Emergency Preparedness and Survival Guide

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INSURANCE CENTER ASSOCIATES

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TWELVE STEPS TO SURVIVAL

Everyone hopes that a great earthquake or other disaster won't strike. However, the recent events prove that the question is not really whether it will happen, but when. The U.S. Geological Survey estimates that there is a 50-50 chance that a great quake will strike California in the next 30 years. If a sizable quake or other disaster strikes, it will be less disastrous if you are prepared.

As we all know, California is earthquake country. In addition to Earthquakes, other emergencies and disasters can also strike and affect us. The Goal of our kit and this article is to help you begin to prepare. Although much of this information will focus on Earthquakes, many of the tips and information included here are useful and appropriate for many events and problems.

The First 72 hours: Civil authorities and recent disasters have made it very clear that each of us needs to be prepared to be on our own for 72 hours or longer. It is possible that you may be without water, gas, electricity, phone, medical assistance, etc.

We hope this booklet, and the starter kit that we have compiled for you, will help you begin to be prepared, plan what to do in advance, and teach you how to react if a disaster happens. It is comprised of information from the American Red Cross, LA Fire Department, LAPD, and FEMA. It is neither all inclusive nor totally complete, but it will show and discuss easy steps for those just getting started in preparing their disaster survival plan. For those with plans already in place, reviewing these materials may provide you with additional information on the basics, and an opportunity to inspect and replenish your plan & supplies.

If you wish, we will be happy to **provide this information via disk** so you can edit, add, and customize it to fit your needs. In addition, you may find other resources, and booklets that will contain other information that you may want to add.

Table of Contents

What to do right after a disaster	
DURING:	
AFTER	
Sheltering in Place:	
Planning: Home, Family, Work, School	
STEP I: FAMILY PLAN	11
Your Environment	. 11
Special Provisions	
Meeting / Communication Plans	
Plan Responsibilities	. 14
Step 2: MAKING SURE YOUR HOME IS SAFE	14
Suggestions:	
STEP 3: SUPPLIES & STORAGE	16
STEP 4: FIRST AID TRAINING AND SUPPLIES	18
Common Injuries	. 19
First Aid Courses	
Medications & Eyeglasses:	. 19
First Aid Kits	
Non-Prescription Drugs	. 20
Bandages:	. 21
STEP 5: DUCK, COVER AND HOLD	21
How to Ride Out an Earthquake	
Other Locations	
STEP 6: KITS: HOME, CAR, AND OFFICE KIT	24
Home Kit	
Car and Work Kit Supplies	
STEP 7: EMERGENCY CASH AND IMPORTANT DOCUMENTS	
Important Documents / Family Records	
Storage Tips	
STEP 8: CAMPING OUT EARTHQUAKE STYLE	
Outdoor Cooking	
Special Tips	
Cooking Supplies	
Essential Supplies	
Fuels	
Supplies	
Utensils	
Outdoor Living	
Essentials	
Personal Hygiene	
Psychological Comfort	
STEP 9: FRESHEN UP YOUR WATER AND FOOD SUPPLIES	
Water Storage	
Storage options	
Alternative Water Sources	35

* PURIFYING YOUR TAP WATER	
GETTING THE WATER OUT OF YOUR WATER HEATER:	
Food Selection and Storage	
Eating and Cooking	
STEP 10: FOCUS ON CHILDREN	
Learn What Earthquakes Are and What Causes Them	39
Discuss Aftershocks	
Assemble Children's Earthquake Kits	39
Accustom Everyone to Living without Electricity	40
After An Earthquake	40
STEP 11: FIRE CONTROL	40
Fire Extinguishers	42
Buying Tips	43
Safety Tips	43
Smoke Detectors	
STEP 12: EMERGENCY LIGHTING	44
Flashlights	
Lightsticks	
Emergency Wall Lights	
Radios	
Special Needs	
Checking Utilities	
Before the next earthquake:	
After the next earthquake:	
GIFTS OF LIFE	
TAKING THE NEXT STEPS	49
Emergency Supplies	
Sanitation	
Shelter	
First Aid	
Workplace	
Clothing	
Car	
Planning for the Disabled	
After The Quake	
How to turn off the gas	
Water	
How to purify water for drinking:	
Food	
Sanitation	
Emergency latrine or toilet:	
Shelter – Making do	
Money and Banks	
Family Plan Checklist	
EMERGENCY OUT-OF-STATE CONTACT CARDS	
	73
IMPORTANT NUMBERS & INFO	73
First Aid – At a Glance	73 76

DURING:

- 1. Take cover under a piece of heavy furniture or against an inside wall and hold on.
 - **IF indoors** Stay inside. The most dangerous thing to do during the shaking of an earthquake is to try to leave the building because objects can fall on you.
 - **IF outdoors** Move into the open, away from buildings, street lights, and utility wires. Once in the open, stay there until the shaking stops.
 - <u>If in a moving vehicle:</u> Stop quickly and stay in the vehicle. Move to a clear area away from buildings, trees, overpasses, or utility wires. Once the shaking has stopped, proceed with caution. Avoid or proceed with caution over bridges or ramps that may be damaged.

<u>AFTER</u>

- 1. Put on shoes with heavy soles. Wear gloves
- 2. **Be prepared for aftershocks.** Although smaller than the main shock, aftershocks cause additional damage and may bring weakened structures down. Aftershocks can occur in the first hours, days, weeks, or even months after the quake.
- 3. Check to be sure everyone (in your immediate vicinity is safe) Help injured or trapped persons, and give first aid where appropriate. Do not move seriously injured persons unless they are in immediate danger of further injury. Call for help.
- 4. Do a Quick check to be sure your current environment is safe,

Turn off Gas, Electricity, etc. at the gas meter shut-off valve or circuit box - ONLY...

- If you smell, hear, or even suspect gas is escaping in your damaged or undamaged building(s).
- If your gas water heater or any other gas appliance has been knocked over and/or pulled free from its wall connection.
- If your building has suffered extensive damage, such as large cracks in the walls or in the concrete slab floors, etc. AND you suspect the gas lines may have been damaged.
- If you smell smoke and/or see or suspect fire.

WARNING ... If you smell gas don't turn on or off any switches. <u>Don't use any open</u> <u>flame to check for leaks</u>. Don't turn on any battery operated flashlights, unless they are a Safety/waterproof light. Chemical light sticks are a safe source of light in the event of gas leak.

WARNING . . . It is very dangerous and therefore not recommended that you go searching for gas leaks inside any damaged building.

BE AWARE: After an earthquake, aftershocks will continue to occur, possibly causing additional damage (or even first damage) to your building(s).

REMEMBER: Do not turn the gas valve back on after the event unless you are qualified.

- 5. Inspect building for obvious safety issues and concerns
- 6. Run water into tub for storage and use. (do not use hot water unless gas is turned off)
- 7. Listen to a battery-operated radio or television for the latest emergency information. Remember to help your neighbors who may require special assistance--infants, the elderly, and people with disabilities. Stay out of damaged buildings. Return home only when authorities say it is safe.
- 8. Use the telephone only for emergency calls.
- 9. Pets after an Earthquake
 - a. The behavior of pets may change dramatically after an earthquake. Normally quiet and friendly cats and dogs may become aggressive or defensive. Watch animals closely. Leash dogs and place them in a fenced yard.
 - b. Pets may not be allowed into shelters for health and space reasons. Prepare an emergency pen for pets in the home that includes a 3-day supply of dry food and a large container of water.

Sheltering in Place:

If you are advised by local officials to shelter in place, remain inside your home or office and protect yourself there.

- Close and lock all windows and exterior doors
- Turn off all fans, heating and air conditioning systems.
- Close the fireplace damper.
- Get your disaster supplies kit and make sure the radio or television is working.
- Go to an interior room without windows. In the case of a chemical threat, an above ground location is preferable because some chemicals are heavier than air and may seep into basements even if windows are closed.
- Using duct tape, seal all cracks around the door and any vents into the room.
- Keep listening to your radio or television until you are told that it is safe or you are told to evacuate. If power is unavailable, be prepared to shelter in place until first responders provide directions. Local officials may call for evacuation in specific areas at greatest risk in your community.

Planning: Home, Family, Work, School

We need to make the places where we spend most of out lives---houses, boats, apartments, workplaces, and schools---as safe as possible, and more so, know what to do at each place before an event.

This brochure teaches you how to improve quake safety at home. You'll also find lists of essential supplies to store for the emergency and information on how some cities, towns, and neighborhoods have organized to cope with the quake.

Many of the suggestions about home safety, a family plan, and other topics can be adapted for schools, workplaces, businesses, and other organizations.

A family plan is important. If the quake comes on a weekday while your family is scattered, how will you reunite, or at least get in touch with each other? (Remember, transportation systems and telephone lines may be out of service.)

Economic considerations also require forethought. How will you deal with the temporary disruption of the banking system and of normal work? Do you have some cash on hand to deal with immediate needs? Private citizens, professionals, and employees should all plan for the emergency.

STEP I: FAMILY PLAN

Do members of your family know the safest and most dangerous places in your home during an earthquake? Do they know where to meet if they get separated after an earthquake? Do they know how to report their physical conditions and whereabouts?

Many government agencies, schools and businesses have plans for earthquakes and other emergencies. Your family should also have one. The safety and well being of your loved ones are important, so take time NOW to develop a family disaster plan. <u>AND MOST IMPORTANTLY</u> <u>DISCUSS AND TEACH IT TO ALL MEMBERS OF YOUR FAMILY</u>. If you have already developed a family earthquake or disaster plan, take time NOW to review and update it.

Your Environment

Safe Spots: Identify objects or places in each room that will provide protection from falling objects:

- Sturdy desks and tables
- Interior wall/corners
- Protected doorways (without doors that may swing and hit you)

Danger Spots: Identify objects and places in each room that pose a danger during an earthquake:

- Windows
- Tall unsecured furniture (cabinets, bookshelves, TV's, etc)
- Heavy objects on shelves
- Appliances
- Hanging mirrors/plants
- Pictures
- Ceiling lights
- Tall unbraced chimneys inside and outside the structure

Evacuation Routes: Locate exits and alternative ways to leave your home should the need arise.

Utility Shut-offs: Show everyone where the shut-offs for the following are located:

- Water
- Gas
- Electricity

Special Provisions

Plan for family members who have special needs, including:

- Seniors
- People with disabilities
- Children
- Individuals who take special medications
- Individuals who do not speak English
- Pets

Make provision for:

- Evacuation, if required
- Special foods
- Medications / Eye glasses
- Life-sustaining equipment
- Wheelchairs, canes, walkers
- Strollers

Be sure to store such items in a location that's easy to access.

Meeting / Communication Plans

It's important that family members know where and how to communicate and reunite after a disaster. Knowing everyone is alive and well will help family members cope with the situation more easily.

Include the following in your family earthquake plan:

- Local and Out-of-state contact (if possible), otherwise select the furthest person away. Make sure you consult with your extended family members so that all of you agree and know who your common contacts are.
- Meeting place(s): Select 3 or 4 points including your home, nearby relative, church, school, etc.
- Policies of schools and day-care centers pertaining to:
 - Emergency shelter
 - o Transportation
 - Care for children

Designate someone to pick up your children if you are unable to do so after an earthquake. Be sure to check with your school for its policies in reuniting children with parents.

Include your family documentation (discussed later).

Plan Responsibilities

You and your family members will have to attend to many details after a disaster. So will your neighbors. Get together and develop a plan that covers all potential problems. Assign specific responsibilities to each person based on their probable locations since it may be difficult to travel after an earthquake. You may also want to keep a copy of this document in several locations. Share it with other extended family members.

Step 2: MAKING SURE YOUR HOME IS SAFE

Your most important task: to make your home or apartment as safe as possible.

Site and Structure: Carry out a structural analysis of your home or apartment, consulting experts if necessary, and make necessary repairs or alterations. Survey the building's exterior and grounds for hazards.

Interior: Conduct a room-by-room examination of the interior for non-structural hazards, to determine what furniture or objects might fall or break. Then take corrective action.

Suggestions:

- Secure bookcases and other top-heavy furniture to wall studs with metal L-brackets and/or lag screws.
- Fasten shelves securely to walls.
 - Secure breakable items on shelves and cabinets with "museum putty", Velcro, or other appropriate fasteners.
- Replace conventional cabinet door latches with safety latches that won't accidentally open
 - o Keep heavy objects on low shelves. Secure hanging fixtures well.
- Put toxic and flammable materials in spill-proof, crush-proof containers on low shelves, preferably in locked cabinets.
- Store breakable items such as bottled foods, glass, and china in low, closed cabinets with latches.
- Hang heavy items such as pictures and mirrors away from beds, couches, and anywhere people sit.
- Brace overhead light fixtures.
- Repair defective electrical wiring and leaky gas connections. These are potential fire risks.
- Secure a water heater by strapping it to the wall studs and bolting it to the floor (after installing an insulating blanket around it to conserve energy).
- Repair any deep cracks in ceilings or foundations. Get expert advice if there are signs of structural defects.
- Store weed killers, pesticides, and flammable products securely in closed cabinets with latches and on bottom shelves.
- Identify safe places in each room.
- Remove or lock wheels or casters, if any, on refrigerator and other heavy appliances, or block them so they won't move.

Supplies: Collect and store emergency supplies for home, car, and workplace.

STEP 3: SUPPLIES & STORAGE

Flashlights, portable radios, first aid kits and other emergency supplies are essential after earthquakes and other disasters, but only if you can get to and use them. Store your emergency supplies in a location that you can access easily.

There are several options for storing your emergency supplies, including:

- Backpacks
- Duffel bags
- Heavy plastic trash cans with wheels
- Other containers

One of the most important considerations in storing your supplies is determining a location that you can store your supplied and this information, so you'll have access it to after a major earthquake or another disaster. At least two different locations are recommended.

Identify the safe spots in your house as you did when you developed your family earthquake plan and conducted your home hazard hunt. Then, determine the locations in which you spend the most time and to which you'll have easy access.

Your options may include storing the supplies in the following locations:

- Under your bed
- In a hallway closet
- In the den
- In the garage
- In more than one location such as in a backpack to take with you if you have to leave your home and in the pantry for use while you're at home.

Supplies don't have to be kept all in one location. For example, you may want to keep a flashlight, sturdy shoes, portable radio and eyeglasses under or next to your bed, keep an adjustable wrench at the gas meter (better yet install a automatic shutoff valve) and your food and water supplies in the pantry.

Remember that food and water require special considerations:

- Empty open packages into screw-top plastic jars or airtight containers to avoid problems with insects and rodents.
- Place food and water stored in the pantry on lower shelves to prevent damage to the container or loss of the item.
- Store your food and water in a dark, cool place to increase their life span.
- Do not place plastic containers directly on cement floors. Lead and other contaminants may leach into the food or water if the container is placed on cement.

STEP 4: FIRST AID TRAINING AND SUPPLIES

In an earthquake, some people get hurt. Are YOU first aid ready? Many people are unaware that they might be on their own for 72 hours or more after a major earthquake. You might have to depend on yourself to treat injured family members, friends and coworkers since outside assistance, including 9-1-1 service, might not be available immediately. If you don't have a first aid kit, NOW is the time to buy or assemble one. If you don't know how to administer first aid, enroll in a first aid class TODAY.

Common Injuries

Earthquakes can cause a number of injuries. The most common injuries and effects include:

Bumps and bruises Broken bones Shock Cuts from flying/broken glass Burns Stopped breathing

First Aid Courses

After a major earthquake or other emergency, immediate medical assistance, including 9-1-1 service, might not be available. You might have to treat family members, friends and coworkers who suffer cuts, broken bones and other injuries. Take time NOW to learn first aid. Courses for adults and children are available through organizations such as local chapters of the American Red Cross, hospitals and community centers (also see

Medications & Eyeglasses:

Be sure to have at least a list of medications with your emergency kit. If you have critical medications, you may want to consider including a small supply in your kit. Be sure to rotate this emergency supply to keep them fresh. If you need glasses, keep an old pair <u>or</u> contacts in your kit.

First Aid Kits

Make sure you have everything you need to treat injuries that might occur during an earthquake or other emergency. Assemble and store an emergency first aid kit that includes:

- First aid book Adhesive tape 3" elastic (ACE) bandages Dust masks Magnifying glass to see splinters Safety pins Triangular bandages Blunt-tipped scissors Eve cup or small cup to wash out eyes Thermometer Tweezers Wound disinfectant Small paper cups Liquid soap Cold compress Safety pins
- Bandages Butterfly bandages Roller bandages Individual 4x4 sterile gauze dressings Nonallergenic adhesive tape Scissors Antiseptic wipes Latex gloves Emergency (foil) blanket Antibiotic salve High-absorbency pads Saline for eye irrigation Aspirin or acetaminophen Tissues Smelling salts lodine

Non-Prescription Drugs

Aspirin or Tylenol (to reduce fever or pain) Antacid (for stomach upset Laxative Alcohol (for cleansing or externally to reduce fever) Vitamin supplements Anti-diarrhea medication Eye wash Antiseptic Emetic (to induce vomiting following poisoning) Anti-Histamine / Benadril

Bandages:

In addition to those items above, bandages can be made from sheets, clean rags, disposable diapers and sanitary pads. Dressings can be held in place by strips of sheets, ties, plastic bags, and stockings.

Keep this kit with your other emergency supplies

STEP 5: DUCK, COVER AND HOLD

We know that major earthquakes such as the magnitude 7.3 Landers temblor in 1992 can strike at any time and cause numerous deaths and injuries.

Experience also shows us that even moderate earthquakes – in the magnitude 5 to 6.9 range – can cause a significant number of deaths and injuries. The magnitude 6.7 Northridge earthquake in 1994 caused 57 deaths, more than 10,000 injuries and an estimated \$40 billion in property losses.

Learn what to do during an earthquake – whether you're at home, work or school. Taking the proper actions can save lives and reduces your risk of death or injury.

How to Ride Out an Earthquake

If an earthquake strikes while you're **INDOORS**, follow the steps below:

DUCK or drop down to the floor. Avoid windows, bookcases, file cabinets, heavy mirrors, hanging plants and other heavy objects that could fall. Watch out for falling plaster or ceiling tiles. (Protective window coating and materials for anchoring computers, televisions and other breakable items are now available.)

Take **COVER** under a sturdy desk, table or other piece of furniture **until the shaking stops**. If that's not possible, seek cover against an interior wall and protect your head and neck by covering them with your arms. Avoid danger spots near windows, hanging objects, mirrors and tall furniture.

HOLD ON to the leg of a sturdy desk, table or other piece of furniture if you take cover under it. Be ready to move with it. **HOLD** the position **until the ground stops shaking and it's safe to get up**.

Other Locations

Earthquakes don't always occur when you and your family are at home, work or school. **If you are in a public place, remain calm and do not rush for the exits**. Take the time in any location to identify alternative exits. Here are some additional safety tips if you're at specific locations when the shaking starts:

- If you're in an **OFFICE BUILDING**, don't use the elevators. Don't be surprised if the fire alarm, burglar alarm or sprinkler system comes on.
- If you're **OUTDOORS** and can safely do so, move to a clear area, away from trees, signs, windows, buildings, electrical wires and poles.
- If you're on a **SIDEWALK NEAR BUILDINGS**, duck into a doorway to protect yourself from falling bricks, glass, plaster and other debris.
- If you're **DRIVING**, pull over to the side of the road, stop and set the parking brake. Try to avoid overpasses, bridges, power lines, signs and other hazards. Stay inside the vehicle **until the shaking is over**. Do not exit your vehicle if wires have fallen on it.
- If you're in a **CROWDED STORE OR OTHER PUBLIC PLACE**, don't rush for the exits. Move away from display shelves containing objects that could fall.
- If you're in a WHEELCHAIR, stay in it. If possible, move to cover, lock your wheels and protect your head and neck with your arms.
- If you're in the KITCHEN, turn off the stove and move away from it, the refrigerator and overhead cupboards. (Anchor appliances and install safety latches on cupboard doors NOW.)
- If you're in a **STADIUM OR THEATER**, stay in your seat and protect your head and neck with your arms. If possible, try to crouch down so that your head is below the top of the chair. Don't try to leave **until the shaking is over**. Leave in a calm, orderly manner when the shaking stops and you are instructed to do so.

Be prepared for aftershocks. Plan where you will take cover when aftershocks occur.

STEP 6: KITS: HOME, CAR, AND OFFICE KIT

No one knows whether they will be at home, at work or on the road when a damaging earthquake strikes. Large earthquakes such as the 1992 Landers and the 1994 Northridge temblors could severely damage bridges, freeway overpasses, transition roads or other facets of the highway system.

As a result, you might have to use alternate driving routes, abandon your car and walk home or remain where you are. Store emergency supply kits at work and in your vehicle to help make your situation less stressful.

Be sure to keep gasoline in your tank. If an earthquake strikes while you are driving, pull over to the side of the road and stop. Try to avoid overpasses, power lines or other objects that could fall.

<u>Home Kit</u>

We've hopefully helped you begin a home kit. Be sure to keep it up and keep it fresh. Rotate perishable and time sensitive items like food and batteries. Choose an "Annual update" date like your birthday, Christmas, 4th of July, etc., or daylight savings times, so you will be reminded this is the time to do it.

Car and Work Kit Supplies

Be sure to store a backpack, duffel bag or tote bag containing the following emergency supplies at work and in your car:

- **Bottled water**: At least 72-hour supply (minimum one gallon per person, per day) to avoid significant losses of body fluids.
- Nonperishable food: Dried fruit, unsalted nuts and crackers, energy bars, etc.
- **First aid kit and book**: To provide medical assistance to yourself, passengers, coworkers and others who may require it.
- Sealable plastic bags: To dispose of trash, waste, etc.
- Flashlights, spare batteries and bulbs: To provide light if you need to walk home, find evacuation routes at night or if lights are out.
- Battery-operated radio, spare batteries: To obtain official information and instructions.
- **Essential medication**: At least 72-hour supply of essential prescription medications to maintain your health and provide comfort while walking home or waiting for roads to reopen.
- **Tools**: Screwdrivers, pliers, crowbars, etc., to help with debris removal and light search and rescue.
- **Pre-moistened towelettes**: For personal hygiene.
- Extra clothes: Shirts, pants, jackets, etc. that are comfortable.
- Sturdy shoes: To protect your feet from broken concrete, glass and other debris.
- Manual can opener: To open canned goods contained in your emergency food supply.
- Sturdy work gloves: To protect your hands from sharp objects you may attempt to lift.

Be sure to also include the following items in your car kit:

- **Reflectors:** To warn approaching vehicles that your car is stopped or abandoned. Check and/or replace them as needed.
- Blanket or sleeping bag: To provide warmth and comfort if you sleep in your car or outdoors while en route home.
- Fire extinguisher: To put out small fires.
- Local maps: To guide you if you use alternative routes to walk or drive to your destination.
- Hat or visor: To provide protection from the sun.
- Whistle: To attract attention and call for help.
- **Pen or pencil and tablet**: To leave messages if you abandon your car. Be sure to specify the date and time and your destination.

STEP 7: EMERGENCY CASH AND IMPORTANT DOCUMENTS

After a damaging earthquake, it won't be "business as usual." Banks and ATMs might be closed for an indefinite period, so your money in the bank will stay there.

Include in your earthquake kit a sufficient amount of cash to get you through the emergency period. You'll need cash to purchase food, gas and other emergency supplies. Small bills – ones, fives and tens – are best.

Be sure you also include plenty of change to call your out-of-state contact from a public phone. (Public phone lines are among the first to be restored after a disaster.) You can also use your calling card to make the call.

You'll also need insurance policies, birth certificates and other vital records after a damaging earthquake or another disaster. Take steps NOW to assemble and protect them.

Important Documents / Family Records

AKA: THE RED FILE

The "Red File" is a good file to have period. After a disaster, you'll need vital personal documents and information for insurance claims and other matters. The following items and documents and/or copies might be included. Keep them in a safe deposit box, freezer or another safe place to prevent identity theft.

- Social security cards
- Birth certificates
- Marriage and death records
- Baptism certificates
- Driver's license
- Credit card / bank card numbers (include # for contacting institution)
- Insurance policies
- Recent income tax returns
- Mortgage and rental receipts
- Deeds
- Stocks and bonds
- Savings and checking account books
- Documentation of valuables (video or photo documentation will facilitate insurance claims)
- Wills
- Health history, allergies, blood types
- Photos of all items in the homes
- Recent photos of family members for identification purposes
- Safe deposit box info/key

Storage Tips

Several options for safely storing your valuables and important documents are available to you, including the following:

- Fireproof storage boxes or safe deposit boxes
- Freezer (make sure you tightly seal documents in a freezer bag before placing them in the freezer)
- The home of your out-of-state contact (send only copies of documents, not the originals)
- Plastic Bags / Boxes / Floatable Totes

STEP 8: CAMPING OUT EARTHQUAKE STYLE

An earthquake larger than the magnitude 6.7 Northridge temblor in 1994 might severely damage utility systems, including gas lines, forcing you to live and cook outdoors for several days.

Prepare to do so NOW by including outdoor cooking and camping supplies as part of your emergency kit.

Outdoor Cooking

If an earthquake disrupts utility services and forces you to cook outdoors, you can use a camp stove or charcoal grill, but remember: use these items for cooking only if you're outdoors.

If necessary, you also can use candle warmers and sternos to heat your food. You can heat canned food in the can, but you must remove the paper so it will not burn and remove the lid first to let steam escape. Chafing dishes and fondue pots can also be used as containers.

Another cooking option is the stove in your recreational vehicle, if you own one.

Special Tips

- If possible, include foods that do not require cooking.
- Use foods stored in your refrigerator first. An unplugged refrigerator will remain cold for 24 hours if you don't open the door. Cook foods in your freezer next. Cook foods stored on shelves last.
- Store fuels in a ventilated area such as a garage or storage shed, away from water heaters.
- Do not camp under power lines, trees or other objects that could fall during an aftershock.

Cooking Supplies

Be sure to store a least enough of the cooking supplies to last 72 hours. Choose the supplies for cooking that best suit your family's needs. A list of options follows.

Essential Supplies

- Barbecue or other outdoor grill
- Camp stove
- Sterno-type fuel

Fuels

- Charcoal and lighter fluid
- Propane

Supplies

- Disposable plates, cups and eating utensils
- Dish Soap
- Paper towels
- Pots, pans
- Water-proof matches or a lighter

Utensils

- Cooking Utensils
- Forks, knives and spoons
- Manual can opener
- Tongs with long wooden handles to pick up heated containers

Outdoor Living

Be sure to have the following supplies available so you and your family are prepared to live outdoors if an earthquake severely damages your home or your utility service is interrupted:

Essentials

- · Battery-operated radios, flashlights with extra batteries
- Blankets, sleeping bags and pillows
- Canopy or tarp
- Clothing
- Rain gear
- Sturdy shoes & gloves
- Essential medications
- First aid book and kits
- Food (nonperishable)
- Local maps
- Rope, tape and trash bags
- Shovel, hammer and axe
- Tent(s)
- Water for cooking, drinking and hygiene

Personal Hygiene

- Baking soda to absorb odors
- Deodorant
- Lip balm
- Mouthwash
- Plastic trash bags
- Portable shower
- Portable toilet or bucket
- Soap
- Sunscreen
- Toothbrushes and toothpaste
- Towelettes
- Wash cloths

Psychological Comfort

- Candy
- Playing cards
- Family photos
- Games

STEP 9: FRESHEN UP YOUR WATER AND FOOD SUPPLIES

You can't exist very long without water. It's essential to life. Food is also important. Many of us could survive without it for several days, but the energy, psychological comfort and nutrition it provides are essential after a damaging earthquake. Plan on about 5 gallons per person minimum.

IMPORTANT:

DO NOT STORE ANY PLASTIC WATER CONTAINER DIRECTLY ON CONCRETE The concrete will leach chemicals into the water, contaminating it and will also degrade the plastic bottle, causing failure.

People who fled their homes for nearby parks had to wait in long lines to receive food, water and other staples from the American Red Cross, Salvation Army and other volunteer agencies. Empower your family and reduce the post earthquake stress by storing or refreshing your emergency water and food supplies.

After an emergency, treat only enough water to meet your needs for 48 hours at a time. There is an increased chance of recontamination if the treated water sits for more than 48 hours. Refrigeration will also help avoid recontamination.

Note: Most home water filters are meant for water that is already microbiologically safe. Using these filters during a "boil water notice" will not guarantee the safety of the water. Replace any filter cartridges after the boil water notice has been lifted to insure your filter is not contaminated.

Water Storage

- Store at least a three-day to three-week supply of drinking water for each family member (at least one gallon per person per day). Water is available in juice-box type containers, cans, foil packets and plastic bottles
- Store additional water for hygiene and cooking
- Store a three-day supply of water for your pets
- Store water on lower shelves, rather than on higher shelves from which containers could fall and burst
- Store your water in a cool, dark and dry place, separated from your other emergency supplies in case of leakage
- 8 drops of pure unscented liquid bleach per gallon of water will reduce the contaminants in the water.
 ADD THE BLEACH WHEN YOU FIRST STORE THE WATER.

NOTE: *ROTATE YOUR WATER EVERY SIX MONTHS* - especially the supply you made up from tap water with bleach added. Although commercially produced water can last up to 2 years, re-use it, And keep it fresh

Storage options

• Bottled Water from the Store - 1- and 2-gallon sealed containers (NOTE: The 1- and 2gallon containers you purchase in your local store are not designed for long-term storage and will begin to leak/fail after about 6 months.)

- 1- and 5-Gallon Sealable Containers From camping or survival stores. Be sure to sanitize container and treat the water that you are storing. Old bleach bottles, clearly marked, make good containers for water storage.
- 20-oz. to 1-Liter Designer Water Containers Are usually marked with an expiration date, but are generally good for about two years
- 5-Gallon Water Bottles from Private Water Companies Water companies claim their water and containers are good for up to five years, if still factory sealed & correctly stored in a cool dark location.

Alternative Water Sources

- Water heater, if secured
- Toilet tanks (not the bowl) ONLY if the water hasn't been treated with chemicals to enhance color, smell, etc.
- Beverages
- Ice
- Water-Packed Can Goods (even syrups are mostly water)
- Water Trapped In Home Piping. Water can be removed by locating and shutting off the main water valve. Then, open the valve at the highest point of your property (i.e., shower head, especially on the 2nd floor). Then, when you open the valve at the lowest point, gravity will force the water from the pipes.
- Swimming pools (for hygiene purposes only, not for drinking!) **DO NOT DRINK POOL OR SPA WATER! Pool water contains many toxic chemicals and has a high potential of giving you diarrhea, causing dehydration!**

* PURIFYING YOUR TAP WATER *

IF THE PURITY OF YOUR WATER SOURCE IS QUESTIONABLE, USE THE FOLLOWING METHODS TO MAKE THE WATER SAFE TO DRINK:

• **BEST!** Add Liquid Chlorine Beach to the water (8 drops per gallon of water. Double this dose if the water is cloudy.) OR

• **GOOD!** Add 2% Tincture of lodine to the water (12 drops per gallon of water. Double this dose if the water is cloudy.) OR

• **ACCEPTABLE!** Boil the water vigorously (5 min. at sea level, adding an extra minute for every 1000 feet above sea level. Double this time if the water is cloudy.) AND

• Don't forget to clean and sanitize your food and water containers before using them. Wash with soap and water then fill with a 10% bleach solution. After 5 min. empty the bleach solution and let air dry AND

• Water that is dirty should first be strained through a coffee filter, cheesecloth, or a paper towel to remove suspended matter.

GETTING THE WATER OUT OF YOUR WATER HEATER:

- Use extreme caution. Let the water cool.
- Turn off the cold water supply to the tank

- Turn off the gas or electric heater for the tank
- Open the drain valve at the bottom
- REMEMBER: Some sediment at the bottom of the tank may at first make water flowing out look murky. Continue to drain water until it becomes clear.

Food Selection and Storage

ROTATING SUPPLIES: Rotating supplies every 6 MONTHS is the key. Not because everything will go bad in six months. But, because you need to make rotating supplies part of your normal habits. The easiest way to remember to rotate is to change your supplies every time you change your clocks for "daylight savings time". Remember, *when you ROTATE YOUR CLOCKS, you ROTATE YOUR SUPPLIES.*

REMEMBER: Your supplies rotation should include (but is not limited to), Batteries, Food, Water, Medications (prescribed and over-the-counter). Don't forget to check and shake that fire extinguisher while you're at it.

- Store nonperishable foods your family normally eats. Include items that do not require cooking
- Avoid foods that require a lot of water to prepare or are heavily salted and make you thirsty
- Remember dietary restrictions
- Be sure to store your favorite treats for psychological comfort
- Include an emergency food supply for your pets
- Store at least a three-day to three-week supply of canned foods. Foods in glass bottles and jars might break when a disaster occurs. Include a manual can opener.
- Open food boxes or cans carefully so you can close them tightly after each use
- Empty open packages of food, such as dried fruits and nuts into screw top (plastic) jars or airtight tin cans to avoid problems with insects or rodents.
- Replace/renew your food supply, including canned goods, once or twice a year. Check expiration dates.

Eating and Cooking

- Be prepared to cook outdoors. Use a:
 - Charcoal grill
 - o Barbecue
 - Camp stove
- Use foods stored in the refrigerator first; use foods stored in the freezer next; use foods stored on shelves last

Remember: These cooking methods are for outdoor use only. Cooking indoors with these items allows carbon monoxide and related gases to build up, which can quickly kill you.

- Store at least a 72-hour supply of the following items:
 - o Charcoal, propane, lighter fluid
 - Waterproof matches or a lighter
 - Paper towels, plastic trash bags
 - Disposable eating utensils

STEP 10: FOCUS ON CHILDREN

Damaging earthquakes such as the 1994 Northridge temblor and their aftershocks can rattle nerves of adults and children. You can't do anything to prevent earthquakes and aftershocks, but you and your children can work together to prepare for the next earthquake. Here are some ideas about how to make your children more prepared for an earthquake:

Learn What Earthquakes Are and What Causes Them

Explain why the ground and buildings shake. Go to a museum, a theme park or an expo that has an earthquake simulator so everyone can experience the shaking sensation. Remind everyone that the shaking will stop. Read stories about earthquakes and let your children ask questions. Learn the difference between fact and fiction.

Discuss Aftershocks

Talk about the possibility that aftershocks as strong as the earthquake itself might occur and continue for some time. Make sure everyone understands that aftershocks are normal.

Assemble Children's Earthquake Kits

Help your children assemble their own earthquake kits. Include a note from parents, a special toy, family photograph and treat, as well as water, food and other earthquake supplies. Kits should meet their needs and likes. Remember that no supplies are "wrong."

Accustom Everyone to Living without Electricity

Go through an entire evening without using electricity to prepare everyone – especially children – for the possibility of having to live without it. Conduct a "flashlight" walk around the block; hold a candlelight or "flashlight" dinner; tell stories or play games instead of watching television.

After An Earthquake

Monitor family members – particularly children – for behavioral changes, including withdrawing from family and friends, overeating or loss of appetite, disobedience and antisocial behavior. Parents and teachers can respond to such problems by encouraging interaction with family members and friends, by providing additional attention and physical comfort and by providing structured but undemanding responsibilities. Contact your local mental health agency for more information.

STEP 11: FIRE CONTROL

Preparation and practice can do a lot to lessen the risk of fire---a primary quake hazard. Draw up a plan for escaping from a fire in your home. List all rooms, doors, and windows, and designate safe exits.

If you need to escape from an upper story, provide folding ladders or rope or chain ladders. (Practice with them. Rope and chain ladders are difficult to use.) Never jump from an upperstory window. As a last resort, hang from a window and drop, but be sure it's into a safe place. Remove all hazards---garden stakes, rocks, etc---from the areas beneath windows that might be used as emergency exits. Be sure gas lines are connected to appliances by flexible tubing (much less likely to break than rigid pipe). Prevent appliances from "walking."

Train family when and how to shut off gas at main valve and at each appliance and heater as well. (Details in After the Quake.)

Place several fire extinguishers in key spots (some outside the house) where they will be easily accessible after the quake. Teach family members how to use them. (See After the quake.) Powder-type ABC extinguishers are good for all sorts of fires. Maintenance: Every two or three months, check to be sure extinguishers are full. Turn them upside down and rap the bottom with a rubber mallet or a board to keep the powder from caking.

Clear away combustibles (dry grass, weeds, firewood, scrap lumber, flammable chemicals) from the outside of the house, garage, sheds, fences, etc. Get rid of unnecessary combustibles inside the house or garage. Make sure nothing flammable is near the gas heater, water heater or any other open flame.

Fires claim the lives of thousands each year. Strong temblors can trigger fires by:

- Breaking gas lines
- Downing electrical lines
- Damaging wiring in appliances
- Toppling shelves holding combustible chemicals

Earthquake-related fires are also caused by:

- Leaving food unattended on the stove after an earthquake strikes
- Lighting or using matches before checking for gas leaks
- Using fireplaces before they've been inspected for damage

Having a good fire extinguisher and knowing how to properly use it before an earthquake or a fire can help save your home and your life.

Fire Extinguishers

Equip your home with dependable fire extinguishers and teach family members how to use them. Proper use of fire extinguishers can keep a small fire from growing, provide you with an escape route through a small fire and help you fight a small fire until professional firefighters arrive.

How to Operate

Hold the extinguisher upright and remember the word "P-A-S-S":

P for **PULL** – Pull the pin, ring or seal

A for AIM – Aim the extinguisher nozzle at the base of the fire. Remember that most fire extinguishers last only 8 – 10 seconds. Make sure you aim at the base of the fire **before** you release.

- **S** for **SQUEEZE** Squeeze or press the handle
- **S** for **SWEEP** Sweep slowly from side to side at the base of the fire until the fire goes out

Buying Tips

Several types of fire extinguishers are available:

- Extinguishers labeled "A" are effective for combating fires involving paper, cloth, wood or other ordinary combustibles
- Extinguishers labeled "B" are effective for fighting fires involving gasoline, kitchen grease, paints, solvents or other flammable liquids
- Extinguishers labeled "C" are effective for fighting fires involving electrical equipment, wiring and appliances
- Multipurpose dry chemical extinguishers labeled "ABC" are effective for fighting most types of fires
- Generally speaking, an A-B-C type of extinguisher is recommended for home use

Safety Tips

- Make sure you have a clear escape route before you attempt to put out a fire
- Stay low to avoid fumes and smoke
- After an earthquake, turn off your stove and unplug any damaged appliances
- Get out immediately and call 9-1-1 to notify authorities

Smoke Detectors

You can reduce your risk of fire-related death or injury particularly during sleeping hours, by installing smoke detectors in the following locations:

- Bedrooms
- Hallways and corridors between rooms
- Stairway ceilings
- Basements, attics and garages
- Living room and den

Be sure to test your smoke detectors each month and change batteries annually. This is also a good time to check your fire extinguishers.

STEP 12: EMERGENCY LIGHTING

Every home should have emergency flashlights and spare batteries.

The magnitude 6.7 Northridge earthquake in 1994 damaged several Los Angeles City Department of Water and Power (DWP) facilities. The quake also damaged several high voltage transmission lines and caused some towers to fail completely. As a result, much of the city was without power for the first time in its history. DWP personnel were able to restore service to 93 percent of the city within 24 hours, but it might take much longer in a larger, regional earthquake. Don't be left in the dark. Empower your family by obtaining battery-operated flashlights and extra batteries for your home and car.

<u>Flashlights</u>

Flashlights can provide immediate emergency light and psychological comfort when earthquakes or other disasters disrupt power. They're good only when you can find them and the batteries work.

Place a flashlight in every room; secure each one to ensure accessibility. Maintain an ample supply of extra batteries and bulbs. Check them every six months.

<u>Lightsticks</u>

Lightsticks are also an excellent source of emergency light and do not require electricity or batteries to operate. Maintain an ample supply for each family member.

Emergency Wall Lights

Units that plug into electrical sockets and activate when electricity is disrupted can also provide short term light during power outages.

<u>Radios</u>

Reliable information and instructions are essential after a damaging earthquake or other disaster. Prepare your family by including battery-operated portable radios or televisions and extra batteries in your emergency preparedness kits.

Special Needs

Electrical outages can also impact persons with hearing impairments and other with special needs. Prepare NOW by including the following, as appropriate, in your emergency kits:

- Extra batteries for hearing aids, TDDs, wheelchairs
- Generator for life-safety equipment

Checking Utilities

Strong earthquakes can also damage utility lines and appliances, putting your home at risk to fire.

Before the next earthquake:

- Show responsible family members the location of your electrical service panel and teach them how to turn off service
- Conduct family drills and simulate turning off electricity to test family skills

After the next earthquake:

- Determine if electricity is out only in your home or throughout the neighborhood
- Check for damaged appliances, as well as fallen, loose or damaged electrical wiring
- Disconnect damaged appliances
- Stop power flow at the service panel if your wiring is damaged
- Turn off gas only if you hear or smell a leak
- Reenergize circuits by turning on the main panel first and then each breaker individually
- Call the Gas Company to restore service. Do not turn the gas back on yourself.

GIFTS OF LIFE

Are you having trouble deciding what to get a family member, friend or coworker for an upcoming holiday or birthday? If so, a survival gift might be the answer, especially for someone who hasn't already bought or assembled his or her own emergency preparedness kit. Flashlights, portable battery-operated radios, first aid kits and other emergency supplies will be valuable after a damaging earthquake since people living in the affected area might have to rely on themselves for at least 72 hours.

Make a list of persons for whom you're going to buy or assemble survival gifts. List what you think everyone needs. Depending on your financial situation and the needs of the people on your list, you might get one item or an entire kit. You can also coordinate with other relatives, friends and coworkers to buy different emergency supply items or to assemble kits as a group project, with each participant contributing one item to the kit.

Suggested Gifts and Approximate Price Ranges

Less than \$5

- Bottled water
- Dust mask
- Emergency (foil) blanket
- Emergency reflectors (set of four)
- Local maps
- Manual can opener
- Nonperishable food
- Safety lightsticks
- Whistle
- Batteries
- Books, games and toys
- Personal hygiene kit (mouthwash, toothbrush, toothpaste, wet wipes, deodorant, sunscreen, etc.)
- Flashlight, spare bulb and batteries
- Pocket knife
- Sturdy work gloves

Between \$10 - \$20

- Duffel bag or backpack
- First aid kit (for one) and book
- Hand tools (wrenches, crowbars, pliers, screwdrivers, etc. to help turn off utilities, remove debris, etc.)
- Multipurpose ABC-type fire extinguisher
- Portable battery-operated radio
- Work gloves

Over \$20

- Camp stove or barbecue
- Commercially made earthquake kit
- Lantern
- Sleeping bag
- Sturdy shoes

TAKING THE NEXT STEPS

Emergency Supplies

After a big quake many utilities and services will be out, and authorities will be overwhelmed. **Expect to be on your own for at least a few days, and possibly up to two weeks.**

Gathering "survival stashes" in advance, and storing them where they will be accessible and undamaged after the quake, will make this time less trying. To be safe, plan to take care of your family for a minimum of two weeks without outside help or supplies.

Make sure you have a pair of hard-soled shoes, work gloves, and a flashlight and spare batteries handy both at home---perhaps under the bed---and at work. Immediately after a big quake, put on the shoes and gloves to protect yourself as you move about. Use the flashlight if electrical power is interrupted and the quake occurs at night or when you are inside a portion of a building without natural light.

Water – SEE ABOVE DISCUSSIONS

Other Supplies:

- Funnel, extra cups or canteens, collapsible plastic water jugs, etc.
- Buckets for catching rain water (for example, from roof downspouts) and for carrying water. Line buckets with plastic bags if they leak or are dirty.
- Pot for boiling water, strainer and/or cheesecloth to filter it.

Food and Cooking Supplies

- Shovel. A pick could also be handy.
- Matches in waterproof container.
- Charcoal (20 lbs. per person), charcoal lighter, and/or
- Camp stove and fuel, and/or
- Grill or fire pit.
- You can improvise a fire pit by digging a hole, lining it with aluminum foil, and cooking on an oven grate.
- Don't cook food directly on a rack taken from the refrigerator (harmful effects from the metal). Such racks are all right for heating up pots and pans.
- Large pots and pans with lids. Double boiler to cook quickly and save fuel.
- Metal coffee pot.
- Two pairs adjustable (channel-lock) pliers. Very useful for handling hot items.
- Oven mitts, hot pads.
- Manual Can Opener.
- Aluminum foil.
- Heavy-duty 30-gallon plastic garbage bags and twist ties (minimum several dozen).
 Smaller plastic bags would also be useful.
- Plenty of paper towels and/or napkins, paper plates, plastic utensils.
- Canned food. Minimum three cans of food per person per day. To be safe, store 40 to

50 cans per person. Examples: stews, hearty soups, sardines, tuna, vegetables. Include foods that can be eaten cold. Fruit juices would be welcome if you have room.

- Multi-vitamins, dietary supplements.
- Coffee, tea, cocoa, powdered milk, powdered juice mix, etc. Remember, water may be in short supply.
- Ball-point pen and stick-on labels (and/or note paper and tape).

Sanitation

- Soap. Best is an antibacterial liquid surgical scrub like Betadine, which can be found in pharmacies. *Hexachlorophene soaps are not recommended because they can be dangerous to infants and small children*. It would also be a good idea to have a supply of alcohol-based, waterless hand-cleaning gel (Pro Care) and alcoholimpregnated tissues (Handi-Wipes) in case water is extremely scarce after the quake.
- Temporary hand wash. Best is a hanging plastic bag (Sun Shower) with hose, nozzle, and shut-off valve. You can also use a garden sprinkler or a can with a pouring spout. Or improvise a hand wash with an old bleach bottle: punch holes in the cap and pour through the cap, or punch a few small holes about on the side of the bottle about an inch above the bottom: when you unscrew the cap, water will run through the holes, and it will stop when you screw the cap back on.
- Small bucket or other container, with lid (for urine).
- Medium bucket or other container, with lid (for feces).
- Detached toilet seat.
- Heavy-duty plastic garbage bags, twist ties. Minimum several dozen (in addition to those for kitchen garbage, etc.). Don't skimp.
- Toilet paper (2 rolls per person per week).
- Clorox II powder or powdered agricultural lime (minimum 5--10 lbs.)
- Shovel or spade for digging latrine. Pick for hard ground. *for dealing with human waste, see* After the Quake.

<u>Shelter</u>

- One roll (200 feet) of 5 mil plastic sheeting.
- Clothesline, rope, strong cord.
- Shovel, pick, crowbar, axe, hammer, nails, saw, staple gun.
- Adjustable (crescent) wrench to be left by main gas valve for emergency shutoff. It would be handy to have another one in an alternate location.
- Some of the tools (especially the crowbar) could be useful in rescues from damaged buildings.
- Dripless candles, matches in waterproof container.
- Flashlights, small AM or AM-FM radio, extra bulbs and batteries. Cheap disposable flashlights can be stocked in emergency supplies. Once a year, replace them with new ones and take the old ones for everyday use.
- Extra shelter and sleeping gear. Ground cloths, tarps, tents, sleeping bags, inflatable beds or foam pads, etc. Several small, inexpensive packaged "tube tents" could come in handy.

<u>First Aid</u>

- Keep a home first aid kit where it will be accessible after a quake, preferably in a strong, water-tight, fireproof container. Use zip-lock plastic bags to organize and protect contents.
- Keep a good first-aid manual with the kit. Refer to it for details on supplies.
- Include basics for minor wounds: small bandages, tape, anti-bacterial soap, alcohol, etc. If possible, add supplies for more serious injuries: large dressings, bandage rolls, sling, splint, etc.

Workplace

- Keep a small pack of personal emergency supplies and clothing at work, in case you cannot reach your home or your car.
- If possible, keep an old bicycle there as well. It may be the best means of transportation after the quake.
- If you don't work on the ground floor, a length of strong rope might come in handy in case of stairway collapse.
- Administrators of businesses and other workplaces should also consider keeping emergency equipment and supplies on the premises.

<u>Clothing</u>

- Shoes with heavy soles.
- Work gloves
- Warm clothing, including sweaters, overcoats, rain gear, caps, and gloves.
- Spare eyeglasses or contact lenses.
- Store emergency clothing in extra suitcases, duffels, or backpacks in a dry place that will be accessible after the quake.

<u>Car</u>

- Keep a minimal stash of clothing and emergency supplies in your car. An all-around car stash would also include battery jumper cables, a tow rope, and a small tool kit.
- Shoes with heavy soles and work gloves.
- Clothing for rain and cold weather.
- Flashlight, spare batteries, matches, small first-aid kit.
- Full canteen, water purification drops or tablets, possible bottled water or juice.
- Spare eyeglasses or contact lenses.
- Note paper, ball-point pen, tape.

Planning for the Disabled

In addition to the precautions that everyone should take, disabled persons have a few other things to think about. Most important, designate in advance someone who can help you (a family member, neighbor, co-worker) should you require assistance after the quake strikes.

After The Quake

How to turn off the gas.

ONLY TURN OFF THE GAS IF YOU SUSPECT A DANGER OF FIRE OR YOU SMELL GAS.

If you have reason to believe the electrical lines have been broken or power is out, don't turn on electric switches. Unplug appliances. (Fuses or circuit breakers should automatically shut off electricity if there is trouble on the circuit.) **Be especially careful if you smell gas.** Don't attempt to shut off your house's electricity or even unplug appliances if you can smell gas. **One spark could set off a fire**



Using a wrench, give the main shut-off valve a quarter turn either way so that it is perpendicular to the line.

Extinguish fires.

Before the quake, place **fire extinguishers** in strategic locations (including some outside the house) where they will be easily accessible after the quake. **Remember, water will probably not be available.**

Before using a fire extinguisher, be sure you have a safe exit in case the fire gets out of control. Use the proper extinguisher for the type of fire:

- Cass A for normal combustibles (wood, paper, cloth).
- Class B for flammable liquids and most electric fires.
- Class C for electric fires. In most cases you should shut off electricity before attempting to extinguish the fire.
- ABC fire extinguishers are good for all types of fires.

Aim the extinguisher at the base of the fire. Sweep the nozzle from side to side and slightly raise the stream as you sweep. *Don't start at the top of the fire and work down.* Use a garden hose (assuming water is available) only if the fire is small. *Spray the base of the fire and work up. Use a spray nozzle or finger to create a spray. After fire is out, conserve water; don't leave it running.*

Once the fire is out, break apart charred materials with rake or hoe and clear them from the area, to make sure embers don't flare up again.

Use a shovel to throw dirt or sand on the fire, to separate burning from unburned materials, and to create fire breaks.

- Rakes and hoes also come in handy for breaking up small fires.
- A water-soaked blanket can also be useful in smothering a small blaze.

Assist injured people.

Administer first aid or CPR if necessary. Hospitals and clinics will be overwhelmed, and only the worst emergency cases should be referred to them.

Avoid fallen power lines. Don't stand under power lines during or after the quake.

- Rescuing someone in contact with a live electrical line is very dangerous, and utility companies warn against attempting it. If you do attempt it, be aware that you are taking a big risk. Try to push the line away with a non-conductive pole of some sort (wooden or plastic). A sturdy, long-handled broom might work!
- If you're in a car which is touching fallen power lines, you should probably wait for help. The rubber tires should insulate you from shock as long as you do not touch the ground while you are still in contact with the car. *If you must get out, be sure you don't let an open door touch anything else, and jump entirely clear in one motion.*

Avoid any chemical spilled from power poles. Utility companies have removed most containers of PCB, but this highly toxic material is still occasionally found in transformers atop electrical power poles.

Don't depend on the telephone. Keep all calls brief, even the most important ones.

Use the phone only to report extreme emergencies---like life-threatening injuries, major fires, or fallen power lines. *Any communication facilities that remain intact after the quake should be reserved for matters of life and death.* Too many routine inquiries to police and fire departments can overload the circuits, preventing any calls from being made.

Be careful about water. Don't drink tap water or use toilets until you know the water and sewage lines are intact. *Contaminated water lines could spread epidemic. Overflowing toilets will create a hazard.*

<u>Water</u>

The first rule of all is to conserve water.

You need a minimum of one gallon per person per day for drinking water alone---more in hot weather, possibly less if it is cool. This means a minimum of nearly 30 gallons for a family of four for a one-week emergency. Twice as much would be better.

Normal supplies will probably be unavailable. Lines will likely be broken by a major quake, especially if there are signs of ground movement or rupture.

If you have reason to believe the water lines are damaged (even if not in your immediate vicinity), *don't use unpurified tap water until your local utility confirms that the supply is safe.* If flows have been interrupted, the good water already in your pipes and water heater may siphon back into the main lines. *Consider turning off the line that feeds your house from the street. The main valve is usually a simple faucet-type handle.*

Water should be used only for:

* Drinking * Washing Hands * Cooking

Until normal service is restored or an adequate supply is otherwise assured, water should **NOT** be used for plants, bathing, washing clothes, or washing dishes (except as explained below).

Immediately inventory available water supplies and institute strict rationing. Don't wait until careless use has depleted your supply.

How to purify water for drinking:

First, filter the water. Then boil it and/or add chemical purifier. Safest method of all combines boiling with chemical purification.

Filtration: To remove sediment, dirt, or other particles, strain water into a clean container through several layers of clean cloth, cheesecloth, paper towels, or paper coffee filters.

Boiling: Boiling water vigorously for one to five minutes usually kills most harmful bacteria, viruses, and organisms (like Giardia Lamblia). *Boiling for 15 to 20 minutes is even better, but since fuel supplies after the quake are likely to be limited, short-term boiling will probably have to suffice.*

lodine is the best chemical purifier for drinking water. Add 10 drops of 2% tincture of iodine to each gallon of water. Double the dosage if the water is cloudy. Stir and let stand 20 minutes before using the purified water.

You can buy 2% tincture of iodine (dissolved in ethanol) at the pharmacy. Or make your own by dissolving 2 grams of USP grade iodine crystals (purple) in 100 ml. of ethanol. (*There are about 30 ml. in 1 fluid ounce. You can use Everclear, a liquor containing a high percentage of ethanol.*) Shake the crystals in the ethanol until completely dissolved. The solution should be stable indefinitely if stored in a tightly-closed glass bottle. (*Don't use rubbing alcohol or methanol; they are toxic.*)

Water purification tablets: Another option is to use commercially-prepared **water purification tablets** which release iodine (Potable-Aqua, Globaline). Follow instructions on the bottle or package.

Note: For medical reasons, some people (like those with thyroid problems) should avoid excess iodine intake. In this case use a combination of boiling and chlorine for water purification.

Chlorine is an acceptable chemical purifier, though not as good as iodine. (The Allied armies in 1944 suffered from dysentery in spite of heavy use of chlorine in their drinking water). It also leaves a stronger taste in the water than iodine. But chlorine is readily available in the form of liquid household bleach (<u>Plain</u> Clorox / Chlorine bleach). Add 2 drops to each quart of water, stir, and let stand 30 minutes. Double the dosage if the water is cloudy. You can also use commercially-prepared chlorine tablets for purifying water; follow the directions on the bottle or package.

A high-tech solution to the problem of purifying water is a modern had pump and micro-pore filtration system (Katadyn, First Need) that filters out bacteria. These items, available from outdoor equipment stores, are somewhat expensive---especially the larger sizes that have enough capacity to filter a reasonable amount of water.

Food

Consume food supplies in this order:

- First, from the refrigerator.
- Then, from the freezer.
- Finally, from cans.

You can keep fresh food in a small ice chest for several days by thawing frozen food inside it. *Open the chest as little as possible. Keep it in a cool, shaded place, covered with blankets or other insulation.* Cooking or salting may preserve food for a time. If you have too much fresh food, share it with your neighbors. Never eat spoiled food. *If water supply is too limited to prepare fresh and frozen foods, eat canned foods only.*

Food preparation should be as simple as possible. You should use an absolute minimum of water and produce very little garbage.

Avoid cooking food directly in pots and pans, and use paper plates and plastic utensils if possible. Dishwashing consumes too much water, and inadequate rinsing can cause diarrhea.

If possible, grill, barbecue, or cook food directly in cans. The trick is to rely mainly on canned food. Open the top of the can, put it into a double boiler or a pot of boiling water, heat it, and remove it with channel-lock pliers. It is best to eat directly from the can. Paper plates can also be used.

If water is very scarce, use plastic forks and spoons and throw them away instead of washing them. You may not eat gourmet meals, but you will survive.

Cooking should be done entirely outside to avoid fire hazards, until you are sure your home's utilities are safe to use. Avoid kitchen stoves because of possibly ruptured gas and electric lines. Do not cook in an indoor fireplace because the quake may have weakened it.

Cook outdoors, away from buildings, on a camp stove, barbecue grill, or barbecue pit (lined with foil to increase heat). *Keep your fire small. Never leave it unattended. Watch for wind-borne embers.*

If you lack fuel, or if it is too wet or too windy to cook outdoors, simply eat the canned food cold. **Garbage should be kept to a minimum.** You can reduce its bulk and odor by cleaning empty food cans in used hand wash water, opening both ends, and crushing them flat. **But do not waste fresh water in this way unless an adequate supply is assured.**

Don't use the garbage disposal in your sink until you know all sewer and water lines are intact. If it's not too windy, scraps and paper can be burned. *(never burn Styrofoam since it causes noxious smoke.)* Cans can also be cleaned by burning them, but only if there is plenty of fuel.

Otherwise, put garbage into double plastic bags and close with twist ties. *Mark and store the full bags somewhere safe from rats and other animals (inside boxes or other containers if possible).*

If you bury garbage, bury it deep and cover the spot so animals won't dig it up. (During prequake planning, check with local officials on how garbage should be disposed of. Some may not want it buried.)

Clean rubbish (trash, such as paper, plastic, bottles, and clean cans) should be stored separately from garbage since it poses no real health hazards.

Sanitation

Good sanitation is vital after a civil disaster.

Washing hands carefully with soap and a small amount of clean water is one of the keys to preventing the spread of intestinal disorders and even of epidemic disease in the emergency period. *An excellent alternative is waterless hand cleaners.*

See **Before the Quake-Supplies-Sanitation** for best types of soap. Alcohol-impregnated tissues (Handi-Wipes) or alcohol-based, waterless hand cleaning gel (Pro Care) may be used if water is scarce.

Before handling food or eating, and after using the emergency toilet facilities, hand washing is absolutely required. No exceptions.

Don't use a common bucket or pan for hand washing; this spreads germs. The best method for hand washing is to suspend a water bag with a hose and clip to turn water on and off. Such bags are commercially available in sporting goods stores as "portable showers." (See Before the Quake-Supplies-Sanitation for suggestions on improvising a temporary hand wash). Save used hand wash water for cleaning food cans after eating.

Human waste: This may be an unpleasant subject. But if solid human waste is not properly disposed of, epidemic disease could result. **Do not use normal toilet facilities**, whether public or private, until officially examined for broken sewer lines. (Moreover, you can be sure that the public toilets will be unbelievably foul from the first day on.) Attempting to use toilets will likely result in overflow and fecal contamination of the facilities---with no water to clean them up! **Emergency toilet facilities must be provided.** Don't wait for the authorities to do it---they'll be overwhelmed with other tasks. (See the following page for what to do.)

Emergency latrine or toilet:

Urine is sterile (germ-free), so it is less a health problem than an odor problem. Urinate into a bucket that can be covered tightly. *Empty the bucket where it won't offend anyone (directly into a street gutter opening, for example).* Solid waste (feces) is the main health problem, and it must be dealt with carefully. Whenever possible, dispose of feces by burial.

Dig a latrine (rectangular pit) 2 feet long, 6 inches wide, and as deep as possible (minimum 2 feet). Provide toilet paper, a scoop, and Clorox II powder or powdered agricultural lime (available in garden supply stores) in a covered container. After each use of the latrine, sprinkle a small amount of the powder over the feces, then sprinkle a small amount of dirt over the powder. **Wash hands.** When the latrine is filled to within one foot of the top, fill it with dirt, pack it down, cover and mark it, and dig a fresh pit. *Note: During your pre-quake planning, check with your local officials on whether they want you to bury solid human waste.*

When solid human waste cannot be buried, set up an emergency toilet:

Provide a bucket or other container with a tight cover. Line it with two heavy-duty plastic garbage bags. Put absorbent material (kitty litter, shredded newspaper) into inner bag. Cover container when not in use, taking care not to tear the plastic liners. *Never urinate into the bag. Urine weakens the plastic. Urinate before using the emergency toilet. Mark a separate bucket for urine.*

To use the emergency toilet, uncover it, fold the bags down over the sides of the bucket, and defecate directly into the inner bag. Sprinkle Clorox II powder or agricultural lime directly onto the feces. Use toilet paper sparingly. Put all used toilet paper into the same bag. Replace the cover on the bucket, taking care not to tear the plastic bags.

Wash hands.

To change bags, close up the two bags in the bucket with twist ties one at a time, inner bag first. Expel the air before you close the bags to avoid tearing them. Put the bags into a closed container (like a garbage can) which has itself been lined with one or two heavy-duty plastic bags and marked as human waste. Then put two fresh bags in the emergency toilet.

Ration plastic bags to last at least two weeks. Have plenty on hand in your emergency supplies. Until they can be disposed of, keep all human waste bags and garbage cans containing them well away from centers of human activity. Mark them clearly and protect them against breaking or spilling. Always wash hands carefully after using emergency toilet.

<u>Shelter – Making do…</u>

Many buildings may be unsafe to use after the quake. You should be prepared to set up simple temporary shelters.

Use tents, tarps, or heavy (5 mil) plastic and rope or clothesline. String lines between trees or between a fence and the side of a house. Suspend tarps or plastic on the lines in the form of an Aframe or lean-to. Use tarps or more of the heavy plastic for a ground cover and moisture barrier. If rain threatens, dig a trench around your shelter to divert water. Collect extra blankets, sleeping bags, overcoats, sweaters, etc. for warmth.



Simple A-frame Shelter.

Money and Banks

The local banking system will grind to a screeching halt if a big disaster hits. Since banks, stores, and gas stations all rely heavily on computers, don't be surprised if the system is paralyzed for days or weeks.

Even if your bank springs back into life right away, the Federal Reserve System on which it depends may not recover so quickly. You may find it impossible to withdraw money from accounts, use automatic teller machines, or even cash checks or arrange for a loan.

Suggestions: Keep cash or traveler's checks in a safe place which will be accessible after a quake. Ask your bank whether it has a plan for coping with post-earthquake emergencies

After the quake, try to recover financial records from your home or office; bank and charge card statements, loan documents, payment and deposit receipts, insurance records, etc. Banks might lose track of transactions conducted just before the quake, so it could be important to prove that you had deposited money the previous day.

Remember: until the financial system is operating normally again, cash will be king and barter may become a prince of the realm.

Family Plan Checklist

EMERGENCY PHONE NUMBERS AND ADDRESSES Emergency Phone Calls Only. Keep Calls Brief.

Police

Fire

Other

Where To Go If They Can't Go Home

Emergency Supplies	Location	Date Last Checked
Fire Extinguishers		
First Aid Kit		
Water & Purifying kit		
Food & Cooking Supplies		
Sanitation		
Shelter (including tools)		
Clothing		

Location of:

Emergency Exits

Gas Shut-off	
Electrical Shut-off	
Water Shut-Off	

EMERGENCY OUT-OF-STATE CONTACT CARDS

This will be the contact that you, friends and family members contact if they need to get or relay a message to you. Tell them not to call direct.

Completely fill in the contact card. It should be typed or printed in ink and then "plasticized" to protect it from wear and water.

Cut them out and have each member of your family carry this card at all times. Copy this page so that you can have spare cards in cars, lunch pails, taped to the bottom of your phone at work, etc.

Have family members in other areas or states agree on the same out-of state contact for any family emergency. Plan for an alternate contact in case disaster strikes in the area where your emergency contact lives.

EMERGENCY OUT-OF-STATE CONTACT			EMERGENCY OUT-OF-STATE CONTACT				
NAME	PRIMARY CONTACT	PHONE		NAME	PRIMARY	CONTACT	PHONE
NAME	Alternate Contact	PHONE		NAME	Alternate	Contact	PHONE
Address:			Address:				
City, State	e, Zip			City, State, Zip			

EMERGENCY OUT-OF-STATE CONTACT				
NAME	PRIMARY CONTACT	PHONE		
NAME	Alternate Contact	PHONE		
Address: City, State	Zin			

EMERGENCY OUT-OF-STATE CONTACT					
NAME	PRIMARY	CONTACT	PHONE		
NAME	Alternate	Contact	PHONE		
Address:		I			
City, State, Zip					

EMERGENCY OUT-OF-STATE CONTACT				
NAME	PRIMARY CONTACT	PHONE		
NAME	Alternate Contact	PHONE		
Address:				
City, State,	, Zip			

EMERGENCY OUT-OF-STATE CONTACT					
NAME	PRIMARY	PHONE			
NAME	Alternate Contact PHONE				
Address: City, State, Zip					

IMPORTANT NUMBERS & INFO

• If you live or work in a different city, add your own in the spaces below:

DISASTER HOTLINE

Los Angeles: 213-978-0348 – <u>www.lacity.org/epd</u> Torrance: 310-618-2320 – <u>www.torrnet.com/TPD/EmergencyServices.htm</u>

POLICE DEPARTMENT (911)

Los Angeles: LAPD – Non Emergency: 877-275-5273 <u>www.lapdonline.com</u> Torrance PD – Non Emergency 310-320-2611 <u>www.torrnet.com</u> LAPD / Harbor Division: 310-518-6381 / Fax: 310-518-6380 LA Port Police: 310-732-3500 www.portoflosangeles.org Torrance: 310- 328-3456 / Fax: 310-618-5532

FIRE DEPARTMENT (911)

Los Angeles: 213-485-6180 / 213-485-6026 Torrance: 310-781-7000 / Fax: 310-781-7030 •

HOSPITALS:

TORRANCE MEMORIAL HOSPITAL / Torrance: 310-325-9110 **LITTLE COMPANY OF MARY** / Torrance: 310-540-7676 San Pedro: 310-832-3311 •

ANIMAL SERVICES: LA: 888-452-7381 / T = 310-618-3850 / County: 310-523-9566

AMERICAN RED CROSS 213-739-5205 www.redcross.org

CALIFORNIA HIGHWAY PATROL South Bay Station: 310-516-3355 <u>www.chp.ca.gov</u>

CALTRANS 800-427-7623 <u>www.dot.ca.gov</u>

ELECTRIC COMPANIES: LA DWP - 800-342-5397 <u>www.ladwp.com</u> SCE / Edison - 800-655-4555 / 800-990-7788 <u>www.sce.com</u>

FEDERAL BUREAU OF INVESTIGATION- LOS ANGELES FIELD OFFICE Torrance: 310-477-6565 / FBI Tip Hotline: 866-483-5137

FEMA: <u>www.fema.gov</u> / <u>www.disasterhelp.gov</u>

GAS COMPANY Southern California Gas Co. (Sempra) 800-427-2200 www.socalgas.com

First Aid – At a Glance