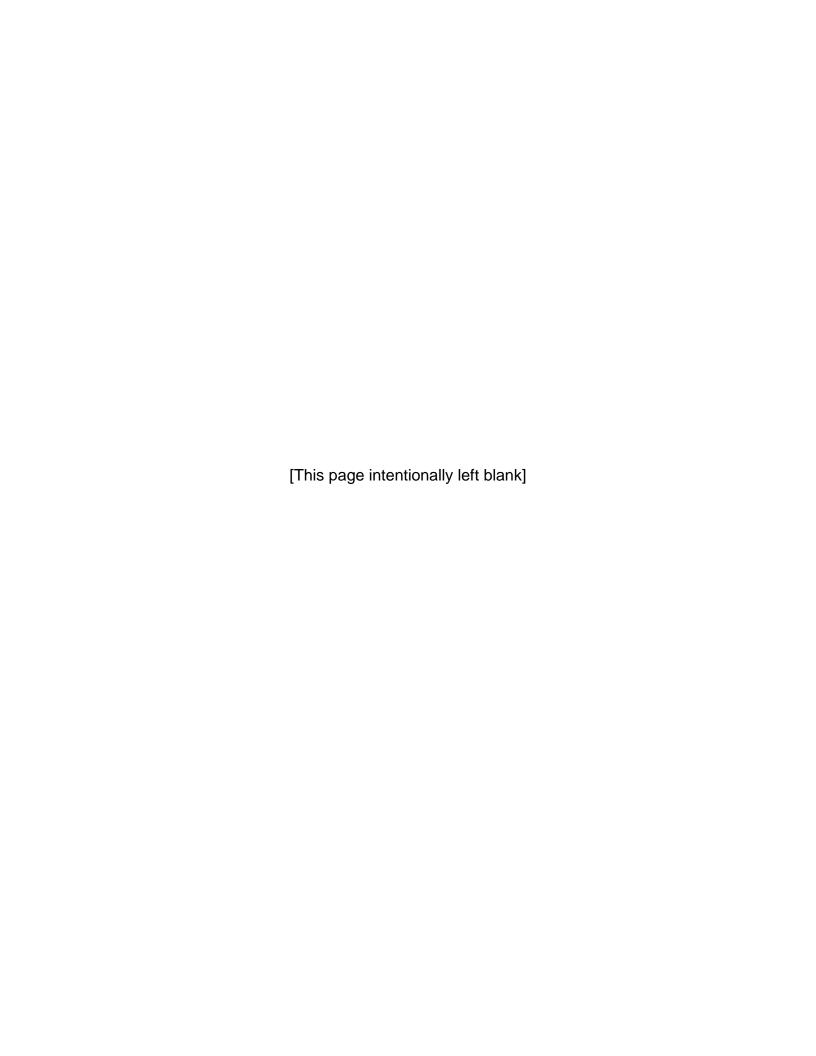
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# **UNIT 7: DISASTER PSYCHOLOGY**

# 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.



# **UNIT 7: DISASTER PSYCHOLOGY**

OBJECTIVES	At the conclusion of this unit, the participants should be able to:				
	<ul> <li>Describe the disaster and post-disaster emotional environment for victims and rescuers.</li> </ul>				
	<ul> <li>Describe the steps that rescuers can take to relieve their own stress and that of other disaster survivors.</li> </ul>				
SCOPE	The topics that will be discussed in this unit are:				
	<ul> <li>Introduction and Unit Overview</li> </ul>				
	<ul><li>Disaster Trauma</li></ul>				
	<ul><li>Team Well-Being</li></ul>				
	<ul> <li>Working with Survivors' Trauma</li> </ul>				
	<ul> <li>Unit Summary</li> </ul>				
ESTIMATED	45 minutes (This time does not include the video.)				
	Please note that the estimated time depends on how much of the video you choose to show the participants. You may show as little or as much of the video as you think is appropriate. If you use the video in its entirety, the lesson will run approximately 1 hour and 15 minutes. Please note that the video should not be used in place of teaching the unit.				
TRAINING METHODS	The lead instructor will begin this unit by welcoming the participants to Unit 7: Disaster Psychology, and will introduce the instructors for the session. The instructor will then present a brief overview of this session.				
	Next, the instructor will explain the importance of having an understanding of the disaster and post-disaster emotional environment and the impact that the emotional crisis may have on CERT members as well as victims. The instructor will present the psychological and physiological symptoms that victims and rescue personnel may exhibit and provide some suggestions for how CERT members can help survivors cope with disaster trauma and control their own stress.				
RESOURCES	Community Emergency Response Team Instructor Guide				
REQUIRED	Community Emergency Response Team Participant Manual				
	<ul> <li>Visuals 7-0 through 7-21</li> </ul>				
	ullet				

**JANUARY 2011** 

#### **UNIT 7: DISASTER PSYCHOLOGY**

#### **OTHER RESOURCES**

If time permits, all or portions of the 43-minute video *CERT Training: Disaster Psychology* are recommended for this unit. The video describes the physical, emotional, and psychological reactions to a disaster and techniques for CERT members to take care of themselves and assist others in coping with the stress. The video is available for download at the national CERT Web site: <a href="https://www.citizencorps.gov/cert/">www.citizencorps.gov/cert/</a>.

#### **EQUIPMENT**

The following equipment is required for this unit:

- A computer with PowerPoint software
- Computer projector and screen

#### **PREPARATION**

Working with a representative of the community in which you will be teaching, identify any potentially culturally sensitive topics in this module. Develop strategies for presenting any such topics in ways that will be engaging and appropriate for participants.

It is particularly important in this unit to be aware of how your target audience may feel about topics such as trauma or coping with stressors. Encourage participants to discuss ways that people within their community may cope with psychological trauma. Avoid forcing your own coping mechanisms onto others.

In particular, look closely at the topic on *What Not to Say*. Make specific note of phrases that might be culturally inappropriate to the target audience. In the topic, *Managing a Death Scene*, ensure that you understand culturally appropriate ways of dealing with death. Treat this topic with reverence and respect participants' cultural backgrounds.

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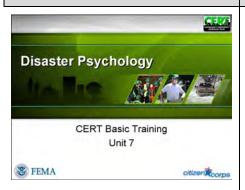
# **UNIT 7: DISASTER PSYCHOLOGY**

Notes	A suggested time plan for this unit is as follows:	
	Introduction and Unit Overview5 minutes	
	Disaster Trauma5 minutes	
	Team Well-Being10 minutes	
	Working with Survivors' Trauma20 minutes	
	Unit Summary5 minutes	
	Total Time: 45 minutes	
ACKNOWLEDGEMENT	The information from this unit has been provided by Victor Welzant, Psy.D. and George Everly, Jr., Ph.D. of the International Critical Incident Stress Foundation; and Joanne Tortorici Luna, Ph.D., California State University, Long Beach, and Culver City, California, CERT. The Federal Emergency Management Agency wishes to thank them for their assistance.	

# **Unit 7: Disaster Psychology**

#### **INSTRUCTOR GUIDANCE**

#### CONTENT



### Introductions and Unit Overview

#### Welcome

Introduce the instructors for this unit.

Ask any new instructors to briefly describe their experience with disaster psychology.

Display Slide 7-0

Briefly review Unit 6: CERT Organization.



The CERT organization is based on a proven management system used by emergency responders. What is it called?

Correct response:

The Incident Command System (ICS)



Who becomes the CERT Incident Commander/Team Leader (IC/TL)?

**CERT BASIC TRAINING: INSTRUCTOR GUIDE** 

What does that person do?

### Correct response:

- 1. The first person to arrive on the scene
- 2. Establishes the basic ICS structure for the incident

# **UNIT 7: DISASTER PSYCHOLOGY**

INSTRUCTOR GUIDANCE	CONTENT
<b>?</b>	What is the place called where the IC/TL stays?
Correct response:	
The Command Post	
<b>?</b> €	What is the key question that CERT Incident Commanders/Team Leaders must always ask?
Correct response:	
"Is it safe for CERT members to attempt the rescue?"	
<b>?</b>	Documentation is an essential part of the CERT's job. What kinds of information should a CERT document?
Correct response:	
<ul> <li>Damage assessment</li> <li>Status of personnel resources</li> <li>Communications between command levels and groups</li> <li>Incident status</li> <li>Victim treatment provided</li> </ul>	Who handles media inquiries?
Correct response: The IC/TL	

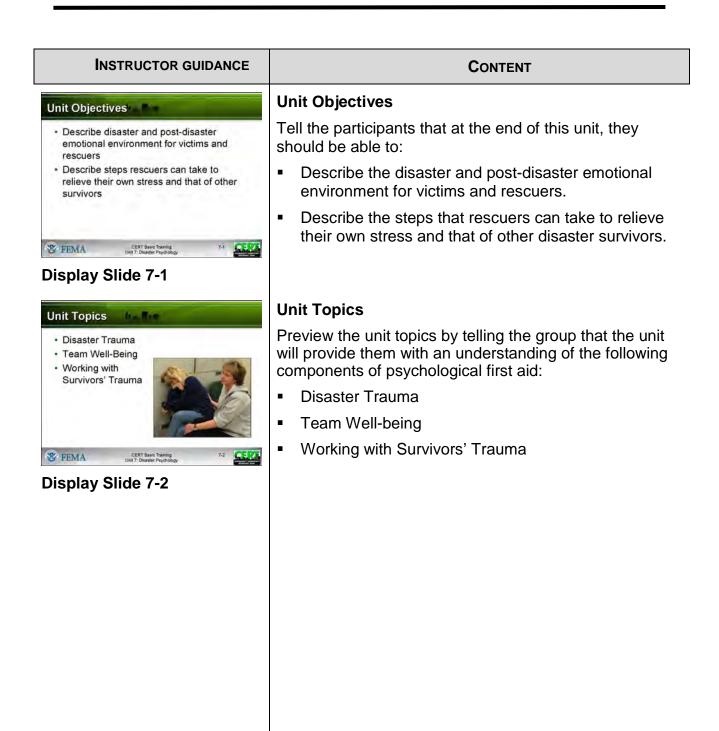
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# **UNIT 7: DISASTER PSYCHOLOGY**

INSTRUCTOR GUIDANCE	CONTENT
	Explain that CERT members might see and hear things during a disaster that are unpleasant and uncomfortable.
<b>?</b> **	Has anyone ever been involved in a large-scale emergency or disaster?
	How were you impacted?
Discuss the participants' responses. Probe for both physical and emotional situations.	
	Stress the need for CERT members to 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 will help CERT members understand and manage their reactions to the event and to work better with others.
	Remind the group that they recently learned about team organization. Point out that team organization concepts can help them both operationally and psychologically. Working together and looking out for each other are important aspects of successful teams.
	Tell the group that this unit will address basic techniques for providing psychological first aid and "field expedient" trauma intervention.
	Stress that psychological first aid is not therapy; rather, it is a set of techniques to provide emotional intervention during field operations. The techniques to be covered in this unit will help manage one's personal situation so that the needs of all survivors, including victims and CERT members, can be met.

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#### **UNIT 7: DISASTER PSYCHOLOGY**

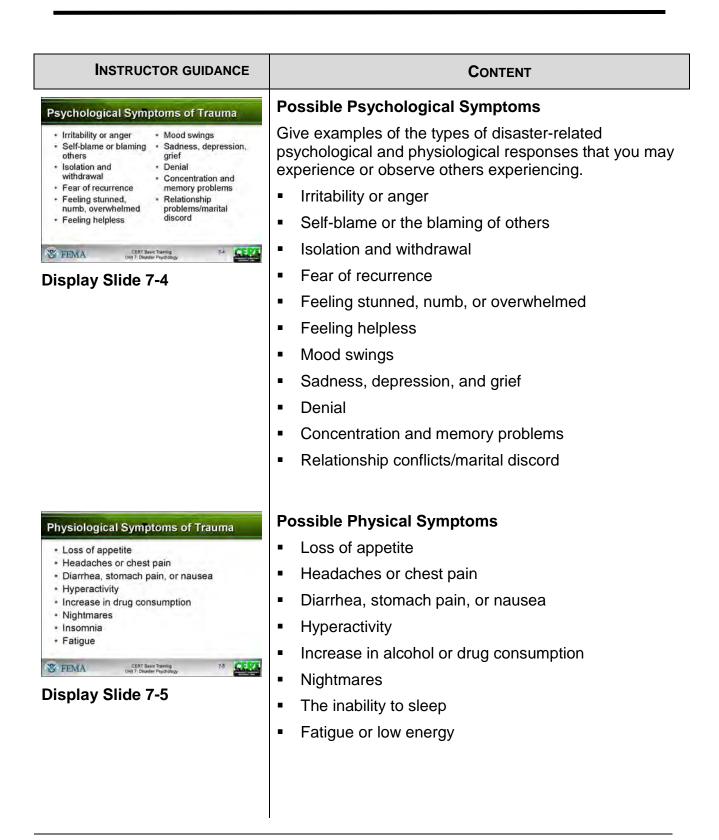


#### **UNIT 7: DISASTER PSYCHOLOGY**

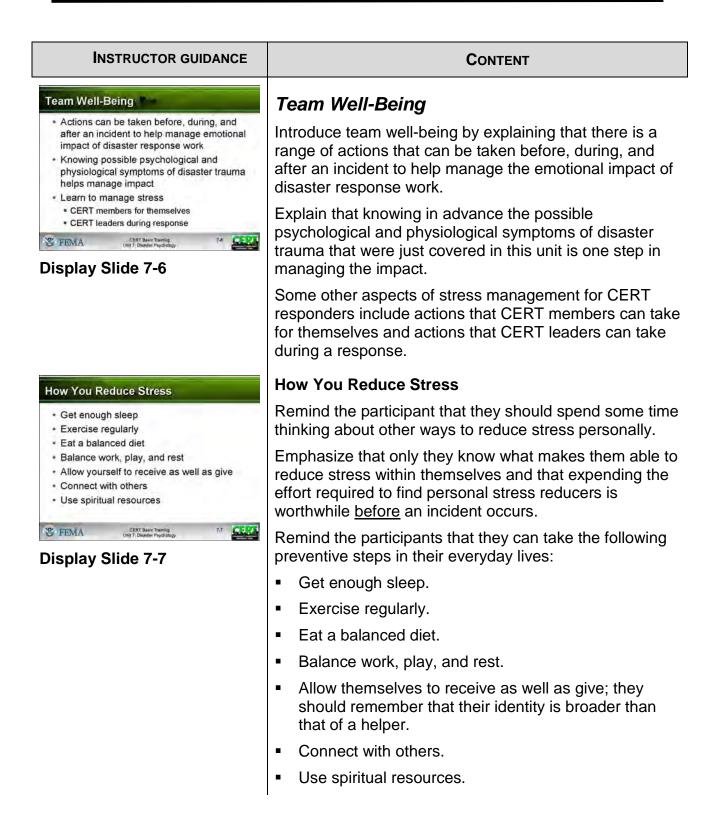
# INSTRUCTOR GUIDANCE CONTENT Psychological Trauma Disaster Trauma Your own personal losses Introduce this section by telling the participants that, · Working in your neighborhood during a disaster, they may see and hear things that will · Assisting neighbors, friends, coworkers be extremely unpleasant. who have also been injured · Not feeling safe and secure Direct psychological trauma could result from: Your own personal losses S FEMA 73 CE. CERT Basic Training Unit 7: Disaster Psychology Working in your neighborhood Display Slide 7-3 Assisting neighbors, friends, coworkers who have been injured Not feeling safe and secure Explain that 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. Explain that vicarious trauma is an "occupational hazard" for helpers. Warn the participants against over-identifying with the survivors. Caution them against taking on the survivors' feelings as their own as it can affect their ability to do their job as rescuers and can also have longer term impact. Advise the group members that taking ownership of others' problems will compound their own stress and impact the CERT's overall effectiveness. Explain that CERT members need to be alert to signs of disaster trauma in themselves, as well as in disaster victims and other survivors, so that they can take steps to alleviate stress.

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#### **UNIT 7: DISASTER PSYCHOLOGY**

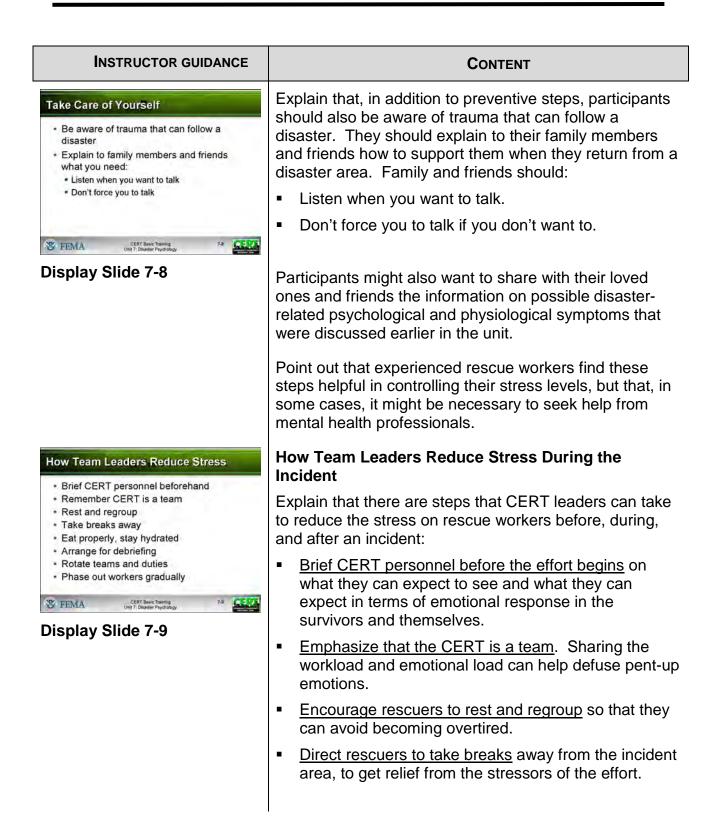


#### **UNIT 7: DISASTER PSYCHOLOGY**



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#### **UNIT 7: DISASTER PSYCHOLOGY**



#### **UNIT 7: DISASTER PSYCHOLOGY**

INSTRUCTOR GUIDANCE	CONTENT
	<ul> <li>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.</li> </ul>
This will be discussed in more detail later in the unit.	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.
	<ul> <li>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.</li> </ul>
	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.
	<ul> <li>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.</li> </ul>
Critical Incident Stress Debriefing	Critical Incident Stress Debriefing (CISD)
1. Introductions and description 2. Review of factual material 3. Sharing of initial thoughts and feelings 4. Sharing of emotional reactions to incident 5. Instruction about normal stress reactions 6. Review of symptoms 7. Closing and further needs assessment	Point out that 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).
FEMA CERT Basic Training 7-10	
Display Slide 7-10	

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#### **UNIT 7: DISASTER PSYCHOLOGY**

INSTRUCTOR GUIDANCE	CONTENT
	CERT leaders may invite a mental health professional trained in critical incident stress management (CISM) to conduct a critical incident stress debriefing (CISD). 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.
	Explain that a 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.
	Explain that CISD would <u>not</u> 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.
	Explain that a CISD has seven phases:
	Introductions and a description of the process, including assurance of confidentiality
	2. Review of the factual material about the incident
	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
	Emphasize that participation in a CISD should be voluntary.
	Say that, as the CERT program sponsor, an agency may assist in arranging CISD services for the CERTs. If so, explain how participants should access those services.

#### **UNIT 7: DISASTER PSYCHOLOGY**

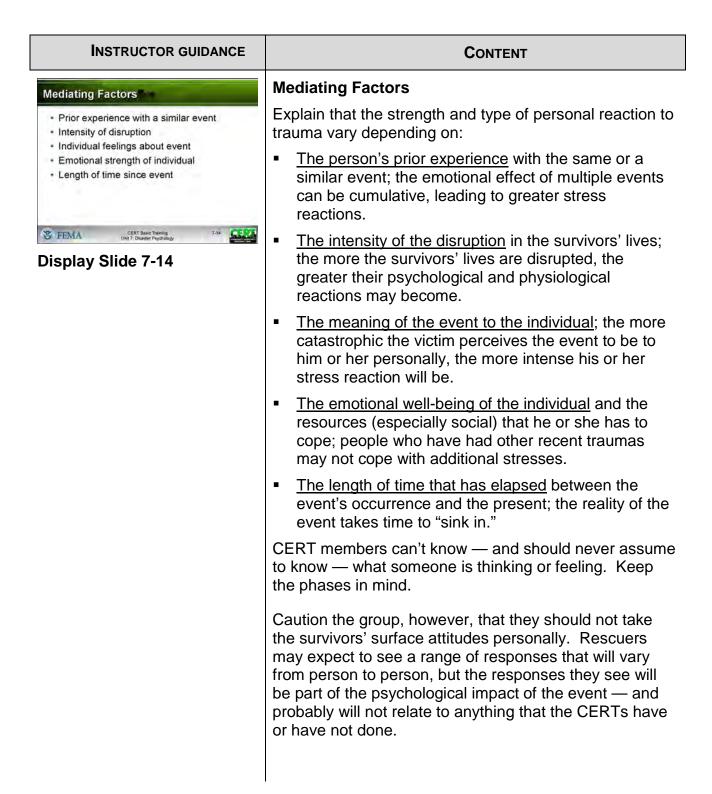
INSTRUCTOR GUIDANCE	CONTENT
	If a CISD is unavailable in the agency, suggest that participants contact the Red Cross or a community mental health agency to schedule a CISD.
	Emphasize that, while it may be beneficial, pastoral counseling is not a substitute for disaster counseling from a professional.
	Explain that the next section will deal with how to handle survivors' trauma.
	Working with Survivors' Trauma
Phases of a Crisis	Identify the emotional phases of a crisis survivors go through and whom and what rescuers might encounter at each phase.
Inventory     Rescue     Recovery	In the <u>impact phase</u> , survivors generally do not panic and may, in fact, show no emotion.
CERT Basic Training Unit 7: Disapler Psychology  Display Slide 7-11	■ In the <u>inventory phase</u> , 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 <u>rescue phase</u> , 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.

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#### **UNIT 7: DISASTER PSYCHOLOGY**

#### INSTRUCTOR GUIDANCE CONTENT In the <u>recovery phase</u>, 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. Tell the participants that they should expect that survivors will show psychological effects from the disaster — and that they should expect that some of the reaction will be directed toward them. **Traumatic Crisis** Traumatic Crisis Introduce this section by defining a crisis as an event that · Actual or potential death is experienced or witnessed in which people's ability to · Serious injury Destruction cope is overwhelmed: · Loss of contact with family or close friends Actual or potential death or injury to self or others Serious injury Destruction of their homes, neighborhood, or valued **ॐ** FEMA CERT Basic Training Unit 7: Disaster Psychology CERT possessions Display Slide 7-12 Loss of contact with family members or close friends Traumatic stress may affect: Effects of Traumatic Stress Cognitive functioning. Those who have suffered · Cognitive functioning traumatic stress may act irrationally, in ways that are · Physical health · Interpersonal relationships 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 ₩ FEMA problems. **Display Slide 7-13** Interpersonal relationships. Those who survive traumatic stress may undergo temporary or long-term personality changes that make interpersonal relationships difficult.

#### **UNIT 7: DISASTER PSYCHOLOGY**



#### **UNIT 7: DISASTER PSYCHOLOGY**

#### INSTRUCTOR GUIDANCE CONTENT Stabilizing Victims Stabilizing Victims Explain that the goal of onscene psychological · Assess survivors for injury or shock intervention on the part of CERT members should be to · Get uninjured people to help · Provide support by: stabilize the incident scene by stabilizing individuals. Listening While any medical needs must be addressed first, you Empathizing · Help survivors connect with natural can provide psychological intervention. Suggest that support systems they do this in the following ways: Observe individuals to determine their level of 7-15 CERT S FEMA CERT Basic Training Unit 7: Disaster Psychology responsiveness and whether they pose a danger to Display Slide 7-15 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.

#### **UNIT 7: DISASTER PSYCHOLOGY**

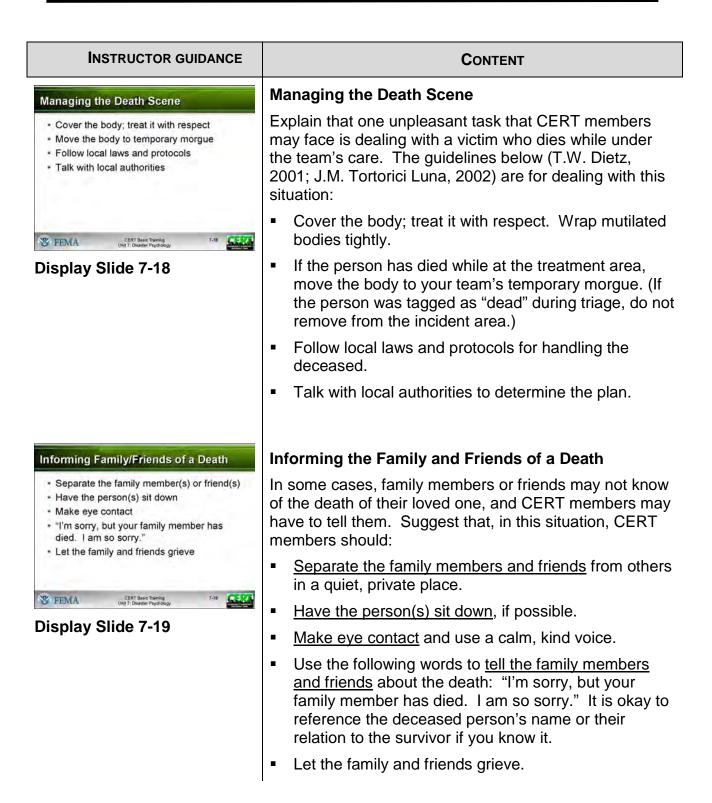
#### INSTRUCTOR GUIDANCE CONTENT Being an Empathetic Listener How to Be an Empathetic Listener Explain that being an empathetic listener requires the · Put yourself in the speaker's shoes listener to listen and let the victim talk. Good listeners · Listen for meaning, not just words · Pay attention to nonverbal communication will: · Paraphrase the speaker 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 S FEMA CERT. CERT Basic Training Unit 7: Disaster Psychology vicarious trauma, be careful not to completely take on **Display Slide 7-16** 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 he or she has fully understood what the speaker has said and to indicate to the speaker that he or she is listening. This reinforces the communication process. Stress that 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.)

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#### **UNIT 7: DISASTER PSYCHOLOGY**

#### INSTRUCTOR GUIDANCE CONTENT Avoid Saying... What Not to Say "I understand" Tell the participants that, when providing support, they "Don't feel bad" · "You're strong" or "You'll get through this" should avoid saying the following phrases. On the · "Don't cry" surface, these phrases are meant to comfort the · "It's God's will" survivors, but they can be misinterpreted. · "It could be worse" · "At least you still have..." "I understand." In most situations we cannot · "Everything will be okay" understand unless we have had the same 7-)7 CERT S FEMA CERT Basic Training Unit 7: Disaster Psychology experience. Display Slide 7-17 "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. Emphasize that these types of responses, rather than provide comfort, could elicit a strong negative response or distance the survivor from the listener. Point out that it is okay to apologize if the survivor reacts negatively to something that was said.

#### **UNIT 7: DISASTER PSYCHOLOGY**



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#### **UNIT 7: DISASTER PSYCHOLOGY**

#### INSTRUCTOR GUIDANCE CONTENT Does anyone have any questions about the types of emotional and physiological responses that they can expect to see during and following a disaster? After answering all of the participants' questions, pose some "What would you do if ..." questions to ensure that they understand the concepts of this section. For example, ask the participants, "What would you do if you were attempting to rescue a victim and the victim became hysterical?" Unit Summary **Unit Summary** · Rescues may be unpleasant or uncomfortable During a disaster, rescuers may be exposed to things Psychological and physiological symptoms of trauma that are extremely unpleasant or uncomfortable. · Take steps to reduce stress These experiences will be stressful and may be · CISD is one intervention · Four emotional phases of a disaster traumatic. · Stress affects cognition, health, and interactions Stabilize individuals Over-identifying with survivors may subject · Be an empathetic listener rescuers to vicarious trauma. S FEMA CERT Basic Training Unit 7: Disaster Psychology CER There are both psychological and physiological Display Slide 7-20 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.

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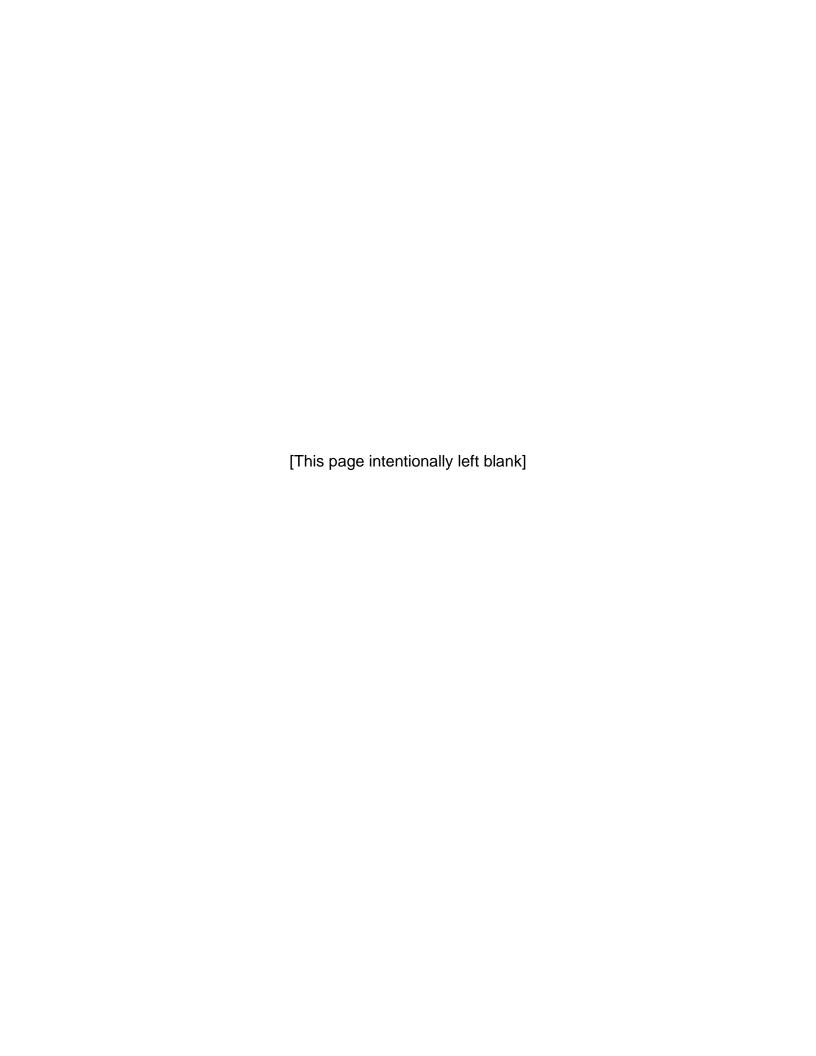
#### **UNIT 7: DISASTER PSYCHOLOGY**

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.  The goal of onscene psychological intervention is to stabilize the incident by stabilizing individuals.  Provide support for survivors by being an empathetic listener.  Does anyone have any questions about anything covered in this unit?		
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Does anyone have any questions about anything		, , ,
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#### **UNIT 7: DISASTER PSYCHOLOGY**

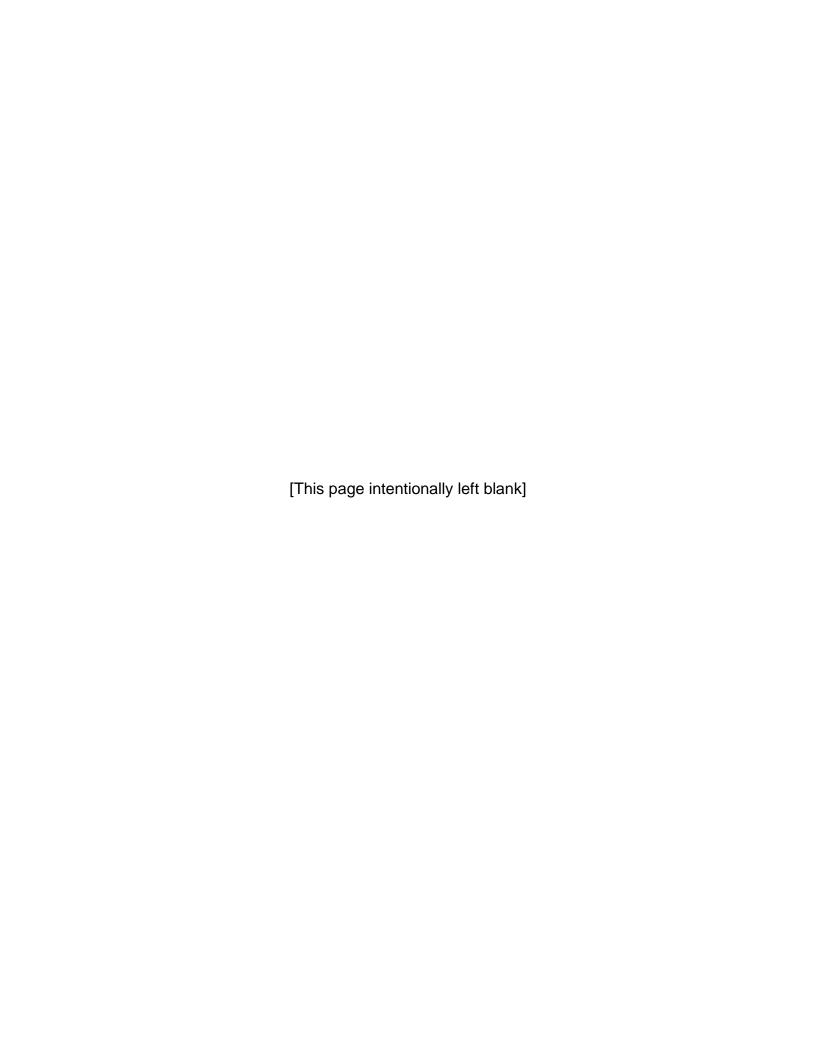
INSTRUCTOR GUIDANCE	CONTENT
Homework Assignment	Homework Assignment
Read unit to be covered in next session     Bring necessary supplies to next session     Wear appropriate clothes to next session	Ask the group to read and become familiar with the unit that will be covered in the next session.
CERT Basic Travelling (Init 7: Disaplet Psychilogy)  Display Slide 7-21	Thank the participants for attending the session. Remind them of the time and location of the next session, if necessary.



#### **UNIT 8: TERRORISM AND CERT**

#### In this unit you will learn about:

- What Terrorism Is: The definition of terrorism and terrorist goals.
- Terrorist Targets: How terrorists choose their targets.
- Terrorist Weapons: The weapons that terrorists are known or are suspected to have and the risk posed by various terrorist weapons.
- **CBRNE Indicators:** Cues that help to identify when a terrorist attack may have occurred or may be imminent.
- Preparing at Home, Work, and in Your Neighborhood: Ways to prepare for a terrorist incident.
- CERTs and Terrorist Incidents: CERT protocols for terrorist incidents and protective action following an event.



OBJECTIVES	At the conclusion of this unit, the participants should be able to:
	<ul> <li>Define terrorism.</li> </ul>
	<ul><li>Identify potential targets in the community.</li></ul>
	<ul> <li>Identify the eight signs of terrorism.</li> </ul>
	<ul> <li>Identify CERT operating procedures for a terrorist incident.</li> </ul>
	<ul> <li>Describe the actions to take following a suspected terrorist incident.</li> </ul>
SCOPE	The topics of this unit will include:
	<ul> <li>Introduction and Unit Overview</li> </ul>
	What Is Terrorism?
	<ul> <li>Terrorist Targets</li> </ul>
	<ul><li>Terrorist Weapons</li></ul>
	<ul> <li>CBRNE Indicators</li> </ul>
	<ul> <li>Preparing at Home, Work, and in Your Neighborhood</li> </ul>
	<ul> <li>CERTs and Terrorist Incidents</li> </ul>
	<ul> <li>Exercise: Applying CERT Principles to a Suspected Terrorist Incident</li> </ul>
	<ul> <li>Unit Summary</li> </ul>
ESTIMATED COMPLETION TIME	2 hours 30 minutes
TRAINING METHODS	The instructor will introduce this unit by defining terrorism using the Department of Justice definition and providing several examples of terrorist attacks within the United States. Then, the instructor will describe the terrorists' goals.

#### UNIT 8: TERRORISM AND CERT

## TRAINING METHODS (CONTINUED)

Next, the instructor will describe the main categories of weapons that terrorists are known to have or are suspected of having. During this discussion, the instructor will introduce the acronym CBRNE (chemical, biological, radiological, nuclear, high-yield explosives) as a way of remembering each category of weapons. The instructor will describe each type of weapon briefly, including the types of damage or injury that they can cause and, in the case of biological and chemical weapons, routes of exposure. At the end of this discussion, the instructor will present a graphic that describes the FBI's assessment of the risk posed by and the impact that could be expected from each type of weapon.

Following this topic, the instructor will cover steps to take to prepare for a terrorist incident and steps to take if an incident has occurred, including shelter-in-place procedures and emergency decontamination procedures.

In the next topic, the instructor will describe the environmental and physical indicators that serve as cues that a terrorist attack has occurred or may be imminent. Then he or she will link these cues to CERT protocols for terrorist incidents, emphasizing personal safety as the first priority. This discussion will include measures that CERT members can take to increase their safety levels (e.g., time, distance, and shielding; immediate decontamination; and not treating those who may have been contaminated), what they can do to protect others, and what to expect when professional responders arrive.

At the end of this unit, the participants will work in teams to apply CERT principles to a suspected terrorist incident.

#### RESOURCES REQUIRED

- Community Emergency Response Team Instructor Guide
- Community Emergency Response Team Participant Manual
- PowerPoint Slides 8-1 through 8-28

#### **EQUIPMENT**

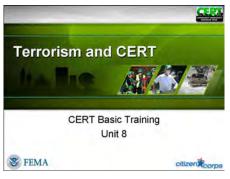
The following additional equipment is required for this unit:

- A computer with PowerPoint software
- A computer projector and screen

Notes	A suggested time plan for this unit is as follows:	
	Introduction and Unit Overview10 minute	es
	What Is Terrorism?10 minute	es
	Terrorist Targets10 minute	∋s
	Terrorist Weapons30 minute	es
	CBRNE Indicators	es
	Preparing at Home, Work, and in Your Neighborhood 20 minute	∋s
	CERTs and Terrorist Incidents	ЭS
	Activity: Applying CERT Principles to a Suspected Terrorist Incident	es
	Unit Summary 5 minute	es
	Total Time: 2 hours 30 minutes	
REMARKS	It is not possible to present comprehensive information about terrorists or their weapons in the timeframe provided for this unit. Refer the participants to <i>Are You Ready?</i> (www.ready.gov) for more information about possible terrorist attacks and how to prepare for them.	<b>;</b>

#### **Unit 8: Terrorism and CERT**

### Introduction and Unit Overview



**INSTRUCTOR GUIDANCE** 

**Display Slide 8-0** 

Briefly review Unit 7: Disaster Psychology.

session, Terrorism and CERT.

terrorism planning.

What kinds of symptoms might you see in someone who is having trouble coping with a disaster?

CONTENT

Introduce yourself and welcome the participants to this

Introduce the instructors for this unit and ask any new instructors to briefly describe their experience with



#### Correct response:

- Psychological symptoms: e.g., anger, grief, withdrawal, self-blame, memory or concentration problems
- Physiological symptoms:

   e.g., loss of appetite, sleep problems, low energy, headaches, increase in alcohol/drug consumption

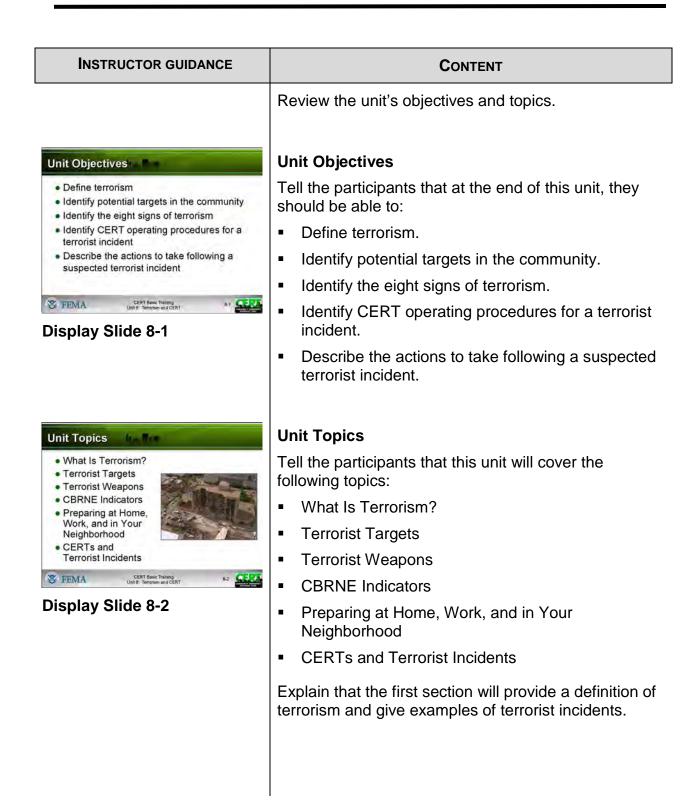
**CERT BASIC TRAINING: INSTRUCTOR GUIDE** 

**UNIT 8: TERRORISM AND CERT** 

INSTRUCTOR GUIDANCE	CONTENT
?	What is vicarious trauma?
Correct response:	
When a person identifies too strongly with a survivor and takes on that survivor's feelings	
?	What is the best way to provide support to survivors?
Correct response:	
Let them talk and be an empathetic listener	
?	What can a CERT member do to take care of himself or herself after a disaster?
Correct response:	
<ul> <li>Get enough sleep.</li> <li>Exercise regularly.</li> <li>Eat a balanced diet.</li> <li>Connect with others.</li> <li>Ask for help if they need it.</li> <li>Tell family and friends how to support them.</li> </ul>	

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INSTRUCTOR GUIDANCE	CONTENT
?	What should a CERT Incident Commander/Team Leader (IC/TL) do during a disaster to help CERT members?
<ul> <li>Correct response:</li> <li>Make CERT members take breaks away from the incident area.</li> <li>Make sure CERT members have regular food and water.</li> <li>Rotate teams.</li> </ul>	What is a critical incident stress debriefing?
Correct response:  A formal group meeting 1to 3 days after the event to help emergency services personnel and volunteers cope with a traumatic event	



#### UNIT 8: TERRORISM AND CERT

# What Is Terrorism? The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives

**INSTRUCTOR GUIDANCE** 

#### **Display Slide 8-3**



#### **Display Slide 8-4**

Provide and emphasize local examples if possible.

#### What Is Terrorism?

Introduce this topic by providing the U.S. Department of Justice's definition of terrorism:

CONTENT

 The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives

Stress that terrorism may be perpetrated by foreign or domestic individuals or groups.

Point out that, while the United States has not had as many terrorist incidents as some other countries, we have had several serious attacks, including:

- The bombing of the World Trade Center (1993)
- The bombing of the Alfred P. Murrah Federal Building in Oklahoma City (1995)
- The bombing at the Atlanta Olympic Games (1996)
- Bombings at family planning clinics and gay bars in the Atlanta area (1996 and 1997)
- The destruction of the World Trade Center and a portion of the Pentagon (2001)
- The sending of anthrax through the U.S. mail (2001)

Explain that each of these incidents demonstrates that we live with the possibility of additional terrorist attacks on our own soil.

#### UNIT 8: TERRORISM AND CERT

#### INSTRUCTOR GUIDANCE CONTENT **Terrorist Goals** Explain that terrorist attacks can occur with or without Terrorist Goals warning. Because of the nature of terrorist attacks, Mass casualties they can — and are often intended to — result in: Loss of critical resources Disruption of vital Mass casualties services Disruption of the Loss of critical resources economy Heightened fear Disruption of vital services Disruption of the economy **ॐ** FEMA **Display Slide 8-5** Heightened fear Terrorist Targets Tell the group that terrorists choose their targets to meet specific goals. For example, the Oklahoma City bombing was a strike against the Federal Government. The September 11, 2001, attacks targeted both our economic center and our military establishment while raising casualty levels to new heights and changing the way Americans think about their safety. Point out that terrorists may select "soft" or lightly protected targets over "hard" or very secure targets. Based on what you know about terrorists and their goals, what do you think would be likely targets in this area? Allow the group time to respond.

#### UNIT 8: TERRORISM AND CERT

#### INSTRUCTOR GUIDANCE CONTENT Summarize their responses by suggesting that Terrorist Targets potential terrorist targets might include: · Seats of government Seats of government Key industries Bridges, subways, Key industries tunnels, and other key transportation Bridges, subways, tunnels, and other key facilities Water supplies and transportation facilities utilities Water supplies and utilities **ॐ** FEMA CERT Basic Training Unit 8 Terrorism and CERT so CERA Places of historical significance Display Slide 8-6 Remind the group that terrorists may also be drawn to major events such as parades or athletic and entertainment events. Remind them that, because of this, participants may see increased security measures to help deter and prevent terrorism. Terrorist Weapons **Terrorist Weapons** 1.Chemical Tell the group that experts generally agree that there 2.Biological are five categories of possible terrorist weapons. The 3.Radiological 4. Nuclear acronym CBRNE will help the participants remember 5. High-yield the five categories. Explosives 1. Chemical **8** FEMA 2. Biological CERT Basic Training Unit 8: Temprism and CERT **Display Slide 8-7** 3. Radiological 4. Nuclear High-yield explosives Remind participants that while this unit focuses on terrorism, it is important to remember that CBRNE incidents may occur accidentally (such as a chlorine

influenza).

tanker truck accident) or naturally (such as pandemic

INSTRUCTOR GUIDANCE	CONTENT
	Tell participants that another type of terrorist weapon is deliberate, large-scale disruption of computer networks. This is known as cyberterrorism. To help guard against cyberterrorism, it is important that computer users implement appropriate security measures.
	Chemical Weapons
Chemical Weapons  1. Blister agents 2. Blood agents 3. Choking agents 4. Nerve agents 5. Riot-control agents  CERT Bask Training Unit 8. Terrorium and CERT  Display Slide 8-8	<ul> <li>1. Chemical agents. Unlike biological agents or nuclear materials, which are difficult to produce or purchase, the ingredients used to produce chemical weapons are found in common products and petrochemicals. Terrorists can turn these common products into lethal weapons.</li> <li>There are five categories of chemical weapons.</li> <li>Blister agents cause blisters, burns, and other tissue damage. Exposure may be made through liquid or vapor contact with any exposed skin, inhalation, or ingestion. Blister agents include several families of chemicals, including mustard and lewisite. The effects of blister agents may be similar to those experienced with riot-control agents like "tear" gas but do not clear upon movement into fresh air. In fact, the effects of most blister agents increase with time and may not reach their full impact for 12 to 18 hours.</li> </ul>

INSTRUCTOR GUIDANCE	CONTENT
	Blood agents are absorbed into the bloodstream and deprive blood cells of oxygen. Exposure may be made through liquid or vapor contact with any exposed skin, inhalation, or ingestion. Blood agents include two main families of chemicals, including hydrogen cyanide and cyanogen chloride. Those who are affected by blood agents may appear "bluish" across the nose and cheeks and around the mouth. As the symptoms of blood agents progress, the victim will convulse and lose consciousness.
	Choking agents attack the lungs. Following exposure through inhalation, the lungs fill with fluid, which prevents oxygen from being absorbed by, and carbon dioxide from being removed from, the blood. Death results from lack of oxygen and is similar to drowning. Two common examples of choking agents are phosgene and chlorine.
	Nerve agents affect the central nervous system. These agents act most quickly and are the most lethal of all chemical agents, acting within seconds of exposure. Victims of nerve agents experience constricted pupils, runny nose, shortness of breath, convulsions, and cessation of breathing. Sarin is an example of a nerve agent.
	Riot-control agents cause respiratory distress and tearing and are designed to incapacitate rather than kill. Riot-control agents cause intense pain, especially when in contact with mucus membrane in areas such as the eyes, nose, and mouth. Common riot-control agents include "tear" gas and capsicum (also called pepper spray).
	Remind the participants that the onset of symptoms that result from chemical weapons can range from immediate to 18 hours following exposure. Chemical weapons are considered a moderate risk.

#### UNIT 8: TERRORISM AND CERT

# INSTRUCTOR GUIDANCE CONTENT Biological Weapons

Although not a biological attack, the Severe Acute Respiratory Syndrome epidemic is an example of how a biological agent can be spread far from its point of origin.



**Display Slide 8-9** 

2. <u>Biological weapons</u>. Biological agents are found in nature and can also be manufactured. It is possible to weaponize biological agents so that they can be disseminated to affect broad segments of the population, animal populations, or crops.

Some biological agents are contagious, but many are not. Routes of exposure for biological weapons are:

- Inhalation
- Ingestion
- Absorption

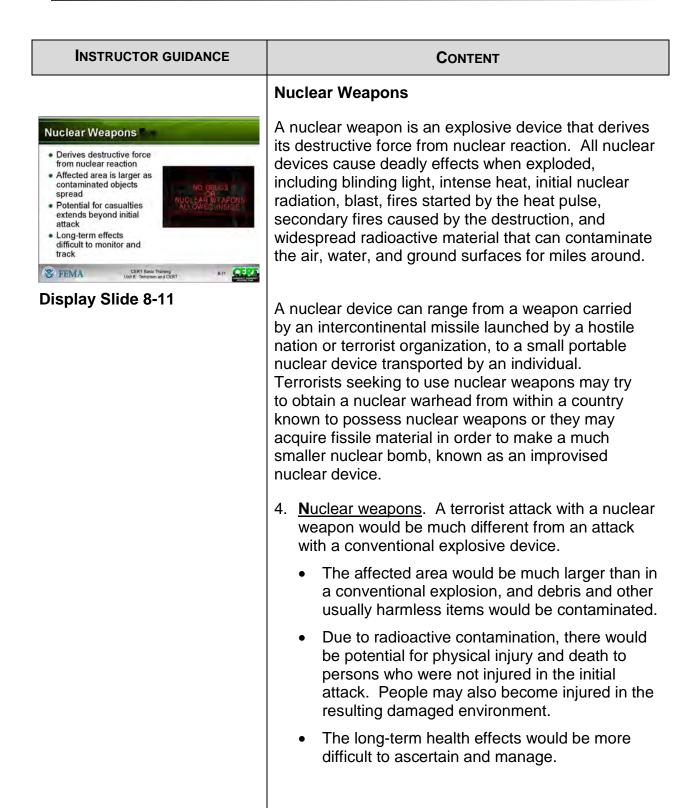
Many, but not all, biological agents take days or even weeks for their symptoms to appear. It is possible for a biological attack to occur and remain unnoticed for some time. Consequently, more people may be affected before it is clear that an attack has occurred.

It is also possible for contagious biological agents to spread far beyond their initial point of contamination as the daily routines of affected individuals broaden the reach of the agent far beyond the initial contamination area. Therefore biological weapons are considered a high risk.

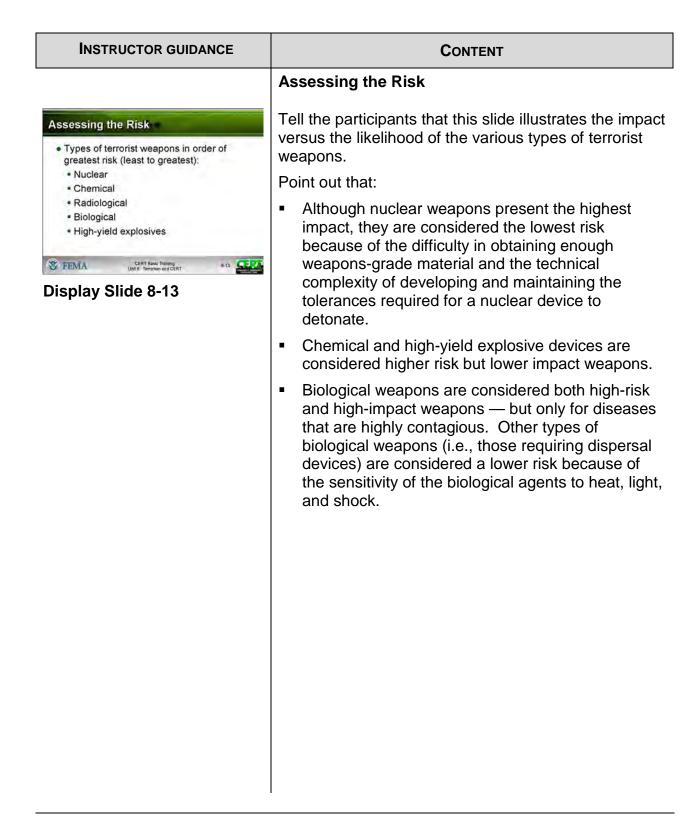
#### UNIT 8: TERRORISM AND CERT

#### **INSTRUCTOR GUIDANCE** CONTENT Radiological Weapons Radiation is energy in the form of waves or particles Radiological Weapons given off during radioactive decay or as a · Considered a higher threat because consequence of certain physical processes that we components are easy to obtain can control. Examples of these are x-ray machines and particle accelerators. Radiation cannot be seen, smelled, or otherwise detected by normal senses. High doses or prolonged exposure to radiation can cause radiation sickness and possibly death. **ॐ** FEMA E-10 CERV Display Slide 8-10 3. Radiation dispersal devices (RDDs) may be improvised explosive devices, also called "dirty bombs," but can include non-explosive devices that could be used to spread radioactive material as well. It is not necessary to use a bomb to disperse radioactive materials; these materials come in solids, liquids, and powdered forms, which can be spread covertly. The major impact of a dirty bomb is produced by the blast. RDDs are considered to be a much higher threat because radiological materials are much easier to obtain than enriched nuclear materials, and the technology required to detonate an RDD is similar to that involved in detonating conventional explosives. Radiological materials are readily available in hospitals and other medical facilities, in university science laboratories, and in many products with commercial uses. Terrorists who would attack using an RDD would need relatively small amounts of radioactive material to make an effective device. As such, radiological weapons are considered a

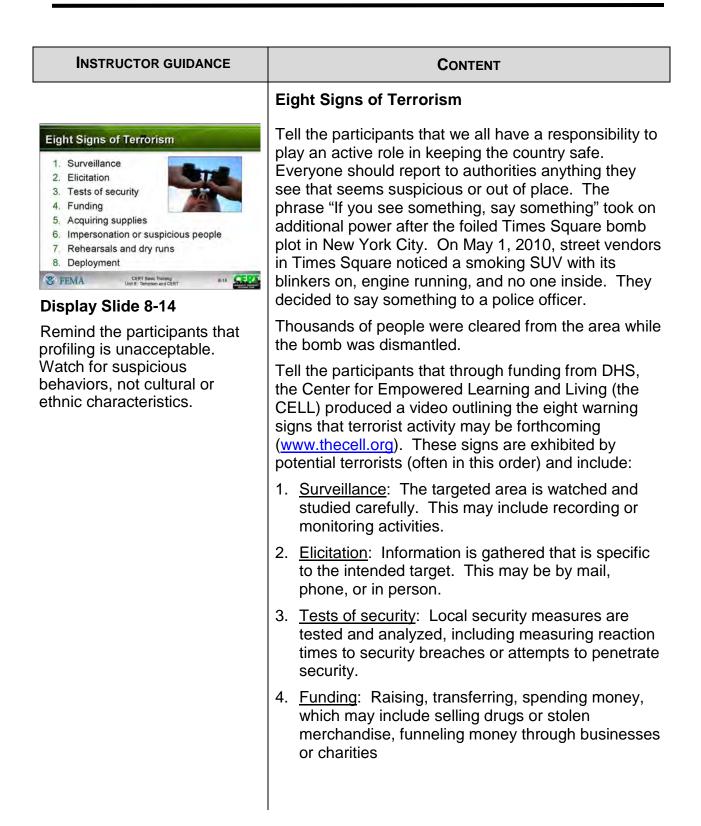
moderate to high risk.



INSTRUCTOR GUIDANCE	CONTENT
	Experts believe that the complexities of a terrorist group's obtaining a nuclear weapon and maintaining the tolerances that are required for the weapon to function make the use of nuclear weapons by terrorist groups a low risk.
	High-Yield Explosives
High-Yield Explosives  • Weapon of choice for terrorists • Used in 80% of attacks • Military munitions: grenades, mortars, surface-to-air missiles • Newer explosives called improvised explosive devices or IEDs • Any device created in an improvised manner used to destroy, disfigure, distract, or harass  CERT BANK THENDS  LIGHT BANK THE	5. High-yield Explosives are the most commonly used terrorist weapons because they are easy to get, easy to hide and activate, and they can cause extensive damage. While terrorists have used military munitions such as grenades, mortars, and shoulder-fired surface-to-air missiles, experts rate high-yield explosives in the form of improvised explosive devices as a greater threat.
	Improvised explosive devices (IEDs) include any device that is created in an improvised manner, incorporating explosives or other materials designed to destroy, disfigure, distract, or harass. Most bombs used by terrorists are improvised. The raw materials required for many explosives can be purchased commercially (e.g., ammonium nitrate, which is also used as fertilizer), purchased from commercial blasting supply companies, or developed using readily available household ingredients. An IED may also contain chemicals as a means of increasing its damage potential.  High-yield explosives are considered the highest risk when dealing with a potential terrorist attack.



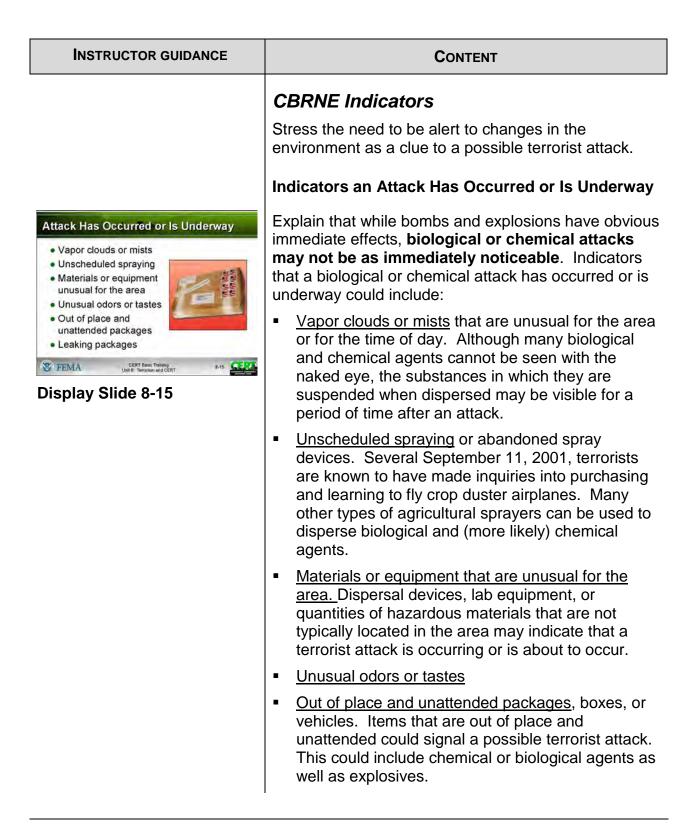
#### UNIT 8: TERRORISM AND CERT



**PAGE 8-18** 

5. Acquiring supplies: Necessary supplies are gathered to prepare the attack, including weapons and weapon components, transportation, and communications. Supplies may be purchased with cash only.  6. Impersonation or suspicious people who don't belong: People impersonating roles to gain access or information and people who don't fit in or don't seem to belong in the location  7. Rehearsals and dry runs: Groups or individuals will often operate test runs before the actual attack.  8. Deployment: The final and most urgent phase when terrorists are deploying assets and getting into position. Attack is imminent.  Explain that the presence of even a few of these signs may indicate the possibility of a terrorist attack.  Tell the group that, although it is not the mission of CERT members to keep constant watch for these eight signs, everyone should be alert to changes in their environment as a clue to a possible terrorist attack and report suspicious activities to appropriate authorities.	INSTRUCTOR GUIDANCE	Сонтент
belong: People impersonating roles to gain access or information and people who don't fit in or don't seem to belong in the location  7. Rehearsals and dry runs: Groups or individuals will often operate test runs before the actual attack.  8. Deployment: The final and most urgent phase when terrorists are deploying assets and getting into position. Attack is imminent.  Explain that the presence of even a few of these signs may indicate the possibility of a terrorist attack.  Tell the group that, although it is not the mission of CERT members to keep constant watch for these eight signs, everyone should be alert to changes in their environment as a clue to a possible terrorist attack and report suspicious activities to appropriate		gathered to prepare the attack, including weapons and weapon components, transportation, and communications. Supplies may be purchased with
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CERT members to keep constant watch for these eight signs, everyone should be alert to changes in their environment as a clue to a possible terrorist attack and report suspicious activities to appropriate		, ,
		CERT members to keep constant watch for these eight signs, everyone should be alert to changes in their environment as a clue to a possible terrorist attack and report suspicious activities to appropriate

#### **UNIT 8: TERRORISM AND CERT**



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#### **INSTRUCTOR GUIDANCE** CONTENT Packages that are leaking may be harmless, but they may also signal a terrorist incident. The terrorists who released sarin in the Tokyo subway system (Aum Shinrikyo) merely poked holes in bags containing sarin, then left the area as the poison leaked out. If you observe any of these indicators of a terrorist See CBRNE Indicators? incident, you should: . If you observe any indications of a terrorist incident you should: Not touch it! . Not touch it · Move away from object or area Move away from the object or area . Report it to authorities immediately Report it to authorities immediately Remember: Cellular phones and two-way radios create static electricity and may detonate explosive S FEMA CERT Basic Training Unit 8: Terrorism and CERT SIS CER devices. CERT members should always report Display Slide 8-16 suspected explosive devices via landline. Emphasize this point. Tell participants that the physical effects on people and animals may also indicate that a chemical or Physical Signs of Chemical-Biological Attack biological attack has occurred. These may include: . Sick or dead animals, fish, or Numerous sick or dead animals, fish, or birds. birds Wildlife is often more sensitive to chemical or · Large number of persons seeking medical attention biological agents than humans. The absence of · Multiple victims exhibiting wildlife or insects that are common for the area or similar symptoms · Multiple casualties without animals, fish, or birds that are obviously sick, obvious signs of trauma dying, or dead may indicate the presence of a SAT CERT ₩ FEMA CERT Basic Training Unit R. Terrorium and CERT biological or chemical attack. **Display Slide 8-17** Large numbers of persons seeking medical attention with similar symptoms that are not characteristic of the season. The symptoms of many biological agents mimic the flu or other common illnesses. An unusually large number of persons seeking medical attention for the flu in July could indicate that a biological attack has taken place.

## **UNIT 8: TERRORISM AND CERT**

INSTRUCTOR GUIDANCE	CONTENT
	<ul> <li>Multiple victims who are exhibiting similar symptoms. Symptoms may range from difficulty breathing to skin necrosis to uncontrolled salivating, uncontrolled muscle twitching, convulsions, or seizure activity. All of these symptoms indicate that a chemical attack may have taken place.</li> <li>Multiple casualties without obvious signs of trauma may indicate a biological or chemical attack.</li> </ul>
	Preparing at Home, Work, and in Your Neighborhood
Preparing at Home, Work, Neighborhood  Personal and family safety is first priority! CERT members are NOT equipped or trained to respond to terrorist incidents Terrorism incident scenes are also crime scenes  CERT Base Training  LERT Base Trainin	Stress that, because personal safety is the first priority, as with hazardous materials, CERT members should treat possible terrorist incidents as a stop sign. CERTs are not equipped or trained to respond to terrorist incidents. Professional responders will need specialized equipment and personnel to respond to a terrorist incident.  In addition, it is important to remember that terrorism incident scenes are also crime scenes. CERT members should avoid taking any action that may disturb potential evidence.

**PAGE 8-22** 

#### UNIT 8: TERRORISM AND CERT

## Prepare for Terrorist Activity · CBRNE events are survivable Preparing for terrorist incidents similar to preparing for natural hazards · Review Unit 1 guidelines · Certain actions more relevant to CBRNE S FEMA CERT Basic Training Unit 8: Terrorism and CERT 8-19 CERT

INSTRUCTOR GUIDANCE

## **Display Slide 8-19**

Direct the participants to the Web site, www.readv.gov. for additional information and more detail on how to prepare for a terrorist incident.

## Shelter-in-Place Procedures . Shut off ventilation systems · Go to your shelter-in-place room . Use precut plastic sheeting to cover air . Tape sheeting over doors, windows, vents . Use duct tape to seal other areas Listen to a battery-powered radio · Ventilate room once contaminants are gone S FEMA CERT Basic Training Unit if: Terrorism and CERT 8-20 CE 4

## Display Slide 8-20

Acknowledge that the media have created negative publicity concerning plastic sheeting and duct tape.

# **Prepare for Terrorist Activity**

Tell participants that there are ways they can prepare for a terrorist incident. The CBRNE events covered in this unit are survivable and what they learn and do now may impact the quality of their survival. Many of the steps for preparing for a terrorist incident are the same as for natural hazards.

CONTENT

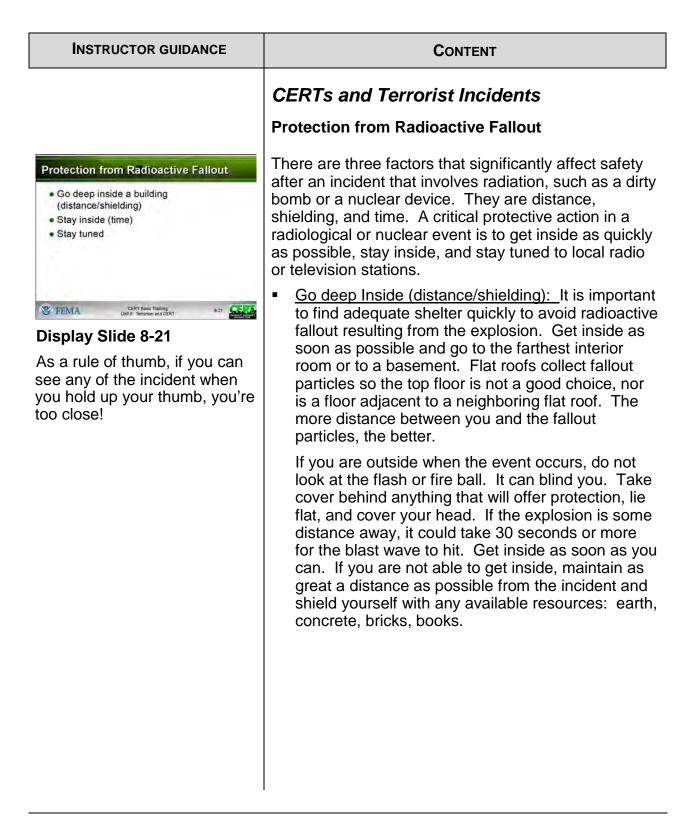
They should review Unit 1: Disaster Preparedness on the importance of learning about community alerts and warnings, having household plans, and assembling supplies in multiple locations. This unit will focus on some of the preparedness actions and protective measures that are particularly relevant for CBRNE events. These include: sheltering-in-place; understanding the concepts of time, distance, and shielding; and decontamination.

#### **Shelter-in-Place Procedures**

Procedures for sheltering-in-place during a chemical or biological attack include:

- Shut off the ventilation system and latch all doors and windows to reduce airflow from the outside.
- Go to your shelter-in-place room (where your precut plastic, duct tape, radio, and other supplies should be stored).
- Use precut plastic sheeting to cover openings where air can enter the room, including doors, windows, vents, electrical outlets, and telephone outlets. When cut, the sheeting should extend several inches beyond the dimensions of the door or window to allow room to duct tape the sheeting to the walls and floor.

INSTRUCTOR GUIDANCE	CONTENT
Point out that studies have shown that sheltering-in-place using plastic sheeting and duct tape reduces exposure to chemical agents by 35 percent (in mobile homes) to more than 90 percent (in office buildings).	Tape the plastic sheeting around all doors and windows using duct tape to ensure a good seal.  Seal with duct tape other areas where air can come in, such as under doors and areas where pipes enter the home. Air can be blocked by placing towels or other soft objects in areas where air could enter, then securing them with duct tape.  Listen to a battery-powered radio for the all clear. Chemicals used in an attack will be carried on the wind and will dissipate over time. You will generally not need to stay in a sealed room for more than a few hours. Listen to Emergency Alert System broadcasts to know when it is safe to leave the safe room.  After contaminants have cleared, open windows and vents and turn on fans to provide ventilation.  To be able to execute these procedures during an actual event requires that you:  Store precut plastic sheeting in your identified shelter-in-place room  Assemble and store food, water, and a battery-operated radio in the shelter-in-place room  Practice sealing the room  Establish shelter-in-place procedures wherever you spend significant amounts of time at home, at work, at school  As a rule of thumb, 10 square feet of floor space per person will provide sufficient air to prevent carbon dioxide buildup for up to 5 hours, assuming a normal breathing rate while resting.

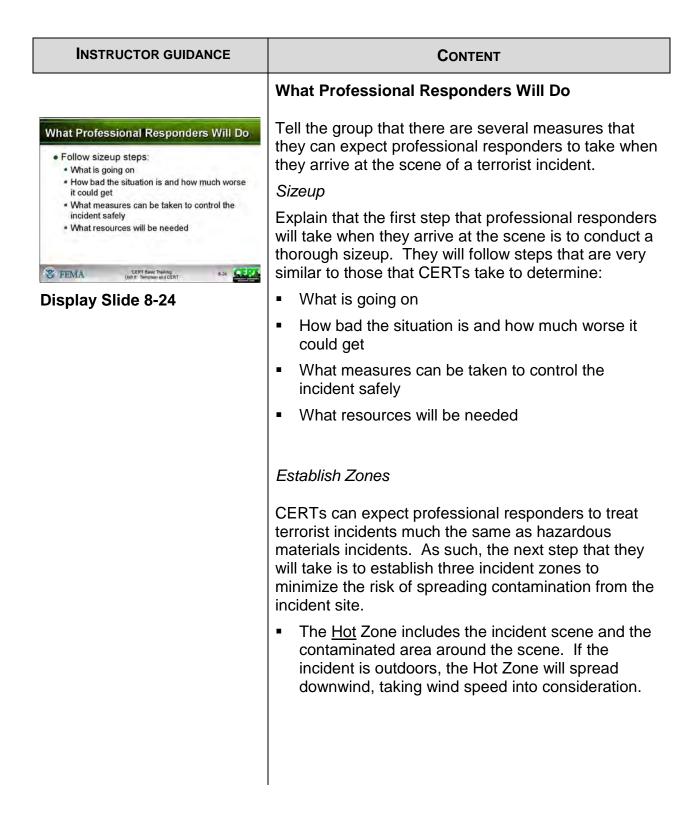


INSTRUCTOR GUIDANCE	CONTENT
	Stay Inside (time): Limiting the amount of time in the area of an incident is important to limit exposure to avoid radioactive fallout resulting from the explosion.
	Stay inside unless threatened by fire, building collapse, medical necessity, or other immediate threats. Remain inside until you receive notification from authorities that it is safe to leave the building. Be prepared to shelter inside for up to 2 to 3 days.
	Stay Tuned: Radiation levels outside will gradually drop and authorities will tell you when it is safe to go outside, bearing in mind that the explosion will have caused significant damage to buildings and infrastructure.
	Basic Decontamination Procedures
Basic Decontamination Procedures  Leave the contaminated area Take decontamination action Remove everything Wash hands Flush the entire body Blot dry Report for decontamination Food safety  CERT Basic Tasking Unit Thereis and CERT  Basic Decontamination  Remove everything Wash hands Flush the entire body Blot dry Report for decontamination Food safety  SET Basic Tasking Unit Thereis and CERT  Basic Tasking Unit Tasking Unit Thereis and CERT	The objective of decontamination is to remove harmful chemicals or particles of radioactive dirt or dust that have come in contact with the skin or clothes.  Be sure to make the points listed below:  Leave the contaminated area immediately.  Depending on the circumstances, go inside, go outside, or go upwind, uphill, or upstream from the contaminant. (Seek a distance of at least 1,000 to 1,500 feet.)

INSTRUCTOR CUIDANCE	CONTENT
INSTRUCTOR GUIDANCE	CONTENT
	Take decontamination action. Seconds count! The goal is to limit the time that the agent is in contact with the skin.
	Remove everything from the body, including jewelry. Cut off clothing that would normally be removed over the head to reduce the probability of inhaling or ingesting the agent. Seal your clothes in a plastic bag.
	<ul> <li>Wash hands before using them to shower. If no shower is available, improvise with water from faucets or bottled water.</li> </ul>
	Flush the entire body, including the eyes, underarms, and groin area, with copious amounts of cool water. Hot water opens the pores of the skin and can promote absorption of the contaminant. Using copious amounts of water is important because some chemicals react to small amounts of water.
	If soap is immediately available, mix the soap with water for decontamination. Avoid scrubbing with soap because scrubbing can rub the chemical into the skin rather than remove it.
	Wash hair with soap or shampoo or rinse with water if soap is not available. Do not use conditioner as that can bind radioactive materials to your hair and make it difficult to remove.
	If hosing someone else off or pouring water from a container, avoid both physical contact with the person and with the runoff.
	The water used for decontamination must be contained and covered or drained outside of the shelter area to avoid shelter contamination.

•	
INSTRUCTOR GUIDANCE	CONTENT
	Blot dry using an absorbent cloth. Do not rub the skin! Put on clean clothes.
	As soon as possible, emergency responders will set up mass decontamination capabilities. For radiological events, stations for radiation monitoring and blood tests will also be set up to determine levels of exposure and what next steps to take to protect health.
	Food Safety. Radioactive particles in food or water may be harmful if consumed. Food in tightly covered containers (cans, bottles, plastic, and boxes) will be safe to eat or drink if you dust or wipe off the containers. Be sure to wash fruit and vegetables and peel them carefully. Water will be safe if it is in covered containers or if it has come from covered wells or from undamaged and uncontaminated water systems.
	Treating Others
Treating Others  • First priority for a CERT member is	Tell participants to remember that the first priority for CERTs is personal safety.
personal safety  Take self-protective measures only  Do not attempt to treat victims in	<ul> <li>CERT members should take <u>self-protective</u> measures only.</li> </ul>
contaminated area  Tell victims about decontamination procedures	<ul> <li>They should <u>not</u> attempt to treat the injuries of victims in the contaminated area.</li> </ul>
CERT Basic Triefing Unit # Terrorier and CERT  S-23  Display Slide 8-23	<ul> <li>CERT members can tell people who are leaving the area about using basic decontamination procedures and waiting for responders.</li> </ul>

INSTRUCTOR GUIDANCE	CONTENT
Emphasize that individual and family safety is any CERT member's primary concern.	Remember that, as with professional responders, CERT members may have difficulty dealing with the idea that they should not try to help others, even partners, who are injured but may have been contaminated. To help the participants deal with the potential of having to make a decision to deny assistance, stress that:
	They have a responsibility to themselves, to other CERT members, and to their families to operate safely.
	They are neither trained nor equipped to deal with contaminated victims.
	3. They cannot help anyone if they become victims. In fact, they may make matters considerably worse if they spread the contamination.
	Emphasize that CERT members must make the best decisions possible with the information that they have at hand. Even if an incident turns out not to be terrorist related, they have made the right decision if they have done the most good for the greatest number and have not become a victim themselves.



INSTRUCTOR GUIDANCE	CONTENT
	■ The Warm Zone is upwind (and upstream if the contaminant is waterborne) from the Hot Zone and is used to isolate victims during decontamination. It is called the Warm Zone because the evacuees can carry or spread a contaminant into this area. Professional responders will hold those who require decontamination in the Warm Zone until decontamination is complete so that contaminants do not spread.
Tell the group that zone information will help them to know what to expect from professional responders. Caution the group not to try to establish zones themselves.	■ The Cold Zone is located upwind and beyond the Warm Zone. Those who are not contaminated or who have been decontaminated will be evacuated to the Cold Zone and kept there until professional responders authorize them to leave.

INSTRUCTOR GUIDANCE	CONTENT
	Activity: Applying CERT Principles to a Suspected Terrorist Incident
	<u>Purpose</u> : The purpose of this activity is to ensure that the participants can apply their CERT protocols to what they've learned about suspected terrorist incidents.
	Instructions: Follow the steps below to conduct this activity.
	Assign the class to table groups of eight. Assign Scenario 1 to half of the groups and Scenario 2 to the other half.
	2. Explain the situation to the groups:
	The participants have completed CERT training and are part of a neighborhood team. Being prepared, each team member has CERT gear and a disaster supply kit in the car. Each team member also has a cell phone.
PM, P. 8-18	Ask each group to read its assigned scenario and determine <u>as a team</u> what actions they should take.
	Tell the groups that they will have 10 minutes to read and discuss their scenarios.
	<ol> <li>At the end of the allotted time, ask each group to select a spokesperson to present the team's response.</li> </ol>
	6. Facilitate a large-group discussion of each team's responses. Solicit input from the class about whether the responses are in line with the CERT goal and protocols for terrorist incidents. Be prepared to answer questions and clarify points that the teams have about what is appropriate for the situation.

#### **UNIT 8: TERRORISM AND CERT**

PM, P. 8-18	Activity: Applying CERT Principles to a Suspected Terrorist Incident

<u>Purpose</u>: The purpose of this activity is to enable you to apply CERT protocols to a suspected terrorist incident.

**Instructions:** Follow the steps below to complete this activity:

- 1. Assume that you are a CERT graduate and have been assigned to a team.
- 2. Working in your table group, read the scenario assigned to your group and determine as a team what actions to take.
- 3. You will have 10 minutes to read and discuss your scenarios.
- 4. Select a spokesperson to present the team's response to the class.

#### Scenario 1:

It is a bright, sunny spring day. You are stopping at the Post Office on your way home from work. As you enter the parking lot, you are shaken by an explosion and see glass from the Post Office windows fly through the air across the parking lot. Although it takes you a few seconds, you realize that there has been an explosion inside the Post Office.

<u>Answer</u>: You should suspect that this is a terrorist incident. The steps that you should take are:

- 1. Move at least 1,000 to 1,500 feet upwind and uphill.
- 2. Use a landline to call information into 9-1-1.
- 3. Warn others of the possible danger.
- 4. Tell victims who try to leave the area to wait for professional responders.

CERT BASIC TRAINING: INSTRUCTOR GUIDE JANUARY 2011 PAGE 8-33

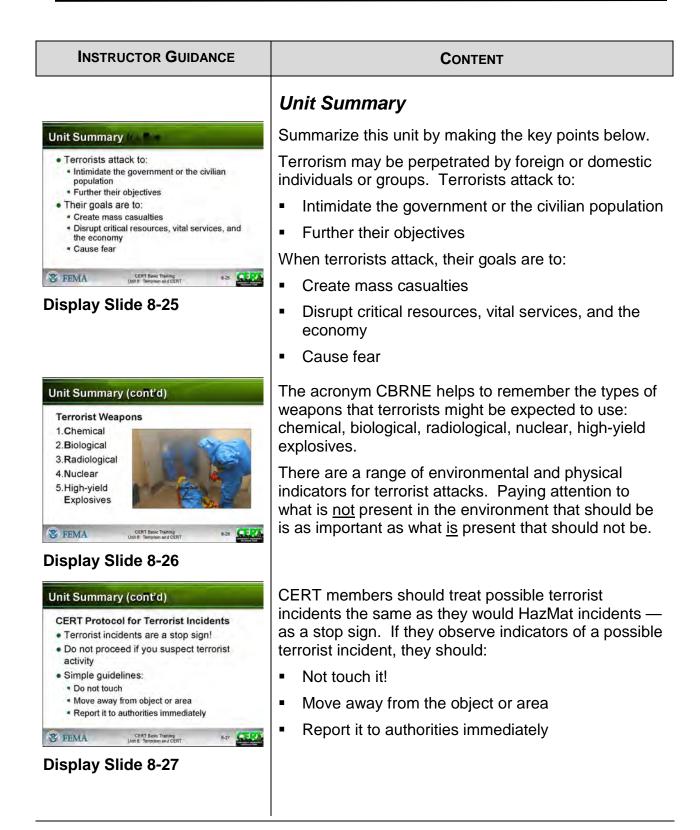
**UNIT 8: TERRORISM AND CERT** 

#### Scenario 2:

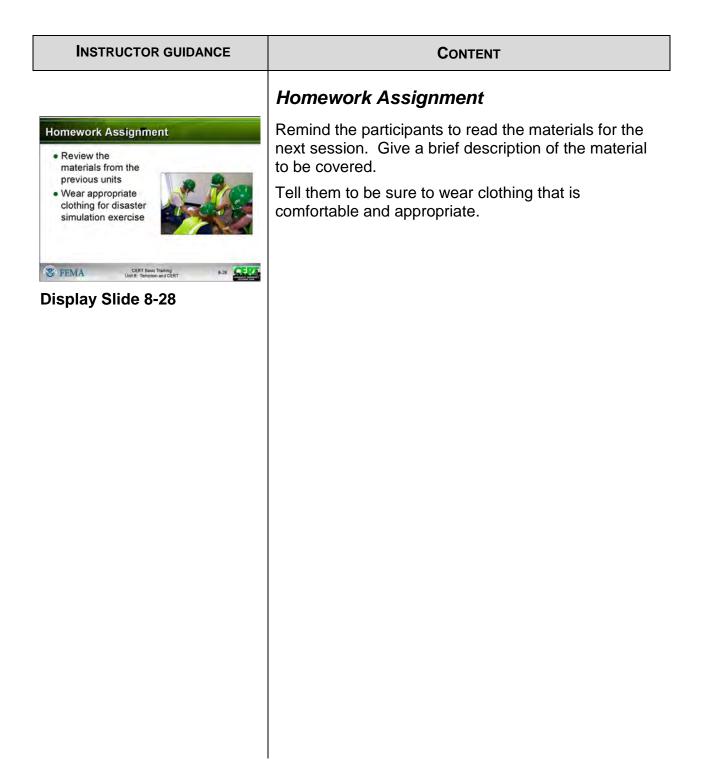
It is a bright, sunny day with light wind. You are stopping at the Post Office on your way home from work. As you enter the parking lot, you see several people exiting the building. All seem to be disoriented. Some are clutching their chests and rubbing their eyes. One has fallen to the ground and seems to be having some sort of convulsion.

<u>Answer</u>: You should suspect that this is a terrorist incident, and it appears from the victims' symptoms that a chemical agent has been used. The steps that you should take are:

- 1. Move at least 1,000 to 1,500 feet upwind and uphill.
- 2. Decontaminate if you think there is a chance that you might be contaminated.
- 3. Call 9-1-1 to report as much information as possible about the incident.
- 4. Warn others of the danger.



INSTRUCTOR GUIDANCE	Content
	CERTs can help limit their exposure to the harmful effects of terrorist weapons by:
	<ul> <li>Moving quickly to limit their exposure time</li> </ul>
	<ul> <li>Evacuating the area as quickly as possible, being sure to move perpendicular to or upwind of an airborne plume, and upstream if contaminants are waterborne</li> </ul>
	<ul> <li>Using the protection of a sturdy building as shielding, going inside if contaminant is outside and going outside if contaminant is inside. If the event includes radioactive fallout, it is important to go quickly deep inside a building for protection.</li> </ul>
	<ul> <li>Safely decontaminating themselves when necessary</li> </ul>
	CERT members should take immediate action to protect themselves and, if exposed, follow basic decontamination procedures immediately. Because the safety of CERT members is the number one priority, CERT members should <u>not</u> attempt to treat anyone who has been contaminated or perform decontamination procedures for them.
	Stress that terrorist incident scenes are also crime scenes. CERT members should avoid taking any action that may disturb potential evidence.
	Does anyone have any questions about CERTs and their role in terrorist incidents?

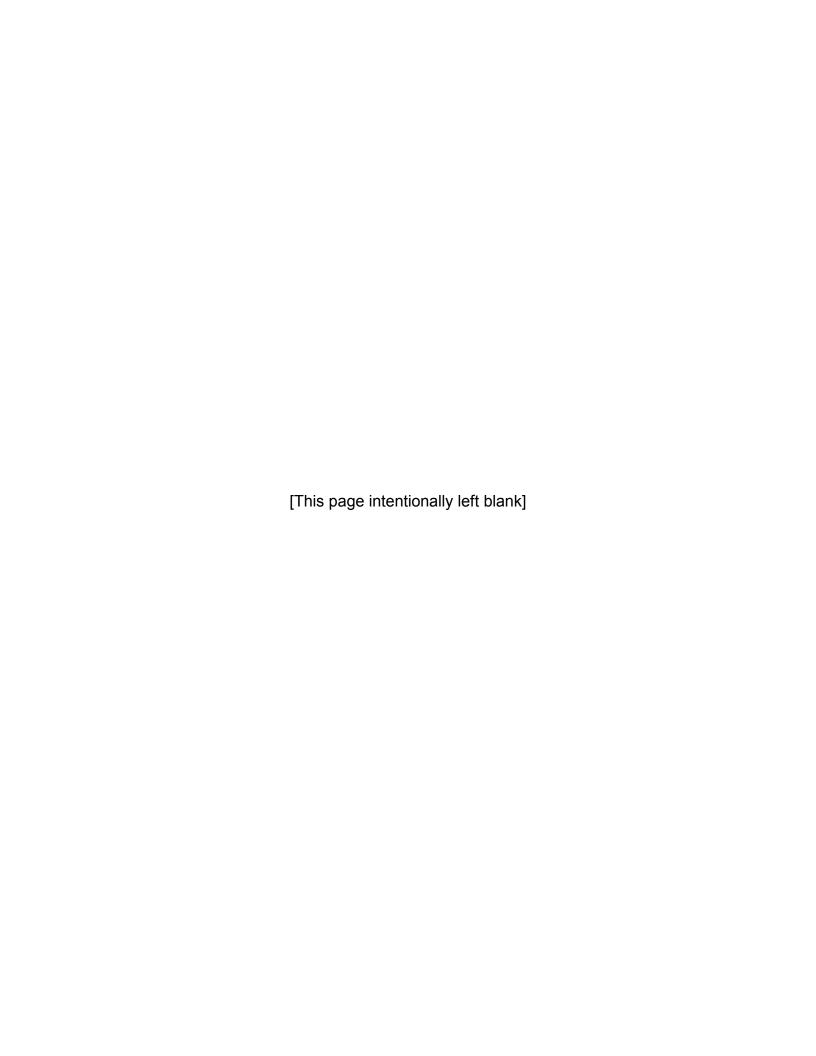




# UNIT 9: COURSE REVIEW, FINAL EXAM, AND DISASTER SIMULATION

## This unit includes:

- A Review of Key Points from the Course
- A Final Exam
- A Final Exercise



# Unit 9: Course Review, Final Exam, and Disaster Simulation

OBJECTIVES	At the conclusion of this unit, the participants should be able to apply the skills and knowledge learned in Units 1 through 8 to a simulated disaster situation.
SCOPE	The topics of this unit will include:
	<ul> <li>Introduction and Unit Overview</li> </ul>
	<ul> <li>Course Review</li> </ul>
	■ Final Exam
	<ul> <li>Disaster Simulation</li> </ul>
	<ul> <li>Exercise Critique and Summary</li> </ul>
ESTIMATED COMPLETION TIME	2 hours 30 minutes
Training Methods	The lead instructor will begin this unit by welcoming the participants to Unit 9: Course Review, Final Exam, and Disaster Simulation, and will introduce the instructors for the unit. The instructor will then explain that this unit is the culmination of all that the participants have learned and practiced over the last eight units. The instructor will briefly review how the unit will proceed.
	The instructor will provide a brief review of the key concepts that were covered in earlier sessions and answer questions as necessary.
	After answering all questions, the instructor will administer and collect the final exam.
	The instructor will then explain how the disaster simulation will be run and point out that the intent of the simulation is to give the participants a practical perspective on overall team operations while further improving their skills. The instructor will emphasize CERT team strategies and will set the stage for conducting the exercise in either a light damage or moderate damage scenario.
	Throughout the simulation, the instructors at each station should stress that the participants must treat the exercise as if it were real and train as if lives were depending on it. The instructors will reinforce that mistakes made during training are lessons learned — lessons that may someday save lives and prevent injuries.

CERT BASIC TRAINING: INSTRUCTOR GUIDE JANUARY 2011 PAGE 9-1

# Unit 9: Course Review, Final Exam, and Disaster Simulation

TRAINING METHODS (CONTINUED)	The instructors should, therefore, encourage leadership, decisive actions, and assertive behavior during the exercise to maximize the learning experience.  At the end of the simulation, the instructor will lead an interactive discussion about the lessons learned and the difficulties encountered during the exercise.	
Resources	<ul> <li>Community Emergency Response Team Instructor Guide</li> </ul>	
REQUIRED	<ul> <li>Community Emergency Response Team Participant Manual</li> </ul>	
	<ul> <li>Certificate of Completion (to be developed locally)</li> </ul>	
OTHER RESOURCES	"Victims" will be needed for the triage and treatment simulation and for the victim extrication simulation. Live "victims" are recommended for the triage and treatment simulation.	
EQUIPMENT	In addition to the equipment listed at the front of this Instructor Guide, you will need the following equipment for this unit:	
	<ul> <li>A computer with PowerPoint software</li> </ul>	
	<ul> <li>Computer projector and screen</li> </ul>	
	<ul> <li>Safety equipment</li> </ul>	
	<ul> <li>Pieces of wood, furniture, or other items to simulate debris</li> </ul>	
	<ul><li>Two or more poles</li></ul>	
	<ul> <li>Moulage (used to simulate injuries)</li> </ul>	
	<ul> <li>Other equipment items, which may be available from earlier units that may add to the realism of the simulation</li> </ul>	
GENERAL PREPARATION	If you believe a PowerPoint presentation will be helpful to the participants, you may pull slides from the presentations that accompany the previous units.	
	The final exam is included in the Participant Manual. Within this unit is a copy of the exam with the correct responses.	
	You will need to make a copy of your agency's CERT Certificate of Completion for each participant who will complete the training.	

### Unit 9: Course Review, Final Exam, and Disaster Simulation

PREPARATION FOR THE DISASTER SIMULATION This exercise will allow the participants to use the skills and knowledge that they have learned throughout their CERT training. A great deal of preparation is required before beginning this exercise.

1. Develop a disaster scenario.

Before the session begins, develop a scenario based on a potential disaster in <u>your community</u>. A sample disaster scenario is included on pages 9-6 and 9-7 so that you can see the type of exercise that will be required. Note: Participant Manual includes a copy of the map for the sample disaster scenario on PM 9-19.

- Identify four areas three indoors and one outdoors (weather permitting) — to serve as exercise stations.
  - At Station 1, the participants will receive the disaster simulation scenario. Based on that scenario, the participants will:
    - Determine the extent of damage
    - Establish team priorities
    - Determine the resources needed
    - Identify potential hazards

The participants will also select a CERT leader who will establish a CERT organization based on resources available and established priorities. Note: To help ensure that as many participants as possible have the opportunity to serve as team leader during the exercise, each group will select a different CERT leader at Station 1, Station 3 (triage and treatment), and Station 4 (victim extrication).

- At Station 2, the participants will be required to:
  - Evaluate a fire situation
  - Select the proper extinguisher
  - Extinguish a fire

NOTE: Each participant will extinguish the fire.

- At Station 3, the participants will be required to conduct triage and treat victims with the medical supplies available.
- At Station 4, the participants will perform leveraging and cribbing to extricate victims who are trapped by debris.

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#### Unit 9: Course Review, Final Exam, and Disaster Simulation

PREPARATION FOR THE DISASTER SIMULATION (CONTINUED) 3. Select four assistant instructors to help with the disaster simulation.

The instructors will serve at the following stations:

- Two assistants at Station 2 to conduct the fire suppression exercise
- One assistant at Station 3 to monitor victim triage and treatment
- One assistant at Station 4 to monitor victim extrication
- 4. Set up the four exercise stations.

The instructors at each station will oversee the station setup, monitor safety during the exercise, provide feedback to the participants, and oversee station teardown.

Setup for each station is as follows:

- Station 1: Station 1 should include one table with chairs.
   Place one copy of the disaster scenario on the table at each chair.
- Station 2: Set up Station 2 in the same manner as for the fire suppression exercise in Unit 2. Provide multiple types and sizes of extinguishers so that participants must select the proper type of extinguisher for the fire.
- Station 3: Before the session begins, identify several types of injuries that would be common as a result of the disaster described in the simulation. The instructors at Station 3 will apply moulage to the "victims" to simulate injuries that would be common for the disaster scenario. They should then place the "victims" in sitting or lying positions around the station. It may be desirable to *not* have all "victims" in clear view or easy reach of the participants.
- Station 4: Use pieces of wood, furniture, or other items (to simulate debris) to "trap" the victims. Provide additional materials that can be used in a leverage and cribbing operation as well as blankets and other items that could be used if necessary to lift or otherwise move the victim from his or her place of entrapment.

# Unit 9: Course Review, Final Exam, and Disaster Simulation

Notes	A suggested time plan for this unit is as follows:	
	Introduction and Overview	5 minutes
	Course Review	. 15 minutes
	Final Exam	. 15 minutes
	Disaster Simulation	. 90 minutes
	Exercise Critique and Summary	. 25 minutes
	Total Time: 2 hours 30 minutes	

#### Unit 9: Course Review, Final Exam, and Disaster Simulation

#### SAMPLE DISASTER SCENARIO

Apple Valley is a rural community with a population of 13,000. Located in Apple County, the town is located between Dawson and Sparkville.

South Lawn Retirement Home is a privately owned geriatric facility, located at the end of 7<sup>th</sup> Street (see the map on the next page). Although a new access road is under construction, 7<sup>th</sup> Street is currently the only access route to South Lawn. Because South Lawn is located across the main line of the Southeast Railroad from the remainder of Apple Valley and could be isolated in the event of a major incident, the South Lawn administrator jumped at the opportunity to organize a CERT. CERT training ended just 2 weeks ago.

You are an employee at the retirement home and a member of the CERT.

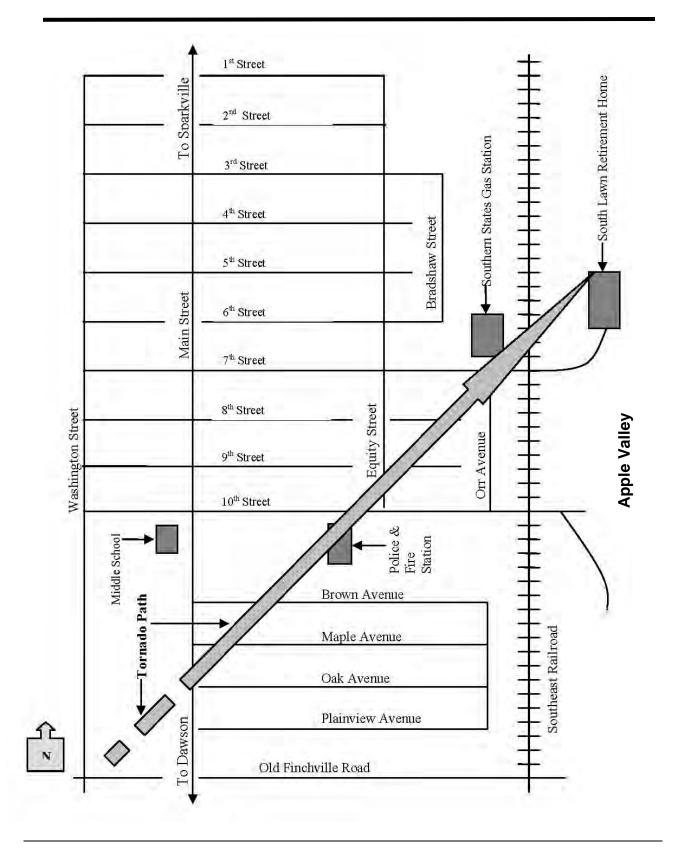
It has been a hot, muggy June day — the kind of day that usually spawns thunderstorms. Early in the day, the National Weather Service issued a severe thunderstorm watch for the afternoon and early evening hours. As the afternoon continued, the temperature rose into the high 80s. Building storms were very visible to the southwest.

While on your dinner break, you turned on the Weather Channel™ to check the latest forecast. It didn't surprise you to see that the National Weather Service had upgraded the watch to a warning for your county. After finishing your dinner, you went back to work on the second floor of the nursing home. As you work, you hear thunder off in the distance.

A while later, you hear the outdoor warning siren begin to sound. Although you immediately begin following the home's established procedures for a tornado warning, there is just no time. Before you can get even the first patient wheeled toward the hallway, you hear glass breaking at the other end of the hallway. The tornado (which would later be determined to be an F-3) struck the northwest corner of the building, tearing away the roof, throwing glass everywhere, and causing a partial collapse at that corner.

As the tornado passes, you realize that you and the residents assigned to you are safe. But you can tell from a quick look down the hall and the screams coming from that area that there have been injuries. Although the situation is confused, you also think you can smell smoke.

## Unit 9: Course Review, Final Exam, and Disaster Simulation



# Unit 9: Course Review, Final Exam, and Disaster Simulation

INSTRUCTOR GUIDANCE	CONTENT
	Introduction and Overview
	Welcome the participants to Unit 9 of the <i>CERT Basic Training</i> course. Introduce the instructors for this session.
	Begin by telling the participants that this unit is the culmination of all that they have learned throughout the course. Tell them that, after a brief review of the key points of the course, they will take a final exam. They will then use their skills and knowledge of CERT organization and operations in a simulated disaster exercise.
	Make any administrative announcements that may be required at this time (e.g., make-up classes).
	Course Review
Spend 2-3 minutes reviewing the key points from each unit.	Cover the following points from the disaster preparedness unit:
	Home and workplace preparedness:
	Assembling a disaster supply kit
	Developing a disaster plan
	Developing a safe room
	Evacuation versus sheltering-in-place
	<ul> <li>Specific preparedness measures for local high-risk hazards (including terrorism)</li> </ul>

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# Unit 9: Course Review, Final Exam, and Disaster Simulation

-	
INSTRUCTOR GUIDANCE	CONTENT
	Cover the following points from the fire safety and utility controls unit:
	Hazardous materials:
	<ul> <li>Identification</li> </ul>
	<ul> <li>Defensive strategies</li> </ul>
	<u>Utility control</u> :
	• Gas
	<ul> <li>Electric</li> </ul>
	<ul> <li>Water</li> </ul>
	<ul> <li><u>Sizeup</u>: Stress the importance of CERT sizeup and the steps in the sizeup process.</li> </ul>
	Firefighting resources:
	<ul> <li>General resources available</li> </ul>
	<ul> <li>Interior wet standpipes, including operation and limitations (if applicable)</li> </ul>
	<ul> <li>Portable fire extinguishers, their capabilities and limitations</li> </ul>
	Safety considerations:
	<ul> <li>Safety equipment must be used at all times.</li> </ul>
	<ul> <li>CERT members must always use the buddy system.</li> </ul>
	<ul> <li>Fire suppression group leaders should always have a backup team available.</li> </ul>

# Unit 9: Course Review, Final Exam, and Disaster Simulation

INSTRUCTOR GUIDANCE	CONTENT
	Cover the following points for disaster medical operations (two units):
	■ The "three killers"
	<ul> <li>Head-Tilt/Chin-Lift method of opening an airway</li> </ul>
	Methods for controlling bleeding:
	Direct pressure
	<ul> <li>Elevation</li> </ul>
	<ul> <li>Pressure points</li> </ul>
	■ <u>Treatment for shock</u> :
	<ul> <li>Patient position</li> </ul>
	<ul> <li>Maintenance of body temperature</li> </ul>
	<ul> <li>No food or drink</li> </ul>
	Conducting triage
	<ul> <li>Head-to-toe assessments</li> </ul>
	■ Wound care
	<ul> <li>Special considerations when head, neck, or spinal injuries are suspected</li> </ul>
	<ul> <li>Treatment area considerations</li> </ul>
	<ul> <li>Splinting and bandaging</li> </ul>
	<ul> <li>Basic treatment for various injuries</li> </ul>

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# Unit 9: Course Review, Final Exam, and Disaster Simulation

INSTRUCTOR GUIDANCE	CONTENT
	Cover the following points for <b>light search and rescue</b> :
	<ul> <li>Search and rescue are really two functions.</li> </ul>
	Goals of search and rescue:
	<ul> <li>Rescuing the greatest number of people in the shortest amount of time</li> </ul>
	<ul> <li>Rescuing the lightly trapped victims first</li> </ul>
	■ <u>Sizeup</u> :
	<ul> <li>Construction types</li> </ul>
	<ul> <li>Related hazards</li> </ul>
	Structural damage:
	<ul> <li>Light damage</li> </ul>
	<ul> <li>Moderate damage</li> </ul>
	<ul> <li>Heavy damage</li> </ul>
	■ <u>Search techniques</u> :
	<ul> <li>Be systematic and thorough</li> </ul>
	<ul> <li>Mark areas searched</li> </ul>
	<ul> <li>Document search results</li> </ul>
	Rescue techniques:
	<ul> <li>Victim carries</li> </ul>
	<ul> <li>Leverage and cribbing</li> </ul>
	Lifts and drags

# Unit 9: Course Review, Final Exam, and Disaster Simulation

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# **Unit 9: Course Review, Final Exam, and Disaster Simulation**

INSTRUCTOR GUIDANCE	CONTENT
The instructor's copy of the final exam is on the following pages of the Instructor Guide. The response in bold is the correct response.	Final Exam  Tell participants that they will now take the final exam for CERT Basic Training.  The final exam is on pp. 9-5 through 9-17 in the Participant Manual.

### Unit 9: Course Review, Final Exam, and Disaster Simulation

## **CERT Basic Training Final Exam**

#### **Unit 1: Disaster Preparedness**

- 1. When a disaster occurs, a CERT member's first responsibility is to:
  - A. Join the CERT in disaster response efforts
  - B. Help professional responders
  - C. Ensure personal and family safety
  - D. Do the greatest good for the greatest number of people
- CERT members volunteer to fill non-disaster roles. An example of a nondisaster function of CERTs is:
  - A. Staffing parades, health fairs, and other special events
  - B. Monitoring the news for potential disaster threats
  - C. Petitioning local officials for more local emergency response funding
  - D. Distributing political pamphlets and other materials
- 3. There are three types of disasters. They are natural, intentional, and
  - A. Mechanical
  - B. Biological
  - C. Chemical
  - D. Technological
- 4. Which of the following is **NOT** a hazard associated with home fixtures?
  - A. Gas line ruptures
  - B. Hazardous material spill
  - C. Injury or electric shock
  - D. Fire from faulty wiring
- 5. One of the steps in preparing for a disaster is to develop a disaster supply kit. Where should you keep separate disaster supply kits?
  - A. Home and work
  - B. Every room in the house
  - C. Vehicle
  - D. Home, work, and vehicle

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## Unit 9: Course Review, Final Exam, and Disaster Simulation

# **Unit 2: Fire Safety and Utility Controls**

While searching a lightly damaged structure following a destructive storm, you and fellow CERT members locate a fire.

- 1. As you conduct your fire sizeup, which of the following is the least important question to consider:
  - A. Can my buddy and I fight the fire safely?
  - B. Do my buddy and I have the right equipment?
  - C. How many people are in the building?
  - D. Can my buddy and I escape?

From your sizeup, you determine that the fire can be put out with a portable fire extinguisher. You and your buddy quickly retrieve a portable fire extinguisher, which you have determined is the right type of extinguisher to fight this fire.

- 2. What should you do before approaching the fire?
  - A. Test the extinguisher after pulling the pin
  - B. Wait for the fire department to arrive
  - C. Tell your buddy to wait at the door for you
  - D. Make sure the house's water supply is shut off

Following the correct CERT procedure (P.A.S.S.), you discharge the extinguisher.

- 3. What should you do if the fire continues to burn 5 seconds after you start to extinguish it?
  - A. Check the label on the extinguisher
  - B. Look for creative resources to fight the fire
  - C. Leave immediately
  - D. Back out and signal for your buddy to attempt to suppress the fire
- 4. The fire has spread to other areas by the time the fire department arrives. What's your next course of action?
  - A. Attempt to suppress the fire again with a new extinguisher
  - B. Communicate what you know to one of the firefighters
  - C. Overhaul the fire
  - D. Send in a backup team to fight the fire

## Unit 9: Course Review, Final Exam, and Disaster Simulation

- 5. If the chief officer asks you and your fellow CERT members to remain outside at a safe distance, how should you respond?
  - A. Continue to conduct a sizeup from a safe distance outside of the building
  - B. Leave the premises
  - C. Enter the house after the firefighters
  - D. Call in more CERT members for backup

While the fire department manages to suppress most of the fire inside the building, a small fire has started to spread through the yard. You notice a nearby shed is posted with an NFPA 704 Diamond featuring the numbers 1, 1, and 2.

- 6. What should you do?
  - A. Suppress and overhaul the fire because the numbers in the Diamond are small and indicate that little risk is present
  - B. Leave the area and communicate the information to one of the professional firefighters on the scene if they are accessible
  - C. Suppress and overhaul the fire only if the number in the blue quadrant is less than 2
  - D. Make sure you are using the correct type of fire extinguisher

## Unit 3: Disaster Medical Operations — Part 1

In the aftermath of a magnitude 7.7 earthquake, you have ensured your safety and your family's safety and you grab your CERT kit and PPE. As you are making your way to your CERT's established meeting point, you come across a woman lying by the side of the road. You call out your name and affiliation and ask, "Are you okay?" There is no response.

- 1. Based on what you know thus far, how should you proceed?
  - A. Assume the woman is dead and continue to the CERT meeting point
  - B. Call 9-1-1 on your cell phone immediately
  - C. Assess for airway, bleeding, and signs of shock
  - D. Make a note of the woman's location and go for help

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## Unit 9: Course Review, Final Exam, and Disaster Simulation

You move closer to the victim. Once again, you ask, "Can you hear me? Are you okay?" As you approach, you hear a very faint "help me," and now that you are closer, you notice that that the victim is bleeding heavily from a laceration on her thigh. You immediately attempt to call 9-1-1 on you cell phone but the system is down.

- 2. You know this woman is seriously injured. How would you help her?
  - A. Assess for the "three killers" systematically, starting with the airway
  - B. Focus immediately on the most critical threat, the heavy bleeding
  - C. Get blankets from your supply kit because this woman is clearly in shock
  - D. Keep the woman company until more help arrives
- 3. You notice that the blood is spurting from the laceration on the victim's inner thigh. What type of bleeding is this?
  - A. Arterial
  - B. Venous
  - C. Capillary
  - D. Mortal
- 4. What will you do to stop the bleeding?
  - A. Apply a tourniquet
  - B. Wrap the wound with the first piece of cloth you can find
  - C. Elevate the victim's heart above the wound by having the woman sit up
  - D. Using the sterile dressings in your supply kit, apply pressure directly to the wound

After a few moments, the bleeding slows considerably. You ask the woman, "Are you okay? Squeeze my hand if you can hear me." She is only able to groan unintelligibly in response. You notice that her fingers are cold — despite soaring temperatures — when she tries to squeeze your hand.

- 5. The signs and symptoms that you witness tell you that this woman is suffering from what?
  - A. Low blood sugar
  - B. Shock due to inadequate blood flow
  - C. Malnourishment
  - D. Shock due to the extreme stress of the situation

## Unit 9: Course Review, Final Exam, and Disaster Simulation

- 6. How would you treat the woman based on your findings?
  - A. Wrap her in something warm
  - B. Tell her to go to sleep
  - C. Ask her to hold the dressing in place while you search for help
  - D. Give her food and water
- 7. If asked to triage the woman, how would you tag her?
  - A. With a tag signifying "Immediate"
  - B. With a tag signifying "Delayed"
  - C. With a tag signifying "Minor"
  - D. With a tag signifying "Dead"

# Unit 4: Disaster Medical Operations — Part 2

A Category 4 hurricane has just struck your town. You are assigned by your Incident Commander/Team Leader to help conduct triage operations in an area of the neighborhood that has sustained damage. Arriving at the treatment area, you notice sections marked "I," "D," and "M" where victims are already being placed for treatment.

- 1. What do the section markers indicate?
  - A. Dead, dying, and healthy
  - B. Minor, immediate, and dead
  - C. Stop, yield, and go
  - D. Immediate, delayed, and minor

You are directed to help with the "Immediate" victims. A fellow team member asks you to get some clean water to wash soiled gloves. You know the supply team is on its way, but could be several hours away. Grabbing a bucket, you run to a nearby stream for water.

- 2. What should you do to sterilize the water for medical use?
  - A. Mix 1 part bleach with 10 parts water
  - B. Mix in 8 drops of non-perfumed chlorine bleach per gallon of water and wait for 30 minutes
  - C. Take the bucket and find a place to boil the water, since you assume that one of the buildings must have a functional kitchen
  - D. Mix in 8 tablespoons of non-perfumed chlorine bleach and wait for 30 seconds

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## Unit 9: Course Review, Final Exam, and Disaster Simulation

Once you arrive back at the "Immediate" treatment area with the water, the team leader explains that a victim has died. The team leader puts you in charge of establishing the morgue.

- 3. How and where will you set up the morgue?
  - A. Near the immediate treatment area
  - B. Near the delayed treatment area
  - C. Away from all three treatment areas
  - D. Near the triage area

A few hours later, you return to the "Immediate" area and ask your Incident Commander/Team Leader for a new assignment. She quickly explains that the area is overflowing with victims and asks you to help perform rapid head-to-toe assessments. While performing your first assessment on a young adult male, you notice swelling and deformity in the victim's upper left arm. After you have finished your head-to-toe assessment, you try to feel for signs of a fracture, but the victim cries out in pain before you get too far.

- 4. Though it is impossible to be sure out in the field, you should assume that:
  - A. The victim's arm is broken
  - B. The victim is bleeding internally
  - C. The victim will die unless you find a medical professional
  - D. The victim has a very badly bruised arm
- 5. You know that you need to splint the injury to prevent further damage. How would you proceed with the splint?
  - A. Attempt to realign the fracture, splint, and then assess PMS
  - B. Assess PMS and then splint the injury as it lies
  - C. Attempt to realign the fracture, and splint
  - D. Splint the injury as it lies, assessing PMS before and after the splint

## Unit 9: Course Review, Final Exam, and Disaster Simulation

Just as you are finishing up the splint on your young adult male victim, a woman runs into the "Immediate" treatment area holding a little boy and frantically calling out, "Someone please help my son, he's turning blue! I don't think he can breathe!" You turn and run to help the woman. You ask her to put her son down so you can help.

- 6. What is the first thing that you should do?
  - A. Conduct a head-to-toe assessment
  - B. Have another volunteer lead the mother away
  - C. Assess for airway, bleeding, and signs of shock
  - D. Perform CPR

While listening for lung sounds, you notice that the boy is wheezing and his lips are blue. You cannot find anything obvious obstructing his airway. As you glance down quickly at the rest of the boy's body, you notice an angry red welt on his inner arm.

- 7. You have reason to suspect that this boy is suffering from:
  - A. Anaphylaxis
  - B. An unknown blood-borne disease
  - C. Hypertension
  - D. Hypothermia

## **Unit 5: Light Search and Rescue Operations**

After a tornado ravages a nearby community, you and your fellow CERT members volunteer to help with the search and rescue operations. You arrive on the scene to discover collapsed houses, cars swept up into trees, and various debris strewn everywhere.

- 1. As you begin the CERT sizeup process, what is the first thing you should do?
  - A. Gather facts
  - B. Assess and communicate damage
  - C. Establish priorities
  - D. Consider probabilities

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## Unit 9: Course Review, Final Exam, and Disaster Simulation

You and three other CERT members begin searching the local library, a large brick building where many people in the community were instructed to take cover before the storm. A sizeup of the building reveals superficial damage, including broken windows and cracked plaster.

- 2. How would you classify the damage to the building?
  - A. Heavy damage
  - B. Moderate damage
  - C. Light damage
  - D. Slight damage

As you continue your search of the library, you make a single slash next to the doorway of the first room you enter.

- 3. What information do you write in what will become the left quadrant of this search marking?
  - A. Information about hazards and collapses
  - B. The number of victims in the room
  - C. Your agency or group ID
  - D. The room number

While stopping frequently to listen, you hear a faint cry for help from the corner of the room. You walk over to find a young boy who has glass shards in his leg and is unable to walk.

- 4. Keeping in mind that you are searching the room with only two other CERT members, which of the following is not a recommended way of moving the boy?
  - A. Blanket carry
  - B. Pack-strap carry
  - C. Chair carry
  - D. One-person arm carry

## Unit 9: Course Review, Final Exam, and Disaster Simulation

Upon completing your search and rescue in the library, you enter a house where the second floor has collapsed, creating a lean-to void.

- 5. How should you proceed?
  - A. Leave the premises immediately and mark the structure as unsound
  - B. Quickly search the ground floor
  - C. Use an axe or similar tool to knock down the floor and clear the void
  - D. Call for backup

# **Unit 6: CERT Organization**

Following an earthquake, you and your fellow CERT members mobilize and meet at a disaster scene, where fire and law enforcement officials have already arrived. Before taking action, you work with the professional responders to get organized.

- 1. What is the name of the system used by emergency response agencies to manage emergency responses?
  - A. Incident Command System (ICS)
  - B. Strategic Planning Unit (SPU)
  - C. Search and Rescue System (SRS)
  - D. Rescue Command System (RCS)
- 2. In the CERT command structure, how is the CERT leader established?
  - A. By being the first person to arrive on the scene
  - B. By seniority
  - C. By department
  - D. By the local police chief

You are the CERT Incident Commander/Team Leader and therefore responsible for directing team activities. You establish a Command Post for your CERT.

- 3. What should you do if you have to leave the Command Post for whatever reason?
  - A. Ask a law enforcement official to take over while you're gone
  - B. Designate CERT Incident Commander/Team Leader status to someone else in the Command Post
  - C. Leave without delegating any of your CERT Incident Commander/Team Leader responsibilities
  - D. You may never leave the Command Post under any circumstances

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# Unit 9: Course Review, Final Exam, and Disaster Simulation

- 4. CERT members should always be assigned to teams of at least how many people?
  - A. Six
  - B. Three
  - C. Two
  - D. Four
- 5. A woman comes up to a disaster scene that you have determined is unsafe to enter. What should you do?
  - A. Warn her that the situation is unsafe
  - B. Threaten to call the police if she attempts to enter
  - C. Physically restrain her from entering
  - D. Nothing; you should let her be
- 6. To whom should you give documentation?
  - A. The first professional responders on the scene
  - B. Your local CERT leader
  - C. Keep it for your own records
  - D. The National CERT Program Office
- 7. Which of the following forms contains essential information for tracking the overall situation?
  - A. Victim Treatment Area Record
  - B. Incident/Assignment Tracking Log
  - C. Message form
  - D. Equipment Resources form

## Unit 9: Course Review, Final Exam, and Disaster Simulation

# **Unit 7: Disaster Psychology**

You and your fellow CERT members arrive at a neighboring community following a devastating tornado. Survivors have been sifting through debris and have found six bodies. They tell you about what it was like to find the bodies. One of your fellow CERT members starts feeling nauseated. He is obviously overwhelmed.

- 1. Which of the following is not an example of a physiological symptom of trauma?
  - A. Hyperactivity
  - B. Denial
  - C. Headaches
  - D. Loss of appetite

Some of the survivors you rescue exhibit signs of trauma, and you've warned your team ahead of time that they should expect some of the psychological effects will be directed toward them. In order to help your team better understand what the survivors are going through, you've also explained the four phases of a crisis following a disaster.

- 2. During which phase do survivors attempt to assess the damage and locate other survivors?
  - A. Impact phase
  - B. Inventory phase
  - C. Recovery phase
  - D. Rescue phase

The goal of onscene psychological intervention by CERT members is to stabilize the incident scene by stabilizing individuals. You come across a man who is in shock and bleeding from his chest.

- 3. What should you do first?
  - A. Listen empathetically
  - B. Attempt to locate the man's family or friends to provide natural support
  - C. Say, "You'll get through this"
  - D. Address the man's medical needs

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## Unit 9: Course Review, Final Exam, and Disaster Simulation

In order to help your team cope with the trauma experienced during the search and rescue, you invite a mental health professional trained in critical incident stress management to conduct a voluntary critical incident stress debriefing 2 days later.

- 4. What is the first step of the critical incident stress debriefing?
  - A. Review of symptoms
  - B. Review of the factual material
  - C. Sharing of initial thoughts and feelings
  - D. Description of the process, including assurance of confidentiality
- 5. Which of the following is not a step that your team's members should take in the future to personally reduce stress?
  - A. Eat a balanced diet
  - B. Get enough sleep
  - C. Take antidepressants
  - D. Connect with others

## **Unit 8: Terrorism and CERT**

You are having a business lunch downtown when you hear a loud explosion. You follow others outside to find what caused the noise. In the distance you can see heavy smoke rising from the electrical plant, the very same electrical plant used to power your town and several major cities in the area and that you saw on the news last night cited as a potential target for a recently uncovered terrorist plot. All around you, people are speculating that the plot was successful.

- 1. What should you do?
  - A. Gather your CERT equipment and report for duty
  - B. Locate your family and evacuate to safety
  - C. Call the Federal Government to alert it about a terrorist attack
  - D. Initially monitor the situation from a safe place

# Unit 9: Course Review, Final Exam, and Disaster Simulation

You remember from the news report that the potential plot was uncovered when an electrical plant security guard noticed the same black van parked outside for over a week. Worried that someone was watching the building, he alerted local authorities.

- 2. Which of the eight signs of a terrorist attack did the security guard notice?
  - A. Surveillance
  - B. Tests of security
  - C. Acquiring supplies
  - D. Dry runs

A friend runs over to you, a little frantic, and asks why you are not headed to the disaster site to help. After all, he says, you are a trained CERT member.

- 3. How do you respond to your friend?
  - A. "Yes. You're right. I'm heading in that direction now."
  - B. "I am a CERT member, but I have to wait for an official to declare a disaster before I can activate."
  - C. "I'm not part of the Terrorist Response Team."
  - D. "You're right. I am a CERT member, but CERT members must not respond to a potential terrorist incident."

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# Unit 9: Course Review, Final Exam, and Disaster Simulation

INSTRUCTOR GUIDANCE	CONTENT
	Disaster Simulation
PM p. 9-18	Conduct the simulated disaster exercise. Participants will find instructions for the simulation in the Participant Manual.
	Assign the participants to four groups.
	Explain that the simulation will provide each group with the opportunity to apply many of the skills that they learned during the earlier sessions.
	Elaborate by telling the participants that the disaster simulation will be conducted at four stations.
	At Station 1, each group will receive the disaster simulation. Based on that scenario, the participants will:
	Determine the extent of damage
	Establish team priorities
	Determine the resources needed
	<ul> <li>Identify potential hazards</li> </ul>
	Explain that, while at Station 1, the participants will select a CERT Incident Commander/Team Leader who will establish a CERT organization based on resources available and established priorities.
	Note that the map for the sample disaster scenario is on PM p. 9-19.
	5. At Station 2, the participants will be required to:
	Evaluate a fire situation
	Select the proper extinguisher for the situation
	<ul> <li>Extinguish the fire</li> </ul>
	Tell the participants that <u>each</u> of them will be required to extinguish the fire.

# Unit 9: Course Review, Final Exam, and Disaster Simulation

INSTRUCTOR GUIDANCE	CONTENT
	6. At Station 3, the participants will be required to conduct triage and treat victims with the medical supplies available.
	<ol> <li>At Station 4, the participants will perform leveraging and cribbing to extricate victims who are trapped by debris.</li> </ol>
	8. Explain that the participants will have approximately 15 minutes at each station. After 10 minutes, the instructors will provide feedback.
	<ol><li>Point out that at the end of the exercise, all of the groups will meet for feedback and a question-and- answer session.</li></ol>
	Ask the participants to assemble in their four teams.
	Give each team a number and explain that each team will begin the rotation at the station that has the same number as the team.
	Instruct all of the teams to select a different person to act as leader at Station 3 and Station 4.
	Ask if there are any questions before the teams proceed to their initial stations.

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INSTRUCTOR GUIDANCE	CONTENT
If you have any refresher or supplemental training scheduled for CERT members, provide the details.	Exercise Critique and Summary
	At the end of the exercise, conduct an interactive discussion on the points learned and the difficulties encountered during the exercise.
	Provide the participants with feedback on their performance, including:
	Overall operations
	<ul><li>Communications</li></ul>
	■ Safety
	■ Teamwork
	Answer any comments or questions about the exercise.
	Stress the importance of continuing education and training to maintain and improve the participants' skills and knowledge. Suggest that the participants attend:
	Periodic refresher training that is offered locally
	<ul> <li>Standard and advanced first aid courses that are offered through organizations such as the American Red Cross</li> </ul>
	<ul> <li>Cardiopulmonary resuscitation classes that are offered through the American Red Cross or the American Heart Association</li> </ul>
	Thank all of the participants for attending the CERT training.
	Graduation
	Distribute a certificate of completion to each participant and thank each personally for attending the course.

