



UNIT 1: EMERGENCY PREPAREDNESS

UNIT OBJECTIVES:

- **Hazards:** Describe the types of hazards most likely to affect your home and community
- **CERT:** Identify different roles of CERT members
- **The Impact on the Infrastructure:** The potential effect of extreme emergencies and disasters on transportation; electrical service; telephone communication; fuel; food, water, and shelter; and emergency services and how to mitigate.
- **Preparedness & Mitigation Review:** How to identify and correct potential hazards in the home. How you can prepare in advance to respond to a disaster.
- **Utility Control:** Gas, water, electricity shut off
- **CERT organization** – Team responsibilities, SEMS/NIMS, Incident Command System
- **Communications** – Using FRS radios

Revised 02/26/09 Hovey

UNIT 1: EMERGENCY PREPAREDNESS

The introduction section in your Participant Manual contains information on:

- When an emergency strikes
- Community preparedness
- How CERT teams operate
- The CERT training program
- The Disaster Service Worker Program

COURSE PREVIEW

This unit will provide an overview of the course by establishing a context for CERT members within the specific hazards faced by the community.

Later units will cover:

- Disaster Medical Operations/First Aid
- Fire Safety/Patient Triage
- Light Search and Rescue
- Hazardous Materials Awareness, Terrorism Awareness, Disaster Psychology and Team Organization

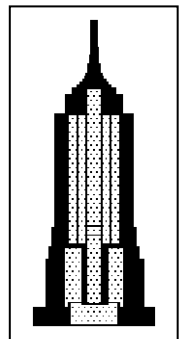
ACTIVITY #1: BUILDING A TOWER

Instructions: Follow the steps below to complete this exercise:

1. You will work in groups.
2. You will spend the next 10 minutes planning and designing a freestanding tower that stands at least five feet tall from the bottom of the structure to the top. You may use only the supplies provided to you by your instructor.

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

Notes:



TYPES OF DISASTERS

Disasters can be:

- Natural
- Manmade
- Technological



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 (9-1-1) may be overwhelmed initially by demands for their services.
- Lives, health and the environment are endangered.

In the immediate aftermath of a disaster, needs will be greater than professional emergency services personnel can provide. In these instances, CERT responders become a vital link in the emergency service chain.

Notes:

RECENT DISASTERS AND EMERGENCIES

Emergency response personnel cooperate at many levels to provide immediate response capabilities.

Emergency service capability can be greatly enhanced by well-organized, well-trained, and well-managed CERTs that are able to:

- Prepare in advance of a disaster event.
- Respond in their communities to address immediate needs brought about by the disaster.

As CERT members, your role is to prepare for a disaster by:

- Creating a plan with your family and neighbors.
- Identifying potential structural and nonstructural hazards in your home and workplace.
- Reducing the hazards to the degree possible before a disaster strikes.
- Developing a disaster supply kit.

CERT members respond after a disaster by:

- Securing your home and family as needed.
- 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.
- Reporting conditions to the EOC.



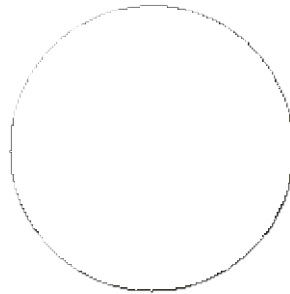
SOG Appendix 5 Post Earthquake Checklist

CERT IN DISASTER ROLES

There are many instances of CERT members participating in disaster responses.

During the 1994 Southern California Northridge Earthquake, it was recorded that CERT responders participated in the following:

- Search: 203
- Rescue: 17
- Medical/First aid treatment: 57
- Patient transport: 4
- Fire suppression: 5
- Utility control: 156



In Alachua County, FL, during Hurricane Floyd in 1999 and during Tropical Storm Gordon in 2000, CERT responders were called by the EOC to contact special-needs residents to ensure that they were aware of the approaching storms and to ascertain whether they would use the County's special needs shelters and transportation. The CERT responders arranged transportation, as necessary.

The CERT concept has extended from its original purpose as a response operation following catastrophic disasters. CERT members can now be activated for a wide range of emergencies. For example, in Whatcom County, WA, CERT members were used in the following situations:

- Whatcom Creek gasoline pipeline explosion (Olympic Pipeline)
 - Explosion at the Georgia-Pacific Pulp & Paper Mill
 - Y2K Emergency Operations Center (EOC) activation
 - Sandy Point wind and flood event
 - 2001 Nisqually, WA earthquake
 - Hurricanes Frances and Katrina
-

CERT IN NON-EMERGENCY ROLES

CERT members are also potential volunteers for the community. They can help with projects such as:

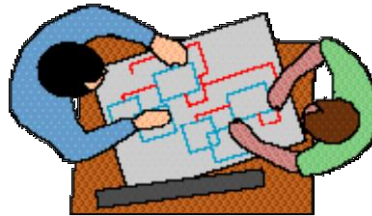
- Distributing preparedness materials.
- Staffing medical booths & outreach booths during special events.
- Assisting with the installation of smoke alarms for seniors and special-needs households.
- Participate in Sheriff's Urban Search Team
- **SOG Appendix 8, Volunteer Interest Survey**

Additionally, in his January 29, 2002, State of the Union address, the President asked that Americans volunteer their services to improve and safeguard our country. The three areas of emphasis for these volunteer efforts are crime, natural disasters, and terrorism.

The **Citizen Corps Program** was created to help Americans meet this call to service. One of the volunteer opportunities offered to the American public under the Citizen Corps umbrella is the CERT program.




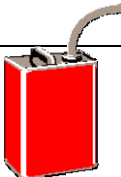
After completing initial CERT training, many CERT members seek to expand and improve their skills—through continuing CERT modules offered locally, courses offered through the American Red Cross, or programs from other sources. Some CERT members have sought additional training opportunities in:

- Advanced First Aid
- Amateur Radio
- CERT Instructor
- Community Relations
- Coordinator, Speaker or Participant for neighborhood, workplace, school or place of worship emergency preparedness efforts.
- CPR & AED Training
- Donations Management
- Medical Reserve Corps
- Shelter Management



IMPACT ON THE INFRASTRUCTURE

Possible Effects of Damage on Emergency Service Providers

Damage to . . .	Possible Effects
Transportation 	<ul style="list-style-type: none"> ▪ Inability to assess damage accurately ▪ Ambulances prevented from reaching victims ▪ Police prevented from reaching areas of civil unrest ▪ Fire departments prevented from getting to fires ▪ Flow of needed supplies is interrupted
Structures	<ul style="list-style-type: none"> ▪ Damaged hospitals unable to function normally ▪ Increased risk of damage from falling debris
Communication Systems 	<ul style="list-style-type: none"> ▪ Victims unable to call for help ▪ Coordination of services is hampered ▪ Loma Prieta first 4 hours, 23 million calls attempted. Next day 44.5 million completed (27.8 million more attempted) ▪ Northridge – First hour 8000 calls for service! <p>Handout #1 - Telephone Tips</p>
Utilities 	<ul style="list-style-type: none"> ▪ Loss of utilities ▪ Increased risk of fire or electrical shock ▪ Loss of contact between victims and service providers ▪ Inadequate water supply ▪ Increased risk to public health
Water Service	<ul style="list-style-type: none"> ▪ Firefighting capabilities restricted ▪ Medical facilities hampered
Fuel Supplies 	<ul style="list-style-type: none"> ▪ Increased risk of fire or explosion from fuel line rupture ▪ Risk of asphyxiation

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

- Police will address incidences of grave public safety.
- Firefighters will suppress major rescues and/or fires.
- EMS personnel will handle life-threatening injuries.
(CERT responders will also handle life-threatening injuries until EMS units become available.)



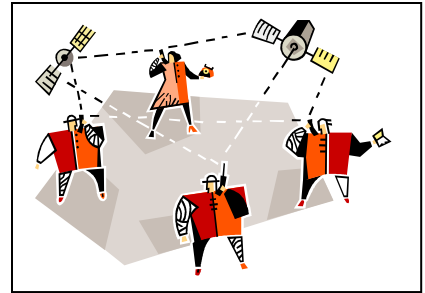
COMMUNITY EMERGENCY RESPONSE TEAM

UNIT 1: EMERGENCY PREPAREDNESS

CERT RESPONDERS PREPARE:

Vehicle

- ✓ Keep tank at least ½ full
- ✓ Response Supplies
- ✓ Identification
- ✓ Map
- ✓ Radio



Communications

- ✓ Set up out of area contact for family
- ✓ Plan for text message, email, Latitude or other tracking devices for family
- ✓ Provide cell phone text messaging email to OES
- ✓ Keep contact information current!
- ✓ Familiarize yourself with the phone tree

Supplies

- ✓ Regularly check and replace supplies

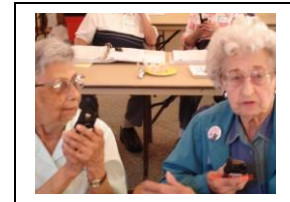


Planning

- ✓ Involve family members
- ✓ Everyone should know how to perform basic functions!

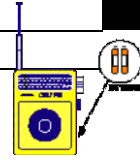
Training

- ✓ Take refresher training as often as possible
- ✓ Participate in exercises
- ✓ Watch email for opportunities





Assembling and Storing a Disaster Supply Kit



You can cope best by preparing for disaster before 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.

SOG Appendix 4 Go Kit

Handout #2 Supply Websites

Handout #3 Home Emergency Checklist

TO PREPARE YOUR KIT

1. Everyone should have 5 basic supplies: water, food, flashlight, first aid kit and battery operated radio. You may need other specific supplies to keep you comfortable and minimize "inconvenience" in the days following the disaster.
2. Review the checklist on the next few pages (from FEMA L-189, ARC 4463, Your Family Disaster Supplies Kit) or go to www.ready.gov
3. Gather the supplies from the list.

Water



Store water in plastic containers such as soft drink bottles. Avoid using containers that will decompose or break, such as milk cartons or glass bottles. A normally active person needs to drink at least two quarts of water each day. Hot environments and intense physical activity can double that requirement. Children, nursing mothers, and medically fragile people may require more.

- Store 1 gallon of water per person per day Remember to consider pet needs in your planning.*
- Keep at least a 3-day supply of water for each person in your household.

Notes:

If you have questions about the quality of the water, purify it before drinking. You can heat water to a rolling boil for 3-5 minutes or use commercial purification tablets to purify the water. You can also use household liquid chlorine bleach if it is pure, unscented, 5.25% sodium hypochlorite. To purify water, use the table below as a guide:

Ratios for Purifying Water with Bleach

Water Quantity	Bleach Added
1 Quart	4 Drops
1 Gallon	16 Drops
5 Gallons	1 Teaspoon



Ratios for purifying water with bleach: Water quantity and bleach added

After adding bleach, shake or stir the water container and let it stand 30 minutes before drinking. Water should have a slight bleach smell to it.

Stored water has a shelf-life of 6-12 months depending on exposure to light/heat.

Emergency Water Sources

- Ice cubes
- Toilet tank
- Hot water heater
- Rainwater
- Some canned vegetables
- *Do not drink pool water treated with chemicals*

Notes:



Hint: To keep water supplies fresh, purchase cases of individual bottled water for every family member and pets. Use the water for your daily use. As each case is used, purchase a replacement and mark the purchase date on the case. Keep bottles of water in the car and drink/replace as you need them.

Assembling and Storing a Disaster Supply Kit

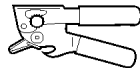
Food

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®. Select food items that are compact and lightweight. Include a selection of the following foods in your disaster supply kit:



- 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/stress foods—cookies, hard candy, sweetened cereals, lollipops, instant coffee, tea bags

Kitchen Items



- Manual can opener
- Mess kits or paper cups, plates, and plastic utensils
- All-purpose knife
- Matches in a waterproof container
- Aluminum foil and plastic wrap
- Re-sealing plastic bags
- If food must be cooked, BBQ or use a camp stove and a can of cooking fuel – *never barbeque indoors!*
- Garbage bags

Notes:



Hint: Eat refrigerated and other perishables first, frozen food second and non-perishable and canned food last. Discard all refrigerated items that are kept more than two hours above 40°F.

Shelf-life of Foods for Storage

Here are some general guidelines for replacing common emergency foods. *Write the current date on all stored foods and replace as follows:*

Use within six months

- Powdered milk (boxed)
- Dried fruit (in metal container)
- Potatoes

Use within one year

- Canned condense meat and vegetable soups
- Canned fruits, fruit juices and vegetables
- Ready-to-eat cereals and uncooked instant cereals (in metal containers)
- Peanut butter
- Jelly
- Hard candy and canned nuts
- Vitamin C

May be stored indefinitely (in proper containers and conditions)

- Wheat
- Vegetable oils
- Dried Corn
- Baking Powder
- Soybeans
- Instant coffee, tea and cocoa
- Salt
- Non-carbonated soft drinks
- White rice
- Bouillon products
- Dry pasta
- Powdered milk (in nitrogen-packed cans)

Special Considerations

Take into account your family's unique needs and tastes. Try to include foods that they will enjoy and that are also high in calories and nutrition. Foods that require no refrigeration, preparation or cooking are best.

Individuals with special diets and allergies will need particular attention, as will babies, toddlers and elderly people. Nursing mothers may need liquid formula, in case they are unable to nurse. Canned dietetic foods, juices and soups may be helpful for ill or elderly people.



Hint: Donate emergency food supplies to a local food bank, once a year, and replace your supplies. The greatest good for the greatest number!

Assembling and Storing an Disaster Supply Kit

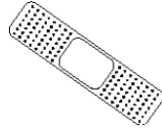
First Aid Kit



Assemble a first aid kit for your home and one for each car.

A first aid kit should include:

- First aid manual
- Sterile adhesive bandages in assorted sizes
- 2-inch sterile gauze pads (4-6)
- 4-inch sterile gauze pads (4-6)
- Hypoallergenic adhesive tape
- Triangular bandages (3)
- Needle
- Moistened towelettes
- Antibacterial ointment/wipes
- Thermometer
- Tongue blades (2)
- Tube of petroleum jelly or other lubricant
- Assorted sizes of safety pins
- Cleaning agent/soap
- Latex gloves (2 pairs)
- Petroleum jelly
- Facial Tissue
- Sunscreen
- 2-inch sterile roller bandages (3 rolls)
- 3-inch sterile roller bandages (3 rolls)



- Scissors
- Tweezers
- Cotton balls
- Medicine Dropper
- Lip Balm
- Ice Pak and Heat Pack
- Small ziplock bags (for ice)
- Biohazard bag (for contaminated items)



Nonprescription Drugs

- Aspirin or nonaspirin pain reliever
- Antidiarrhea medication
- Antacid (for stomach upset)
- Syrup of Ipecac (used to induce vomiting if advised by the Poison Control Center)
- Laxative
- Vitamins
- Activated charcoal (use if advised by the Poison Control Center)



Special Items

Remember family members with special needs, such as infants and elderly or disabled persons.

For Baby

- Formula
- Diapers
- Bottles
- Powdered milk
- Medications
- Pacifier
- Blankets
- Food/Juice



For Adults

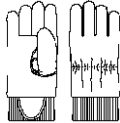
- Heart and high blood pressure medication
- Insulin
- Prescription drugs – Replace every time you refill the prescription
- Denture needs
- Contact lenses and supplies
- Extra eye glasses – Put old eyeglasses in the kit when you purchase new glasses.

Assembling and Storing an Disaster Supply Kit

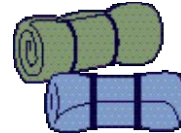
Clothing and Bedding

Include at least one complete change of clothing and footwear per person.

- Hard hat
- Leather work gloves
- Sturdy shoes or work boots
- N95 Mask



- Rain gear
- Blankets or sleeping bags
- Thermal underwear
- Sunglasses



Household Documents and Contact Numbers

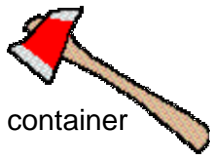
- Personal identification, cash (including dollars and quarters) or traveler’s checks, and a credit card
- Family Photos
- Will, insurance policies, contracts, deeds, stocks and bonds
- Passports, social security cards, driver’s licenses, immunization records, birth certificates & marriage certificates
- Bank and Credit card account numbers and phone numbers

- Inventory of valuable household goods including photos
- Keep all copies of records in a waterproof, portable container or on a computer disc in another location
- Emergency contact list and phone numbers including school, insurance and out of area contact
- Map of the area and phone numbers of places you could go
- An extra set of car keys and house keys



Tools and Supplies

- Rope, Axe, Shovel, Broom, Prybar, Pliers
- Emergency preparedness manual
- Battery-operated radio and extra batteries
- Flashlight and extra batteries/light sticks
- Fire extinguisher: small canister, ABC type
- Tube tent
- Duct tape
- Compass
- Matches in a waterproof container
- Swiss Army knife
- Plastic storage containers
- Road flare(s)
- Paper, pencil
- Whistle



- Shutoff wrench, to turn off household gas and water
- Entertainment—games and books



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
- Household chlorine bleach



STRUCTURAL AND NONSTRUCTURAL HAZARDS

Shutting off or raising utilities is one way to reduce—or mitigate—a hazard before a disaster occurs. Shutting off utilities is one way to mitigate a hazard immediately after a disaster.

The mitigation steps that one should take before and immediately after a disaster depend on the hazard and type of structure. This topic will deal with types of structures and the hazards related to each. Safety precautions, including hazard mitigation for structural and nonstructural hazards, will be covered next.

HAZARDS RELATED TO STRUCTURE TYPE

You might not have an opportunity to select the type of structure that you are in when a disaster occurs. 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.



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 unreinforced brick are less stable than newer construction.

Remember that:

- Following an event in which a structure has been damaged, there is a threat of additional damage, such as fire from ruptured gas lines.



Hint: Donate batteries to Toys-for-Tots or other charity and replace one a year.

STRUCTURAL AND NONSTRUCTURAL HAZARDS (CONTINUED)

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.

Malls, sports arenas, airports, places of worship, and other places with long roof spans also may pose hazards in some types of disasters. For example:

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

There is also risk in all types of structures from nonstructural hazards.

NONSTRUCTURAL HAZARDS

Everyone has hazards in their homes or workplaces. Fixtures and items within a home, garage, or workplace can pose a hazard during or after a disaster. 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.



There are relatively simple measures that individuals can take to alleviate many home and workplace hazards.

HAZARD MITIGATION

It is important to become informed on the probable impacts of likely events, including the potential for terrorist activity. The more information you have, the better you will be able to plan adequately and respond reasonably.

Regardless of the event or the amount of warning offered, there are safety precautions that you can take to reduce or prevent injury. This section will deal with measures to ensure personal safety.

The next section will address:

- Home and worksite preparedness
- Community preparedness

HAZARD MITIGATION (CONTINUED)

PERSONAL SAFETY

The appropriate personal safety measures are determined by:

- The type of event.
- The amount of warning that you have.
- Whether you are inside, outside, or driving.

Protecting yourself during a disaster requires planning. There are measures you should take to prevent or minimize the damage caused by most hazards. These measures can be taken long before a disaster occurs, during the time of the disaster, and after the disaster has occurred.

HOME AND WORKPLACE PREPAREDNESS

Preparedness is the key to survival in a disaster. Individuals, families, and building managers can take steps that will help minimize structural and nonstructural hazards, facilitate escape, and promote survival during the period immediately following the event.

Home and worksite preparedness includes:

- Structural and nonstructural hazard mitigation.
- Individual preparations, such as:
 - Developing a disaster plan.
 - Assembling a disaster supply kit.
 - Having proper tools and equipment
 - Developing a safe room in a secure area of the home (in case authorities ask you to stay indoors).

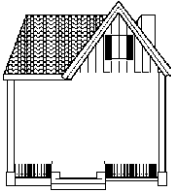
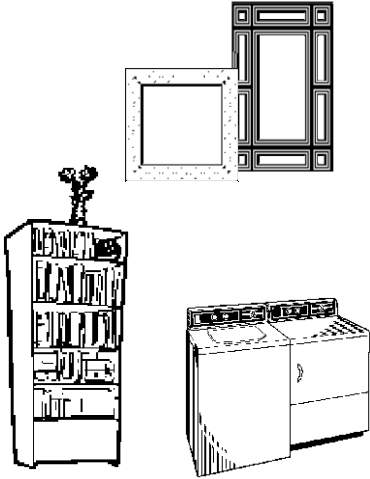


Notes:

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

STRUCTURAL AND NONSTRUCTURAL MITIGATION

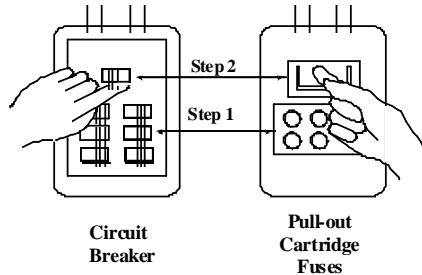
Precautions Against Structural and Nonstructural Hazards

Type Of Hazard	Sample Precautions
<p>Structural</p> 	<ul style="list-style-type: none"> ▪ Bolt older houses to the foundation. ▪ Strap propane tanks. ▪ Raise utilities (above the level of flood risk). ▪ Strap mobile homes to their concrete pads. ▪ Ask a professional to check the foundation, roof connectors, chimney, etc.
<p>Nonstructural</p> 	<ul style="list-style-type: none"> ▪ Anchor such furniture as bookshelves, hutches, bunk beds and grandfather clocks to wall studs using flexible fasteners such as nylon Velcro straps. ▪ Secure appliances and office equipment in place with industrial-strength Velcro®. Make sure gas appliances have flexible connectors to reduce risk of fire. ▪ 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 shutoff wrench where it will be immediately available. ▪ Secure water heaters to the wall to safeguard against a ruptured gas line or loose electrical wires. ▪ Glass and pottery objects can be secured with nondrying putty or "Quake" wax. ▪ Framed pictures should be hung from closed hooks so that they can't bounce off. Only soft art, such as tapestries, should be placed over beds and sofas.

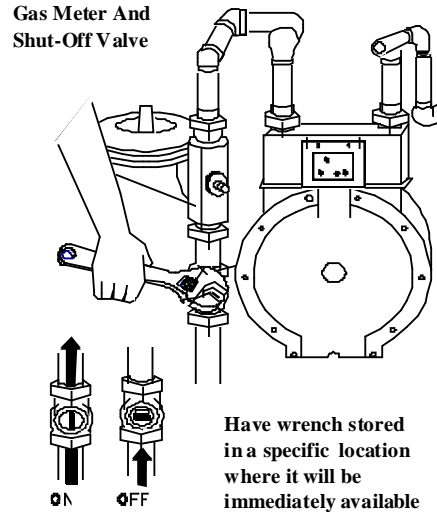
Notes:

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

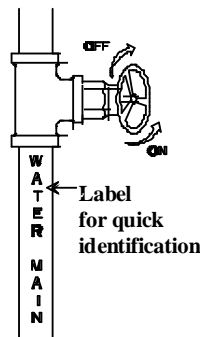
Electrical Shut-Offs



Gas Meter And Shut-Off Valve



Water Shut-Off



UTILITY SHUT OFFS

Electrical

The electrical shut-off procedure shows both a circuit box and a fuse box in two steps:
 Step 1 – Turn off all individual breakers (or unscrew fuses).
 Step 2 – Shut-off the main circuit (or main fuse switch). To turn back on, reverse steps.

Water

Clockwise turn of the valve to shut off and counter-clockwise to turn on.

Gas

The gas meter shut-off diagram indicates the shut-off valve location on the pipe that comes out of the ground. To turn off the valve, use a 12" crescent wrench, or other tool, to turn the valve clockwise one-quarter turn in either direction. Store the wrench at the meter (in a ziplock bag with non-rust lubricant) or any other easily accessible location. **After an earthquake, only turn off the gas if you suspect a leak, smell natural gas, hear a hissing sound or see the dials on the meter spinning unusually fast.**



Hint: Test the valve, periodically, by turning it 1/8 turn. If valve becomes stuck, spray with WD 40 and try again. If still stuck, contact PG&E or a plumber.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

Different nonstructural hazards pose different threats, depending on the disaster. Refer to the Association of Bay Area Government's website for more in-depth information:

<http://www.abag.ca.gov/bayarea/eqmaps/fixit/fixit.html>

- Home Fires: Make sure that security bars and locks on outside window entries are easy to open.
- Landslides/Mudslides: Install flexible pipe fittings to avoid gas or water leaks. Flexible fittings are more resistant to breakage.
- Wildfires:
 - Clear all flammable vegetation at least 30-feet around all structures. Clear ornamental shrubbery and trees of dead leaves and branches.
 - Remove all needles and leaves from roofs, eaves and rain gutters.
 - Trim tree limbs 10-feet away from chimneys or stovepipes.
 - Cover chimney outlet or flues with 1/2" mesh screen.
 - Post a clearly visible house address, using at least 4" high numbers for easy identification.
 - When choosing a new roof, replace wood shingles using non-combustible Class "A" roofing materials.

For more information, you may obtain a copy of the "*Living with Fire in Santa Clara County*" publication by contacting the Santa Clara County Fire Department at 408.378.4010 or go to www.sccfd.org

DEVELOPING A DISASTER PLAN

A disaster plan can mean the difference between life and death. For example:

- How will you escape your home?
- Where will you meet family members?
- What route will you take out of your neighborhood if evacuation becomes necessary? Do you have an alternate route in case your route is blocked or otherwise impassable?
- What will you take with you?
- Where will you go?
- What will you need to shelter in place? Do you have those items (or enough of those items)?

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

The answers to these questions may be different depending on the hazard, and you probably will not be able to plan for every event that could happen. By playing “What if?” with high-risk hazards, you will be better prepared for any hazard that might strike.

Conduct a home hazard hunt. Look around the house and ask yourself:

1. If the item falls down, will it hurt someone?
2. If the item falls and breaks, will I be upset?

Address “yes” answers with appropriate preparedness steps.

CREATING A FAMILY DISASTER PLAN**To get started . . .**

- Contact your local emergency management office or your local chapter of The American Red Cross. (See Additional Resources page)

- 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 that is 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.

- 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 or fall.)
- Prepare emergency supplies for home, car, office and school.
- Contact your local fire department to learn about home fire hazards.
- Learn first aid and CPR.

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)

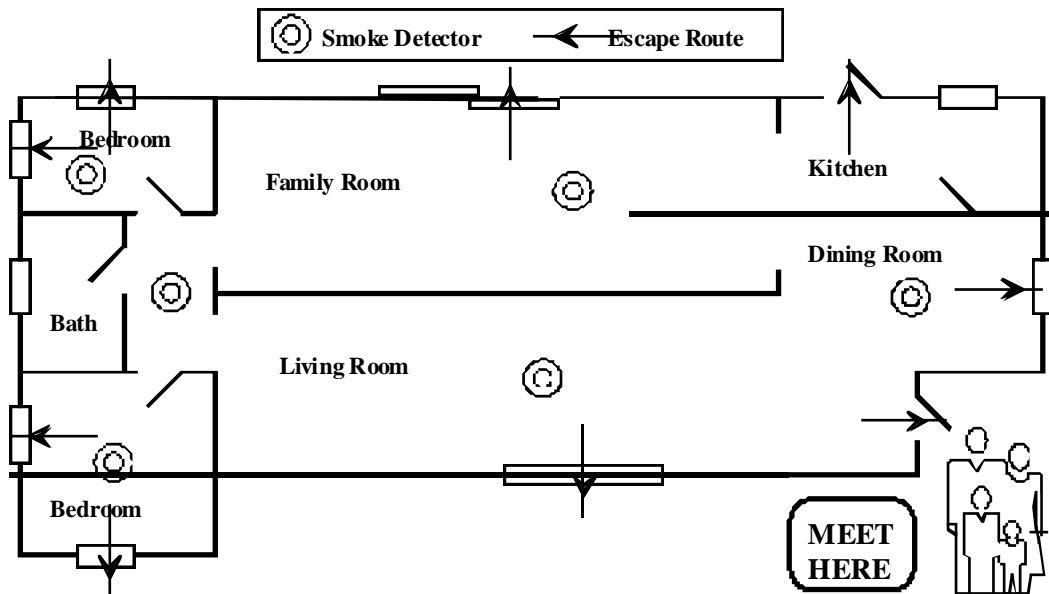
- Meet with your neighbors.
 - Plan how the neighborhood could work together after a disaster. Know your neighbors' skills (medical, technical).
 - Consider how you could help neighbors who have special needs, such as elderly or disabled persons.
 - Make plans for childcare in case parents can't get home.

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 physically challenged individuals.
- Inform all family members or office co-workers of the plan.
- Run practice escape drills.

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



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.

COMMUNITY EMERGENCY RESPONSE TEAM

UNIT 1: EMERGENCY PREPAREDNESS

ADDITIONAL RESOURCES

TO CONTACT YOUR LOCAL EMERGENCY MANAGEMENT OFFICE:

Campbell	www.ci.campbell.ca.us/	408.866.2174
Cupertino	www.cupertino.org	408.777.3335
Los Altos	www.ci.los-altos.ca.us/	650.947.2805
Los Altos Hills	www.losaltoshills.ca.gov/	650.941.7222
Los Gatos	www.town.los-gatos.ca.us/	408.354.6840
Monte Sereno	www.montesereno.org/	408.354.7635
Morgan Hill.....	www.morgan-hill.ca.gov/	408.776.7310
Saratoga	www.saratoga.ca.us/	408.868.1215

FOR MORE INFORMATION ON DISASTER PREPAREDNESS AND FIRE SAFETY:

American Red Cross/Santa Clara Valley Chapter	http://chapters.redcross.org/ca/scv/
American Red Cross/National	www.prepare.org
Association of Bay Area Governments.....	www.abag.ca.gov/bayarea/eqmaps/fixit/fixit.html
Centers for Disease Control (CDC)	www.cdc.gov
Emergency Management Institute.....	www.training.fema.gov/emiweb/
Environmental Protection Agency	www.epa.gov
Federal Emergency Management Agency (FEMA)	www.fema.gov
FEMA Publication "Are You Ready? A Guide to Citizen Preparedness"	www.fema.gov/areyouready
Governor's Office of Emergency Services.....	www.oes.ca.gov
National Fire Protection Association (NFPA).....	www.nfpa.org
National Safety Council.....	www.nsc.org
Pacific Gas & Electric.....	www.pge.com
Pandemic Flu.....	www.pandemicflu.gov
San Mateo County Collaborating Agencies Responding to Disaster.....	www.preparenow.org
Santa Clara County Fire Department	www.sccfd.org
Santa Clara Valley Water District	www.valleywater.org
State Emergency Digital Information System (EDIS).....	http://edis.oes.ca.gov/
US Department of Homeland Security	www.ready.gov
US Geological Survey	www.usgs.gov

TO LOCATE CPR AND/OR FIRST AID COURSES, CONTACT YOUR LOCAL COMMUNITY CENTER FOR A SCHEDULE OF CLASSES OR GO TO:

American Heart Association	www.americanheart.org	408.977.4950
American Red Cross.....	www.redcross.org	408.577.1000

HOME AND WORKPLACE PREPAREDNESS (CONTINUED)**EMERGENCY COMMUNICATIONS**

Listen to the Emergency Alert System (EAS) for instructions from emergency management professionals who are evaluating the situation.

Local radio & television stations:

Radio	Television
KCBS 740 AM and 106.9 FM	KNTV Channel 11
KLIV 1590 AM	City Channel Cable 26
Cupertino Radio 1670 AM	Handouts #4 Amateur Radio, #5 Communication Plan

COMMUNITY PREPAREDNESS AND CERT

Citizen preparedness will be less effective if the City isn't prepared. Representatives of all agencies that have a role in response work together to organize their agencies' activities before an emergency or disaster. The product of their efforts is called an Emergency Operations Plan, or EOP.

THE EMERGENCY OPERATIONS PLAN (EOP)

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 do business in an emergency.

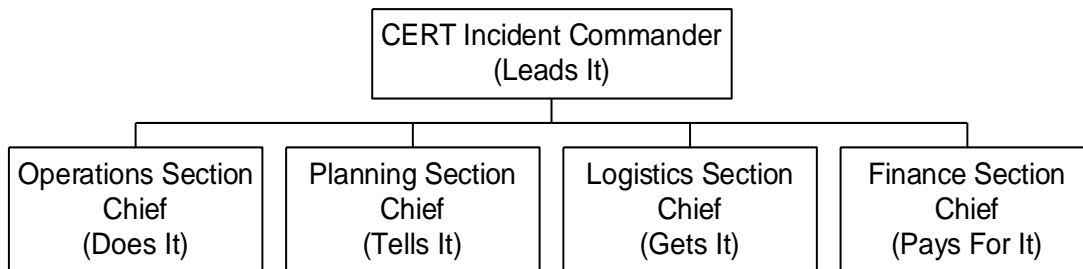
COMMUNITY PREPAREDNESS & CERT (CONTINUED)

SEMS (STANDARDIZED EMERGENCY MANAGEMENT SYSTEM)

NIMS (NATIONAL INCIDENT MANAGEMENT SYSTEM AND NEIGHBORHOOD ORGANIZATION)

- SEMS/NIMS is used by all State agencies, Counties, Cities, Districts, and others who have a part in the emergency response (equivalent counterparts at every level)
- Requires standardized terminology, equipment and organization
- Operates using the Incident Command System (below)
- Created the Operational Area concept using Counties as an intermediate communications level between cities and the region.

CERT ORGANIZATION CHART



SOG Form COES100

CERT teams respond to emergencies based on the Standard Operating Procedures of their sponsoring agency.

Incident Command System (ICS) – Is a people management tool. The five functions of ICS are:

Command – “Leads” the operation and has ultimate decision-making power.

Operations – “Does it” Conducts the field response to address the situation

Planning – “Tells it” Maintains records and tracks events to support the event

Logistics – “Gets it” Provides all equipment and personnel

Finance – “Pays it” Manages costs and requests reimbursement

The Incident Command System (ICS) is a nationally used, standardized, on-scene emergency management concept. Its design allows users to adopt an organizational structure equal to the complexities and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS is the integration of facilities, equipment, personnel, procedures and communications operating within a common organizational structure thereby enabling the effective management of resources to accomplish stated objectives. ICS is based on the **Firefighting Resources of Southern California Organized for Potential Emergencies**, “*FIRESCOPE*” program developed and long used by the California Department of Forestry.

With the implementation of NIMS/SEMS, all five NIMS/SEMS levels (field, local, Op Area, Region and State) adopted the use of ICS.

The principles of ICS ensure that the system provides for the following kind of operations:

- **SINGLE JURISDICTIONAL/AGENCY INVOLVEMENT,**
- single jurisdictional responsibility with multiple agency involvement,
- multiple jurisdictional responsibility with multiple agency involvement.

The system's organizational structure adapts to any emergency or incident. The system:

1. is applicable and acceptable to all user agencies.
2. is readily adaptable to new technology.
3. expands in a rapid and logical manner from an initial response to a major incident and contracts just as rapidly as organizational needs of the situation decrease.
4. has basic common elements in organization, terminology and procedures.

NIMS/SEMS LEVELS

Field - When the first responder arrives on the scene of an emergency, he assumes the role of Incident Commander (IC) until such time as a higher rank or more experienced representative assumes command. The exact nature of an incident dictates which first responder will command the on-scene site (Fire, Police, Public Works, Medical or Citizen Corps). As responding assets report to the IC, they are assigned specific tasks. A single command post is established for all reporting assets, regardless of origin or specialty (Unified Command). Additional resource requests, unable to be filled through normal Mutual Aid channels, will be directed to the City EOC.

Local – Each city/town has its own emergency management organization based upon their size and local government configuration. Local governments are primarily responsible for the protection of the lives, property and environment of their residents. When a major emergency exists, cities activate their Emergency Operations Centers (EOC) and function under ICS. The City EOC does not manage the field response. It SUPPORTS the field response. If the extent of the emergency overwhelms resources, the City will contact the next level of Emergency Management to request support.

Operational Area – The Op Area is an intermediate-level of the State's emergency organization that encompasses the county and all political subdivisions within the county, including special districts.

The Op Area manages information, resources, and priorities among local governments within the Op Area. It serves as a coordination and communications link between the local government and regional level.

Region - The Governor's Office of Emergency Services is divided into three regions: The Southern Region I, the Coastal Region II and Inland Region III. Santa Clara County/Santa Clara Operational Area is assigned to Coastal Region II. Its emergency management staff is headed by a Regional Administrator and is located in Oakland.

The Region II Emergency Operations Center (REOC) staff manages and coordinates information and resources among 15 operational areas stretching from the Oregon Border to the southern Monterey County line and between the operational areas and the State Operations Center (SOC) in Sacramento.

Whenever an Operational Area activates for emergency response, the Regional Emergency Operations Center activates to support the response efforts. The Coastal Region maintains liaison officers with each Op Area in the region. These agents may be directed to report to the Op Area EOCs when emergency situations occur to coordinate the State's response.

State - The State Emergency Management staff is lead by the Director of the Governor's Office of Emergency Services, and assisted by coordinators provided by state agencies. When activated, the State staff will be responsible for coordinating statewide emergency operations, to include the provision of mutual aid and other support, and the redirection of essential supplies and other resources to meet local requirements. The State Emergency Operations Center is activated at the request of the REOC.

Relationship with Federal Counterparts - The Governor's Office of Emergency Services coordinates with their federal counterparts in the Federal Emergency Management Agency (FEMA) when State resources are stretched beyond their capabilities. Once a Presidential Declaration of Emergency has been announced, FEMA Region IX will coordinate the Federal response efforts including forwarding liaison officers/contact teams to the on-site command post of the state assets.

NIMS/SEMS COMPONENTS

Common terminology is the established common titles for organizational functions, resources, and facilities within NIMS/SEMS/ICS.

Modular organization is the method by which the NIMS/SEMS/ ICS organizational structure is developed, based upon the kind and size of an incident. The organization's staff builds from the top down with responsibility and performance placed initially with the EOC Director. As the need exists, Operations, Planning/Intelligence, Logistics and Finance/Administration may be organized as separate sections, each with several branches.

COMMUNITY EMERGENCY RESPONSE TEAM

UNIT 1: EMERGENCY PREPAREDNESS

Unified command structure is a team effort that allows all agencies with responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, autonomy, responsibility or accountability.

A *EOC Action Plan* identifies objectives, strategies and determinations made by the Director of Emergency Services for the event based upon the requirements of the jurisdiction. In the case of unified command, the event objectives must adequately reflect the policy and needs of all the jurisdictional agencies. The *EOC Action Plan*, facilitated by the Planning Section and approved by the EOC Director, documents the support activities required for the operational period. It reflects the functional status of:

- a. Situation Intelligence: Current Threats
- b. Planning Section: Emergency Contingency Planning
- c. Operations Section: Issues and Concerns
- d. Logistics Section: Issues and Concerns
- e. Finance Section: Issues and Concerns
- f. Management Section: Action Item Requirements for next period

Manageable span-of-control within the EOC is a limitation on the number of EOC staff positions that can effectively be supervised or directed by an individual supervisor. The kind of event and the nature of the response or task, will influence the span-of-control range. The span-of-control range is between one to seven personnel with one to five being optimum.

Comprehensive resource management is the identification, grouping, assignment and tracking of resources.

Integrated communications are managed through the use of a common communications plan and the EOC communications center established for support of resources assigned to the event.

SOG Appendix 2 Functional Responsibilities

EFFECTIVE COMMUNICATION METHODS (HANDOUT #5)

- **Radios (Keep extra batteries on hand)**
- **FRS (Family Radio Service) Radios** – Available to anyone. Can be used to communicate within the neighborhood (1.5 mile radius). May have the ability to talk to surrounding neighborhoods.
 - **Set the radios to a common channel** - Each person needs to confirm the channel used for the emergency before leaving for their posts and also check the operation of the radio by transmitting to test it.
 - **Keep radio communication to a minimum** - If the person you need to talk to is close by, communicate face to face.

COMMUNICATIONS PLAN

Set up a communication plan so all team members know what they are expected to do. Issues to discuss include:

- Team name designation (Team 1, Team 500/John, SR1, etc)
- Primary and backup radio frequencies (if using radios)
- Emergency recall (in case the safety officer detects a hazardous condition that could endanger the search team) – Use whistle if not using radios.
- Status check (to confirm the team is OK and let them know how much time has elapsed*)
- Recall procedure (for rest or to send in fresh people)

EFFECTIVE MESSAGES

Keep radio communication to a minimum - If the person you need to talk to is close by, communicate face to face.

REMEMBER TO KEY – HESITATE – TALK HOLD THE SIDE PTT (PUSH TO TALK) BUTTON DOWN IN THE MIDDLE. WAIT 2 SECONDS AND THEN TALK.

Keep it Simple - the more complex a message, the more likely it will be misunderstood.

Example: "This is Mike, Search & Rescue team leader. We are at the building at 123 Main St. where the emergency involving possible people hurt inside the house that was just reported is being taken care of by my team. We have commenced operations by locating our triage tags in our trauma bags and have begun triaging and moving the victims."

Could be shortened to: "Command Post, this is the Search & Rescue team leader. My team is on scene at 123 Main St. We are setting up triage. Over."

If the Command Post needs more information, they will ask.

Each message should contain information in the following order:

1. Title of Receiver - "example: Command Post"
2. Title of Sender - "example: S&R Team Leader" **(If you have *Emergency Traffic*, it should be indicated in this initial broadcast). "This is Search & Rescue Team Leader with Emergency Traffic"**
3. *Wait for Receiver to acknowledge you. Do not continue the transmission until you are sure the Receiver is ready to receive.*
4. Your Location
5. Message
6. Termination – "Over" ("over" is the universal term for ending a transmission. Others will know that the air is clear for their transmission.)
7. Receiver will acknowledge receipt. Receiver may chose to repeat the message to confirm it was correctly understood.

8. When you have finished your FINAL transmission of the conversation, say “Out” or “Clear”. **Hold in the “talk” button for a second after you finish speaking so your last word is not cut off.**

NOTE: If you are told that the first part of your transmission is being cut off, it’s because you’re not waiting long enough after you push down the PTT or you’re not pushing down hard enough.

Sample Communication:

“Command Post, this is S&R Team leader with Emergency Traffic”

“S& R Team leader, this is Command Post, go ahead, over”

“Command Post, S&R Team is on scene at 123 Main St. We need the First Aid Team for injuries, over.”

“Command Post copies, need the First Aid Team to 123 Main St. Command Post Out”

Use Plain English – Most emergency responders have changed from using codes to “clear text” (plain English) to avoid misunderstandings.

Listen before talking. Be sure no one else is talking before you begin. After depressing the talk button, wait for two seconds before speaking.

Speak Slowly. Be sensitive to the amount of information and detail the person on the other end needs to write down.

Avoid broadcasting deaths over the air. You never know who is listening! – Use a messenger.

Avoid broadcasting children’s names over the air (if the information about them is sensitive) – Use a messenger

USING WHISTLES TO COMMUNICATE

Emergency Recall

- Three **short** blows by safety officer means the search team needs to exit right away. Search team acknowledges by repeating the signal.
- Three **short** blows by the search team means they are in trouble and request help.

Status Check

- One **long** blow by the safety officer means that the welfare of the team is being checked. Search team acknowledges by repeating the signal.

Recall Procedure

- Three **long** blows means the search time has expired and the search team should exit the building. Search team acknowledges by repeating the signal.

*** Search times should be between 10 and 30 minutes, depending upon the situation...shorter time periods for more stressful/hazardous situations.**

UNIT SUMMARY

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.

CERTs have become a key component of President Bush's Citizen Corps.

HOMEWORK ASSIGNMENT

Before the next session, you should:

1. Read and familiarize yourself with Unit 2: Triage, Fire Safety & Hazmat
2. Start working on CERT Checklist, including:
 - Storage of food and water for at least 3 days for yourself and your family.
 - Establishing an out-of-area contact.
3. Locate the utility shutoffs in your home.
4. Review Developing a Disaster Plan.

