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.

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INTRODUCTION AND UNIT OVERVIEW

SETTING THE STAGE

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.

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

CERTs are able to:

- Assist emergency services personnel when requested in accordance with standard operating procedures developed by the sponsoring agency and by area of training
- Assume some of the same functions as emergency services 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.

INTRODUCTION AND UNIT OVERVIEW (CONTINUED)

CERT BASIC TRAINING OVERVIEW

CERT Basic Training is provided in nine units:

- Unit 1: Disaster Preparedness
- Unit 2: Fire Safety and Utility Control
- Units 3 and 4: Disaster Medical Operations
- Unit 5: Light Search and Rescue Operations
- Unit 6: CERT Organization
- Unit 7: Disaster Psychology
- Unit 8: Terrorism and CERT
- Unit 9: Course Review, Final Exam and Final Exercise

EXERCISE: BUILDING A TOWER

Instructions: Follow the steps below to complete this exercise:

1. Work in groups of five to design and construct a free-standing tower that stands at least 5 feet tall from the bottom of the structure to the top.

2. You will have a total of 10 minutes. Spend the first 5 minutes planning and designing the tower as a group. While you are planning, you should not touch any of the materials.

3. You will be told when to begin construction and will have 5 minutes from that point to complete the tower.

The skills and abilities that you use during this exercise are the same skills that you will use as CERT members.

INTRODUCTION AND UNIT OVERVIEW (CONTINUED)

UNIT OBJECTIVES

At the end of this unit, you should 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 your community and their potential impact on people, health, and infrastructure.
- Undertake personal and organizational preparedness actions.
- Describe the functions of CERTs and your role as a CERT member.

COMMUNITY PREPAREDNESS: ROLES AND RESPONSIBILITIES

Community preparedness is a key priority in lessening the impact of disasters. It is critical that all community members take steps to prepare in advance of an event.

Effective community preparedness addresses the unique attributes of the community:

- The threat and hazards profile and vulnerabilities of the area
- 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

COMMUNITY PREPAREDNESS: ROLES AND RESPONSIBILITIES (CONTINUED)

GOVERNMENT

Government has the responsibility to develop, test, and refine emergency operations plans, ensure emergency responders have adequate skills and resources, and provide services to protect and assist its citizens. In meeting these challenges, government also has the responsibility to involve the community in the planning process, to incorporate community resources in the plans, to provide reliable, actionable information, and to encourage training, practicing, and volunteer programs.

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)

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.

COMMUNITY PREPAREDNESS: ROLES AND RESPONSIBILITIES (CONTINUED)

The EOP is a document that:

- 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)
- Sets forth lines of authority and organizational relationships and shows how all actions will be coordinated
- Describes how people and property will be protected in emergencies and disasters
- 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

In short, the EOP describes how the community will function in an emergency.

COMMUNITY LEADERS

Community leaders from the private and civic sectors have a responsibility to participate in community preparedness. Their responsibilities include:

- 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
- Identifying and integrating appropriate resources into government plans
- Ensuring facilities, staff, and customers or population served are prepared, trained, and practiced in preparedness actions

COMMUNITY PREPAREDNESS: ROLES AND RESPONSIBILITIES (CONTINUED)

THE PUBLIC

The public also has a responsibility for preparedness. All members of the community should:

- Learn about community alerts and warnings, evacuation routes, and how to get critical information
- 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

Citizen Corps is the grassroots movement to strengthen community safety and preparedness through increased engagement of all sectors of the community. Citizen Corps is administered by the Federal Emergency Management Agency but implemented locally. The goal of Citizen Corps is to make communities safer, more prepared, and more resilient when incidents occur.

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 specific population composition, the hazard profile, and the infrastructure.

COMMUNITY PREPAREDNESS: ROLES AND RESPONSIBILITIES (CONTINUED)

The goals of the Councils are to:

- Tailor activities to engage all sectors of the community
- Identify and build on existing strengths
- Increase collaboration between government and the whole community
- Expand integration of community resources into plans and protocols
- Encourage personal and organizational preparedness through outreach, training, and exercises
- Promote volunteer opportunities for ongoing community safety and surge capacity in disasters

HAZARDS AND THEIR POTENTIAL IMPACT

TYPES OF DISASTERS

Disasters can be:

- Natural (e.g., earthquakes, wildfires, floods, extreme heat, hurricanes, landslides, thunderstorms, tornadoes, tsunamis, volcanic eruptions, winter storms)
- Technological (e. g., hazardous material spill, nuclear power plant accident)
- Intentional (terrorism using chemical, biological, radiological, nuclear, or explosive weapons)

HAZARDS AND THEIR POTENTIAL IMPACT (CONTINUED)

KEY ELEMENTS OF DISASTERS

Regardless of the event, disasters have several key elements in common:

- They are relatively unexpected, with little or no warning or opportunity to prepare.
- Available personnel and emergency services may be overwhelmed initially by demands for their services.
- Lives, health, and the environment are endangered.

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

Assessing your community's vulnerability to hazards allows the community to prioritize preparedness measures and to target effective actions for the appropriate hazard. To assess your community's vulnerability to hazards, it is useful to:

- Identify the most common disasters that occur
- 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

IMPACT ON THE INFRASTRUCTURE

EXAMPLES OF POSSIBLE IMPACT OF DAMAGE ON INFRASTRUCTURE

Damage to . . .	Possible Effects
Transportation	▪ Inability to assess damage accurately
	▪ Ambulances prevented from reaching survivors
	▪ 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	▪ Damaged critical facilities (e.g., hospitals, fire stations, police precincts, airports) unable to function normally
	▪ Increased risk of damage from falling debris
Communication Systems	▪ Survivors unable to call for help
	▪ Coordination of services is hampered
	▪ Families and friends cannot communicate
Utilities	▪ Loss of service
	▪ Increased risk of fire or electrical shock
	▪ Limited access to fuel, e.g., pumps that may not work
	▪ Loss of contact between survivors and service providers
Water Service	▪ Medical facilities hampered
	▪ Inadequate water flow, which results in notice to boil water and hampered firefighting capabilities
	▪ 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

IMPACT ON THE INFRASTRUCTURE (CONTINUED)

RESULTS OF DAMAGE TO THE INFRASTRUCTURE

Each instance of damage to the infrastructure may severely restrict the abilities of police, fire, and emergency medical services in that disaster.

Because emergency services personnel are likely to have inadequate resources to meet the public's needs, those resources must be applied according to the highest-priority need.

- Police will address incidences of grave public safety.
- Firefighters will suppress major fires.
- EMS personnel will handle life-threatening injuries. You should be aware, however, that CERTs will also handle life-threatening injuries until EMS units become available.

Lower -priority needs will have to be met in other ways.

HAZARDS RELATED TO STRUCTURE TYPE

It is important to know what type of damage to expect from the main types of structures in the community. Engineered buildings, such as most high-rise buildings, have performed well in most types of disasters. During earthquakes and high-wind events (e.g., tornadoes, hurricanes), older high-rise buildings, however, are more susceptible to damage from:

- Broken glass
- Falling panels
- Collapsing walkways and stairways

IMPACT ON THE INFRASTRUCTURE (CONTINUED)

Keep in mind that age, type of construction, and type of disaster are major factors in potential damage to detached homes and garages.

- Homes built before 1940 generally were not bolted to the foundation, making them subject to being shaken, blown, or floated off their foundations.
- Older homes constructed of non-reinforced brick are less stable than newer construction.
- Tornado and hurricane damage to single homes can range from little damage to total destruction.
- Following an event in which a structure has been damaged, there is a threat of additional damage, such as fire from ruptured gas lines.
- Be aware that you may encounter multiple-unit dwellings and that such dwellings should be approached in a different manner than a single family home.

  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. (Utility control will be covered in more depth in Unit 2 of the training.)

- 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.

MULTIPLE-USE BUILDINGS

Buildings such as malls, sports arenas, airports, places of worship, and other buildings with oversized roof spans pose particular hazards in a disaster:

- Strip shopping centers pose a threat from collapse and broken glass.
- Warehouse-type structures may also collapse.

There is also a risk in all types of structures from non-structural hazards.

IMPACT ON THE INFRASTRUCTURE (CONTINUED)

NON-STRUCTURAL HAZARDS

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

Some of the hazards include:

- Gas line ruptures from water heaters or ranges displaced by shaking, water, or wind
- Damage from falling books, dishes, or other cabinet contents
- Risk of injury or electric shock from displaced appliances and office equipment
- Fire from faulty wiring, overloaded plugs, frayed electrical cords

Reducing hazards is an important part of personal preparedness. 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.

HOME AND WORKPLACE PREPAREDNESS

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 ever 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.

PREPARING FOR A DISASTER

Many preparedness actions are useful in any type of emergency situation, and some are specific to a particular type of disaster. A critical first step to preparedness is to understand the hazards in your community and to learn about local alerts and warning systems, evacuation routes, and sheltering plans. It is also important to familiarize yourself with hazards in other areas when you are traveling and may experience a type of hazard you are not as familiar with.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

Regardless of the type of disaster, important elements of disaster preparedness include:

- Having the skills to evaluate the situation quickly 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

It is also always important to address specific needs for yourself and people you know, including any access or functional needs, considerations for pets and service animals, and transportation.

More information on preparedness is available online.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

WEB SITES OF INTEREST

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.
http://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 www.ready.gov 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.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

PROTECTIVE ACTIONS

Because many disasters occur with little or no warning, individuals need to have the knowledge and skills to take immediate protective actions in the first critical moments after a disaster has occurred, before you have instruction from authorities. While the specific action to take is based on the disaster type, the amount of warning, whether you are inside, outside, or driving, and the amount of training you have, the following list provides a good overview of the protective actions you should be familiar with. These should be your objectives in assessing your post-event environment.

- Assess situation. When something occurs without notice, it is important to take a few seconds to assess the situation to determine your 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 you should stay where you are (if you are inside and an event has occurred outside, you may need to stay inside) and in other circumstances you should change location (if you are inside and the event is inside, you may need to evacuate the building). All disasters have unique attributes, so it is important for you to realize that you may need to evaluate the circumstances to determine the best course of action.
- Staying or changing location is a critical early decision in disasters. If you are not in immediate danger, you should stay where you are and get more information before taking your next steps. Thinking through the likely hazards in your community and where you might be when an event occurs may help you visualize your response. While you 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 you listen to local authorities when that information is provided. If experts tell you to evacuate from your location, LEAVE!
- Seek clean air and protect breathing passages. Regardless of the type of disaster, clean air is a critical need. Actions to protect your breathing passages and seek clean air may include covering your mouth with a cloth or mask, vacating the building, or sheltering in place by sealing an internal room while the airborne contaminant dissipates.
- Protect yourself from debris and signal rescuers if trapped. Protecting yourself from falling or precarious debris is a critical protective action. If you become trapped, protect your airways, bang on an object, or blow a whistle. Yelling should be a last resort.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

- Remove contaminants. If contaminants have been released into the area or you have made contact with liquid or solid contaminants, it is critical that you 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.
- 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

SHELTERING

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 yourself from contaminants in the air for a short period of time until the contaminants dissipate. You should identify an internal room in your home, at work, or other locations where you spend a great deal of time. If sheltering-in-place is needed, you will be in this room for only a few hours, but it is important that you be able to seal the room quickly. Storing specific items in the room is helpful. You 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 you would stay where you are for several days or, in the case of a pandemic, you may be asked to limit your time outside the home for up to 2 weeks. It is important to store emergency supplies for these possibilities.
- 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, you should take your 3-day disaster supplies kit with you so that you will be sure to have the supplies you require.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

DEVELOPING A DISASTER PLAN

In addition to knowing immediate protective actions that you 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?

Family safety is the most important factor when disaster strikes. In an effort to make the best decision regarding your family's safety, you should always first consider what is best given the situation. It is also essential that you practice your plan with your family — evacuating the home and contacting all family members using your "check-in contact." Practicing your plan now will improve your performance when it matters most.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

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.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

ACTIVITY: EVACUATE!

Take the scenario given and decide what things to bring with you and/or what to do in the time available.

ESCAPE PLANNING

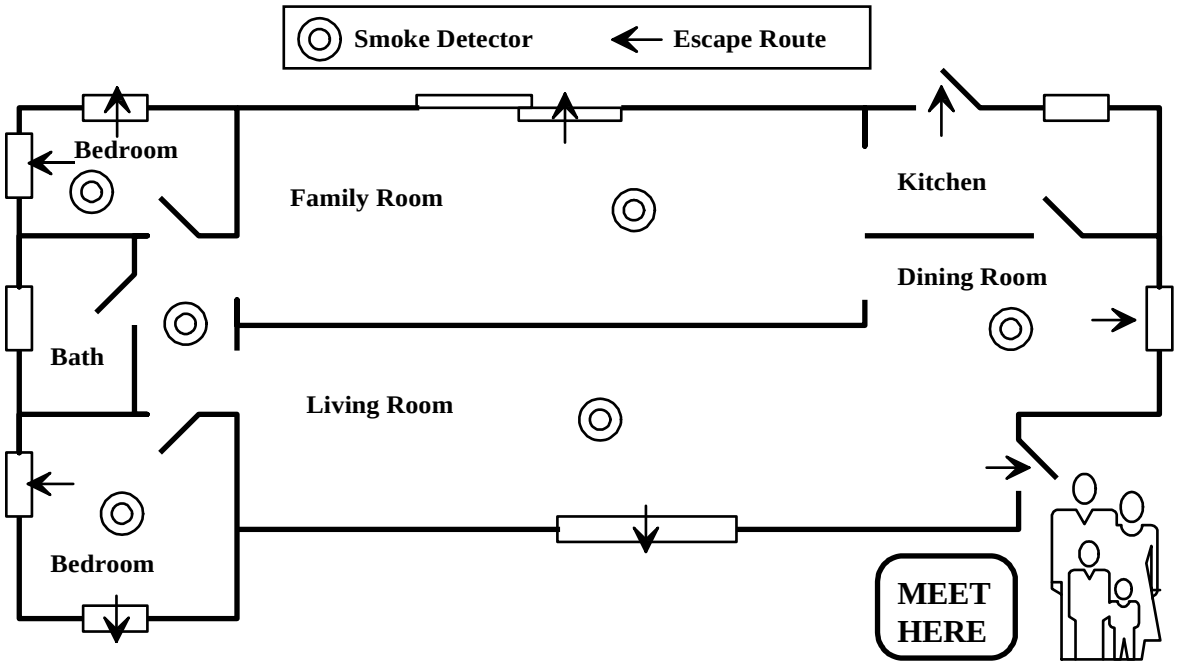
Develop an escape plan that provides for escape from every room. As part of your escape plan:

- Consider the needs of children and individuals with disabilities.
- Inform all family members or office coworkers of the plan.
- Run practice escape drills.

Practice your plans after you develop them. Conduct family fire drills, follow the local evacuation routes, and locate the nearest shelter to ensure that, when a disaster occurs, you know what to do.

An example of an escape plan is shown in the figure that follows.

Escape Plan



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

It is important to have an escape plan that:

- Includes escape from every room of the house or every area of the workplace
- Considers the needs of children and individuals with disabilities

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.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

ASSEMBLING AND STORING DISASTER SUPPLIES

You can cope best by preparing for disaster before it strikes. One way to prepare is to assemble disaster supplies in multiple locations. 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 your 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 (*).

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.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

If you have questions 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:

Ratio for Purifying Water with Bleach

Water Quality	Bleach
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 or stir the water container and let it stand 30 minutes before drinking.

Food

- Ready-to-eat canned meats, fruits, and 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
- Foods for infants, elderly persons, or persons on special diets
- Comfort and stress foods— cookies, hard candy, sweetened cereals, lollipops, instant coffee, tea bags

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

Kitchen Items

Household liquid bleach to treat drinking water

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

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

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 Center)

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

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

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,
- 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

and the name and number of your veterinarian in case you have to foster or board your pets

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*

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

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

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

*Items marked with an asterisk are recommended for evacuation.

REDUCING THE IMPACT OF HAZARDS THROUGH MITIGATION

In addition to managing the impact that a disaster would have on you and your family 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.

You should ensure your homeowner's policy provides adequate coverage and covers appropriate hazards in your area. In addition, homeowners insurance does not cover damage caused by flooding, so it is important to know whether you are in a flood hazard area and to purchase flood insurance if so. Visit the National Flood Insurance Program Web site, www.floodsmart.gov, to learn more.

Non-structural hazard mitigation includes relatively simple actions you can take to prevent home furnishings and appliances from causing damage or injuries during any event that might cause them to shift. Examples of non-structural hazard mitigation include:

- Anchor heavy furniture.
- Secure appliances and office equipment.
- Install hurricane storm shutters.
- Secure cabinet doors with childproof fasteners.
- Locate and label gas, electricity, and water shutoffs.
- Secure water heaters and have flexible gas lines installed.

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

- Bolt house to foundations.
- Install trusses or hurricane straps to reinforce the roof.
- Strap propane tanks and chimneys.

REDUCING THE IMPACT OF HAZARDS THROUGH MITIGATION (CONTINUED)

- Strap mobile homes to their slabs.
- Raise utilities (above the level of flood risk).
- Build a safe room.

Please note, 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 www.fema.gov/plan/prevent/saferoom/index.shtm

Sheltering-in-place is done to protect against contaminants in the air. To shelter-in-place, you do not need to alter the structure of the room. You are simply sealing the room with plastic sheeting and duct tape for a short period of time while the contaminants in the air dissipate.

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REDUCING THE IMPACT OF HAZARDS THROUGH MITIGATION (CONTINUED

FORTIFYING YOUR HOME

Type of Hazard	Sample Precautions
Structural	▪ Bolt older houses to the foundation. ▪ Install trusses or hurricane straps to reinforce the roof. ▪ Strap propane tanks and chimneys. ▪ Strap mobile homes to their concrete pads. ▪ Raise utilities (above the level of flood risk). ▪ Ask a professional to check the foundation, roof connectors, chimney, etc.
Non-Structural	▪ Anchor such furniture as bookshelves, hutches, and grandfather clocks to the wall. ▪ Secure appliances and office equipment in place with industrial-strength Velcro®. ▪ Install hurricane storm shutters to protect windows. ▪ Secure cabinet doors with childproof fasteners. ▪ 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. ▪ Teach all home occupants, including children who are old enough to handle the responsibility, when and how to shut off the important utilities. ▪ Secure water heaters to the wall to safeguard against a ruptured gas line or loose electrical wires.

REDUCING THE IMPACT OF HAZARDS THROUGH MITIGATION (CONTINUED)

Remember 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.

For more information: "Learn About the Different Types of Disasters and Hazards" at www.fema.gov/hazard/index.shtm

GET INVOLVED

Preparedness requires active participation from all.

- Start the process by talking to your friends and family about the hazards in your area and what steps you all need to take to be able to help each other in a crisis – large or small.
- Ask about emergency planning at your workplace, your schools, your 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.

REDUCING THE IMPACT OF HAZARDS THROUGH MITIGATION (CONTINUED)

Take training to acquire the skills you need to help others and keep your skills current through refresher training and practice.

- Your 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 your family and neighbors and at your workplace, school, place of worship, and community-organized events. The more you practice, the better prepared you will be to take effective action when a disaster happens.
- Talk to your friends and family about volunteering, too. Volunteering to help your community through CERT and other activities is a great experience to share!

CERT DISASTER RESPONSE

As described earlier in this unit, CERTs respond in the period immediately after a disaster when response resources are overwhelmed or delayed.

CERTs assist emergency response personnel when requested in accordance with standard operating procedures developed by the sponsoring agency. Working as a team, members assume some of the same functions as emergency response personnel.

It was pointed out that, 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.

CERTs respond after a disaster by:

- Locating and turning off utilities, if safe to do so
- Extinguishing small fires
- Treating life-threatening injuries until professional assistance can be obtained
- Conducting light search and rescue operations
- Helping disaster survivors cope with their emotional stressors

There is a distinction between how a CERT member responds to a disaster as an individual and how that member responds as part of a team.

CERT DISASTER RESPONSE (CONTINUED)

A CERT member's first responsibility is personal and family safety. 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.

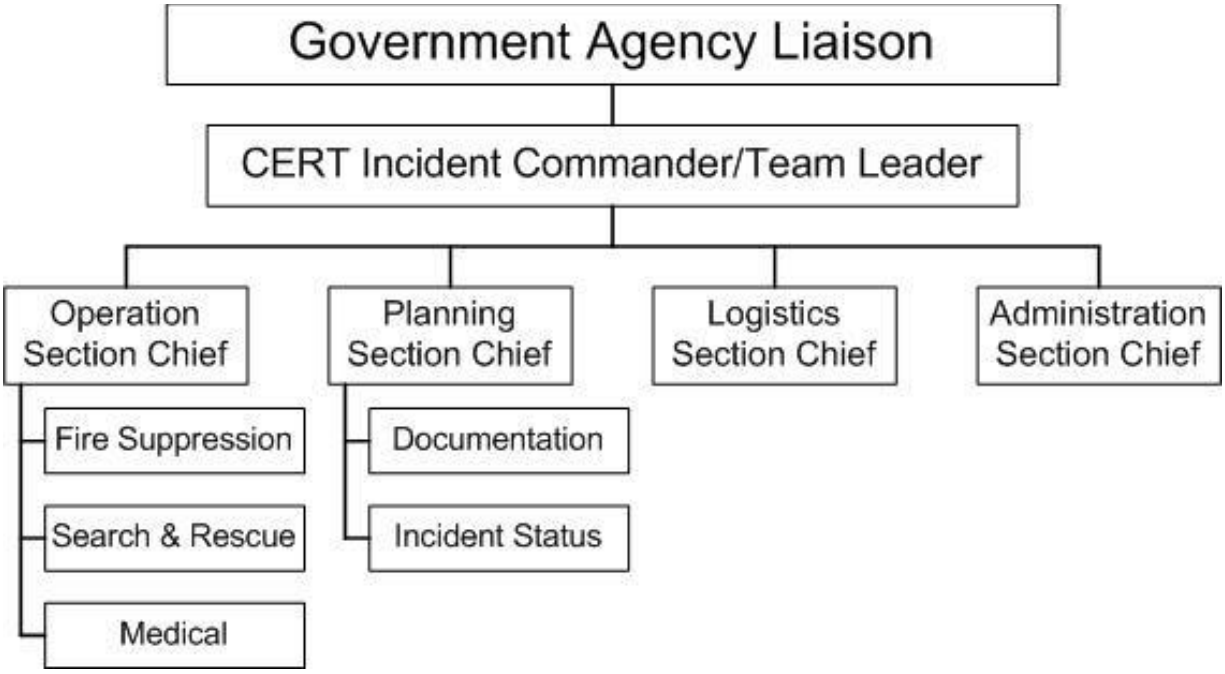
CERT ORGANIZATION

The chart below shows the basic CERT structure, including four sections. No matter which function CERT members are assigned to, effective CERTs require teamwork.

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

CERT organization and operations will be covered in greater detail later in the course.



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.

CERT DISASTER RESPONSE (CONTINUED)

PERSONAL PROTECTIVE EQUIPMENT

Remember, 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 remember that, at all times, a CERT member's first job is to stay safe.

It is important to wear the appropriate personal protective equipment (PPE). CERT members are required to wear:

- Helmet
- Goggles
- N95 Mask
- Gloves (work and non-latex exam)
- Sturdy shoes or boots

CERT IN ACTION

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, www.fema.gov/cert. Click on the link "CERT in Action!"

CERTS IN NON-DISASTER ROLES

CERT members are also a potential volunteer pool for the community. They can help with non-emergency 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 first aid booths and preparedness displays at health fairs, county fairs, and other special events

CERT DISASTER RESPONSE (CONTINUED)

- Assisting with the installation of smoke alarms for seniors and special needs households
- Assisting with traffic and crowd management at large community events

PROTECTION FOR DISASTER WORKERS

As volunteers engaging in CERT, members are generally protected by "Good Samaritan" laws that protect people who provide care in a prudent and reasonable manner.

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.

For additional information: http://nonprofitrisk.org/library/state-liability.shtml

Applicable Laws and Key Points

Applicable Laws	Key Points

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

There are also Independent Study (IS) courses available online from the Federal Emergency Management Agency (FEMA) that will of interest to CERT members. 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

For a complete listing and access to FEMA Independent Study courses, visit www.training.fema.gov/IS/ . Click on the "ISP Course List" link.

UNIT SUMMARY

- Everyone in the community has the ability and the responsibility to prepare for disasters.
- Citizen Corps is the grassroots movement to strengthen community safety and preparedness through increased civic participation. CERTs are a key partner with Citizen Corps.
- Government leaders have the responsibility to engage the whole community in the process of community planning and in testing and evaluating those plans.
- Community leaders have the responsibility to ensure their employees and constituent groups are prepared and to participate on coordinating planning councils.
- The public has the responsibility to learn about community hazards and plans, and to prepare, train, practice, and volunteer.
- There are three kinds of disasters: natural, technological, and intentional. Most hazards occur with little or no notice, may cause emergency personnel to be overwhelmed, and are a danger to lives, health, and the environment.
- Personal preparedness should be tailored to the hazards in your community, but should include:
  - Learning about community alerts, warnings, and plans
  - Learning about appropriate protective actions
  - Developing household plans and conducting drills to practice
  - Assembling disaster supplies in multiple locations
  - Reducing hazards in the home
  - Encouraging others to prepare and volunteering to help your community

UNIT SUMMARY (CONTINUED)

- 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:
  - Familiarity with the types of events that are high risk for the area and the types of damage that can occur as a result
  - Adequate preparation for each event and its aftermath
  - Training in the functional areas to which CERTs are assigned
  - Practice through refreshers and simulations
- CERTs have proven themselves invaluable in the areas in which they were tested. They can be invaluable in this community as well.

HOMEWORK ASSIGNMENT

The next unit will cover fire safety. Before the next session, you should:

1. Review the detailed information in Unit 1 of the Participant Manual
2. Read and familiarize yourself with Unit 2: Fire Safety and Utility Control 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 your disaster supply kits. Remember to wear appropriate clothes to the next session (no shorts or open-toed shoes) because you 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 your home for hazards and identify ways to prevent potential injury

UNIT 1: ADDITIONAL MATERIALS

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COMMUNITY EMERGENCY RESPONSE TEAM CHECKLIST

Instructions: 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	☐	
▪ Water	☐	
▪ Out-of-State Check-In Contact	☐	
▪ Mitigation Measures		
• Water heater	☐	
• Utilities	☐	
• Cabinets, etc.	☐	
• Other: _____	☐	
Team Organization		
▪ Leadership		
• Incident Commander/Team Leader	☐	
• Group leaders	☐	
▪ Membership		
• Roster	☐	
• Phone list	☐	
• Skills inventory	☐	
▪ Communications		
• Telephone tree	☐	
• Newsletter	☐	
• Amateur radio	☐	
• Runners	☐	

COMMUNITY EMERGENCY RESPONSE TEAM CHECKLIST

Team Organization	*Check if Completed*	*Date Checked*
▪ Resources		
• Personnel	☐	
• Equipment	☐	
• Supplies	☐	
• Personal CERT kit	☐	
▪ Area Surveys and Locations		
• Evacuation plans	☐	
• Staging area/command post	☐	
• Medical treatment area	☐	
• Specific hazard areas	☐	
• Area maps	☐	
▪ Response Plan		
• Response criteria	☐	
• Communications and notifications	☐	
• Staging area/command post	☐	
▪ Teamwork		
• Meetings	☐	
• Drills and exercises	☐	
• Training		
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
- N-95 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.

Equipment 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			

Equipment and Supplies	***Date Obtained***	***Quantity***	***Date Checked***

▪ Utility knife
▪ Note pads
▪ Markers:
  • Thin- point
  • Thick- point
▪ Pens
▪ Duct tape
▪ Masking tape (2- inch)
▪ Scissors (EMT shears)
▪ Non-sparking crescent wrench
▪ First aid pouch containing:
  • 4- by 4-inch gauze dressings (6)
  • Abdominal pads (4)
  • Triangular bandages (4)
  • Band-Aids
  • Roller bandage
  • Any personal medications that a CERT member may need during deployment			