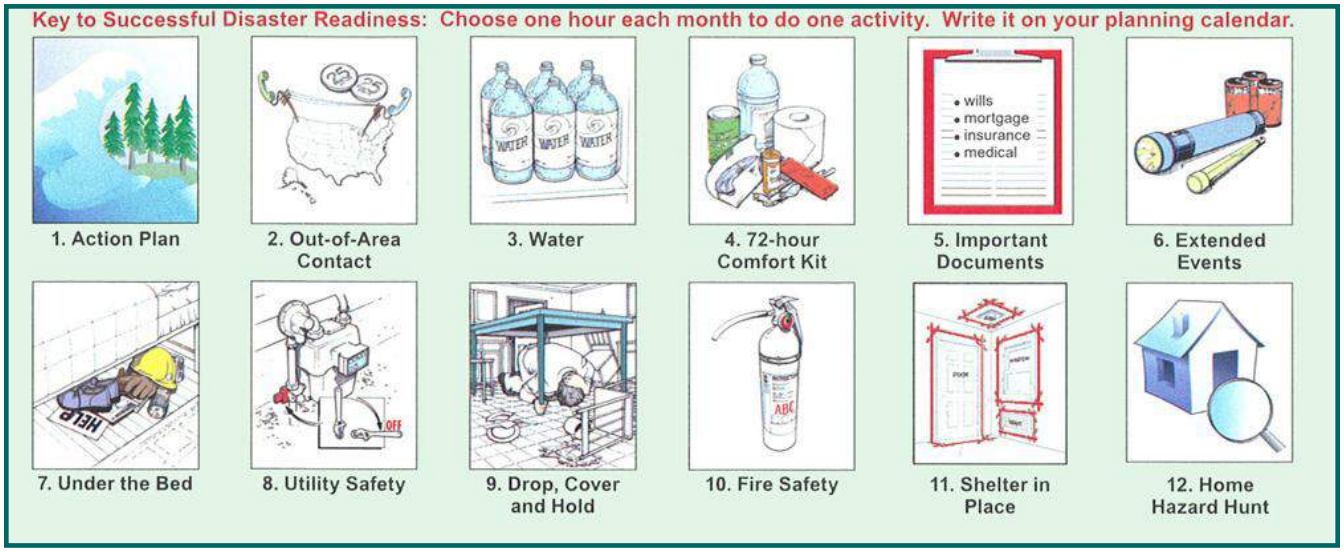
Prepare in a Year

ONE HOUR

of disaster preparedness activity

EACH MONTH

helps you be ready for disasters – whenever they occur.



www.emd.wa.gov/preparedness/prep_prepare_year.shtml

Compelling photos. Streaming videos.
Illustrated step-by-step instruction.

A complete list of local offices of emergency management can be found on our website at: www.emd.wa.gov/preparedness/prep_neighborhoods.shtml

EM
PUBLIC SAFETY. PUBLIC TRUST

Action Plans

ACTIVITY 1

Earthquake

An earthquake is a sudden release of pent-up energy along a fault line in the earth's crust. Without warning, the ground under your feet will begin to shake and roll.

A timely response is critical. Gas leaks may have occurred, which could lead to fire and explosion. People may have been injured. What you do in the *first hour* following an earthquake can save lives, reduce the severity of injuries, and save property.

What To Do:

1. Check on the well-being of your loved ones.

2. Dress for safety - protect your head, hands, and feet. Sturdy shoes will protect your feet from broken glass. Leather gloves will protect your hands from sharp debris. A hard hat will protect your head from fallen objects, like chimney bricks teetering on roof edges. (See ***Month #7 – Under the Bed***, for more information.)

3. Check your natural or propane gas, and shut it off if necessary. (See ***Month #8 - Utility Safety***, for more information.)

4. Shut off your water at the house master shut-off valve. If water pipes have broken, this will help keep the water in your water heater safe from pollutants. (See ***Month #8 - Utility Safety***, for more information.)

5. Post an OK/Help card in your front window or on your front door. If you – or a neighbor – have been injured and are going into shock, time is critical. This signals your status to your neighbors and helps prioritize your response activity. (See ***Neighborhood Preparedness - Map Your Neighborhood***, or simply write OK or Help in a paper and post it.)

6. Place your fire extinguishers outside on the sidewalk or street edge so they are visible and available for immediate use should anyone in the neighborhood experience fire. Time is critical. In a disaster, 9-1-1 fire responders will likely be unavailable.

See ***Neighborhood Preparedness*** for programs and resources that will help your neighbors organize and prepare for a timely and safe response to disasters.

Tsunami

- Tsunamis that strike the Washington Coast are most often caused by earthquakes. These earthquakes might occur far away or near where you live.

- Some tsunamis can be very large. In coastal areas their height can be as great as 30 feet or more (100 feet in extreme cases), and they can move inland several hundred feet.

- A tsunami consists of a series of waves. Often the first wave may not be the largest. The danger from a tsunami can last for several hours after the arrival of the first wave.

- Tsunamis move faster than a person can run.

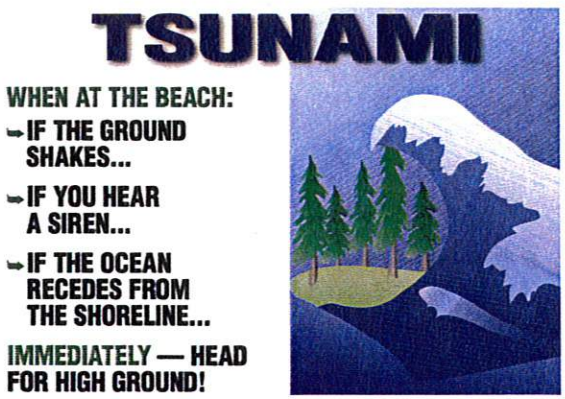
- Sometimes a tsunami causes the water near the shore to recede, exposing the ocean floor.

- The force of some tsunamis is enormous. Large rocks weighing several tons along with boats and other debris can be moved inland hundreds of feet by tsunami wave activity. Homes and other buildings are destroyed. All this material and water move with great force and can kill or injure people.

What To Do:

- If you are at home and hear there is a tsunami warning, make sure your entire family is aware of the warning. Evacuate immediately.

- If you are at the beach or near the ocean and you feel the earth shake, move immediately to higher ground, DO NOT wait for a tsunami warning to be announced.



Volcano

A **volcano** is an opening (or rupture) in the Earth's surface or crust, which allows hot, molten rock, ash and gases to escape from deep below the surface.

Magma is molten rock within the Earth's crust. When magma erupts through the earth's surface it is called lava. Lava can be thick and slow-moving or thin and fast-moving.

A **lahar** is a type of volcanic mudflow that flows down from a volcano, typically along a river valley. Lahars have the consistency of concrete: fluid when moving, then solid when stopped. Lahars can be huge. 5,600 years ago, a Mount Rainier lahar produced a wall of mud 600 feet deep in the White River canyon, extending over an area of nearly 200 miles.

Lahars can be extremely dangerous, because of their energy and speed.

What To Do:

During an Eruption or Lahar

1. Grab your 72-hour Comfort Kit (see ***Month #4 - 72 hour Kits***)
2. Evacuate immediately. Follow designated evacuation routes.
3. Keep tuned to a NOAA radio or a local emergency alert station for updates.

During an Ash Fall

1. Close all doors and windows and place damp towels at door thresholds.
2. When going outside, wear dusk masks and goggles.
3. Put stoppers in the tops of drainpipes.
4. Constantly sweep or shovel ash from roofs and gutters (roofs generally cannot support more than four inches of wet ash).
5. Remove outdoor clothing before entering a building.
6. Listen to a battery operated radio to receive updates.

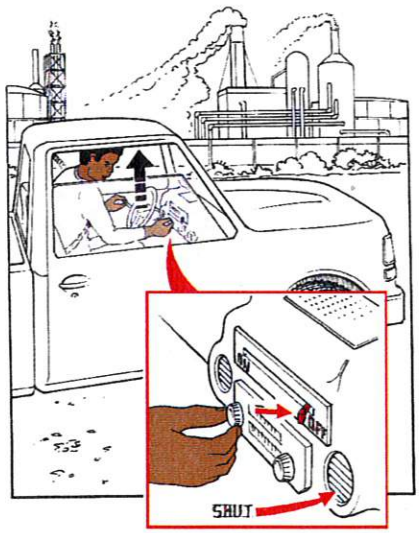
Chemical Release

A chemical release is an accidental release of harmful chemicals into the air. It can occur at manufacturing plants, or from accidents involving transport trucks or trains. They can also be the result of terrorist acts and those intending to create harm and injury.

What To Do:

Shelter In Place Immediately

1. Go inside immediately. Remember your pets.
2. Tightly lock all doors and windows.
3. Shut off fans and all devices that circulate air throughout your home.
4. Go into your pre-selected room and tightly seal it with plastic sheeting and duct tape. Place a dampened towel under the door. (See ***Month #11 - Shelter in Place***.)
5. Listen to the radio for instructions.
6. Thoroughly air out your home once the emergency is over.



In Your Car

1. Tightly roll up all windows.
2. Shut off the motor to avoid drawing outside air in through the engine.
3. Turn off all heating and cooling and close all vents.
4. Breathe through a dampened cloth.
5. Turn on the radio and listen for instructions.

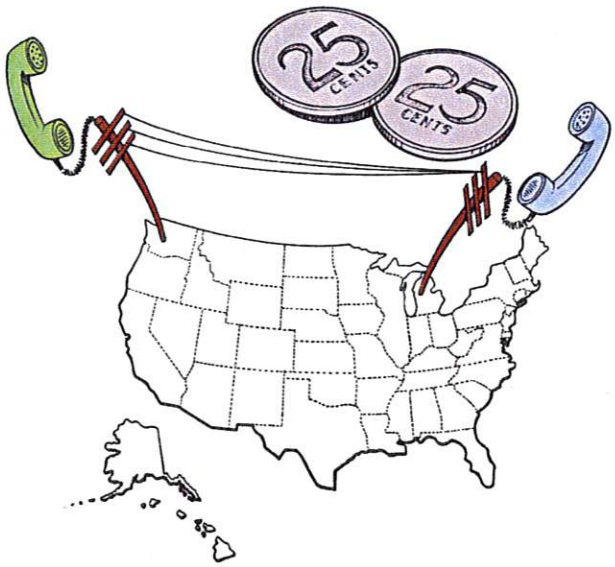
Prepare in a Year

Out-of-Area Contacts

ACTIVITY 2

Preparing to be Separated from Loved Ones

If you are separated from your loved ones when disasters strike, you immediately will wonder how and where they are. The stress of the event may make it difficult to remember even routine information, like phone numbers. Consequently, we recommend that every household member have an out-of-area contact card in a wallet, purse, or backpack at all times.



Contacting loved ones after disasters

1. Ask an out-of-area friend to be your contact person. This person should live at least 100 miles away from you. See *Did You Know* to find out why you can make long distance but not local calls.

Out-of-area contact:

_____

Phone number:

_____

After a disaster, all household members call this person to tell her or him how they are, and to find out how other household members are.

TIP: You may be able to text messages to all your loved ones on your cell phone. Keep these messages short.

OUT OF AREA CONTACT PERSON

www.emd.wa.gov

WHY? Local phone systems may be shut down in a disaster. However, you frequently can place a long-distance call.

Name (print):

_____

Phone number (with area code):

_____

Cell phone number (with area code):

_____

TIP: You may be able to text message all your loved ones on your cell phone. Keep these messages short.

2. Make small cards with this person's name and phone number for all family members to carry in their wallets, purses, or backpacks.

Did You Know

- Phone lines were "hardened" years ago to withstand nuclear attack and are quite resistant to damage. It's difficult to make local calls not because of damage, but because of the number of people trying to call at the same time. Typically, however, you can make long distance calls.
- One reason the local phone system shuts down during earthquakes is because handsets get knocked from their bases. Help restore local phone service by making sure all your phones are hung up.
- You should keep a phone that does not require electricity. Cordless phones use electricity! - if power is out, they will not work.
- Pay phones are part of the emergency services network, and are a priority to be restored to service. Tape the coins needed to use a pay phone to your out-of-area contact card.

www.emd.wa.gov

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WHY? Local phone systems may be shut down in a disaster. However, you frequently can place a long-distance call.

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OUT OF AREA CONTACT PERSON

WHY? Local phone systems may be shut down in a disaster. However, you frequently can place a long-distance call.

Name (print):

Phone number (with area code):

Cell phone number (with area code):

TIP: You may be able to text message all your loved ones on your cell phone. Keep these messages short.

- **cut apart**
- **prepare a card for each loved one**

Storing Water

ACTIVITY 3

Preventing thirst after a disaster

Water is essential for survival. The ground trembling and shaking caused by earthquakes can crack or break the lines that bring fresh water to your house. You may have to rely for three days or more on the water you have stored.

How much water should I store?

Three (3) gallons for each person in your household is the minimum amount required to take care of drinking, cooking, and hygiene needs for the first 72 hours of a disaster.

Which containers are good?

Plastic containers with a screw-cap lid, such as two-liter soda pop bottles or food-grade plastic jugs, work great.

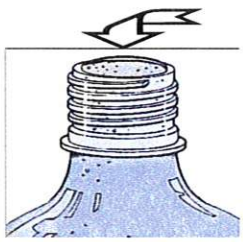
If you use two-liter soda pop bottles, plan to store at least six (6) of these for each person in your household.

Do not use glass bottles or old bleach bottles (or any container that has held a toxic substance). Glass breaks too easily. The plastic of old bleach bottles contains substances that, over time, get into the water and make it unfit for drinking.

Avoid the use of plastic milk jugs. They are difficult to seal tightly, and their plastic becomes very fragile and brittle over time.

✔ Storing water

☐ 1. Choose containers that have a tight-fitting screw-cap lid. Two-liter pop bottles are a great choice.



2. Thoroughly rinse out the container and the lid with water, and **fill it to the very top** of the container. For extra safety, thoroughly rinse the container with a weak solution of liquid chlorine bleach (8-10 drops in two cups water). Empty this solution out and fill the container right to the top with fresh water.

3. Seal the container tightly.

4. Label it "drinking water" and date it.

5. Store it in a cool, dark place. Examples:

   - under the bed
   - in the corner of closets
   - behind the sofa

   Hint: To make it easy to find many places to put your water, think about this activity as a priority rather than an inconvenience.

Can I improve the taste of stored water?

Stored water will taste better if you put oxygen back into it by pouring the water back and forth between two clean containers several times.

Is adding liquid bleach recommended?

In March, 1994, the Food and Drug Administration and the Environmental Protection Agency stated:

- Tap water does not need anything added to it before it is stored because it has already been chemically treated.
- Commercially purchased water does not need anything added to it. Keep it in its original, sealed container.

What about rotation?

It is recommended that water be rotated every six months.

Treating water of questionable purity:

1. Filter the water to remove as many solids as possible. Coffee filters, cheesecloth, or several layers of paper towels work well.

2. Bring the water to a rolling boil for a full 10 minutes.

3. Let it cool for at least 30 minutes. Water must be cool or the chlorine you add next will dissipate and be rendered useless.

4. **Add 1/8 teaspoon of liquid chlorine bleach per gallon** of cool water, or **8 drops per two-liter bottle**. The only active ingredient in the bleach should be 6.00% sodium hypochlorite, and there should be no added thickeners, soaps or fragrances.

5. Let it stand for 30 minutes.

6. If it smells of chlorine, you can use it. If it does not smell of chlorine, add 16 more drops of chlorine bleach per gallon, let it stand for another 30 minutes, and smell it again. If it smells of chlorine, you can use it.

   If it does not smell of chlorine, discard it and find another source of water.

Distillation - A second method of purification:

1. Fill a pot halfway with water.

2. Tie a cup to the handle on the pot's lid so that the cup will hang right-side up when the lid is placed upside-down on the pot (make sure the cup is not dangling in the water).

3. Boil the water for 20 minutes. The water that drips from the lid into the cup is distilled.

   This method allows the vapor resulting from boiling water to collect in the cup. This condensed vapor will not include salts or other impurities.

Additional information:

- The only thing that should be used to purify water is liquid household bleach containing 6.00% sodium hypochlorite and no thickeners, soaps or scents.

  Other chemicals, such as iodine or products sold in camping or surplus stores have a short shelf life and ARE NOT RECOMMENDED AND SHOULD NOT BE USED.

- Boiling water kills bacteria, viruses, and parasites that can cause illness. Treating water with chlorine bleach kills most viruses, but will probably not kill bacteria. Therefore, boiling and then adding chlorine bleach is an effective water purification method.

- The only accepted measurement of chlorine is the drop. A drop is specifically measurable. Other measures, such as "capful" or "scant teaspoon" are not uniformly measurable, and should not be used.

- There is no difference in the treatment of potentially contaminated water that is cloudy or that which is clear.

SOURCE: FDA and EPA Report, 1994

distillation is an effective method of water purification

Prepare in a Year

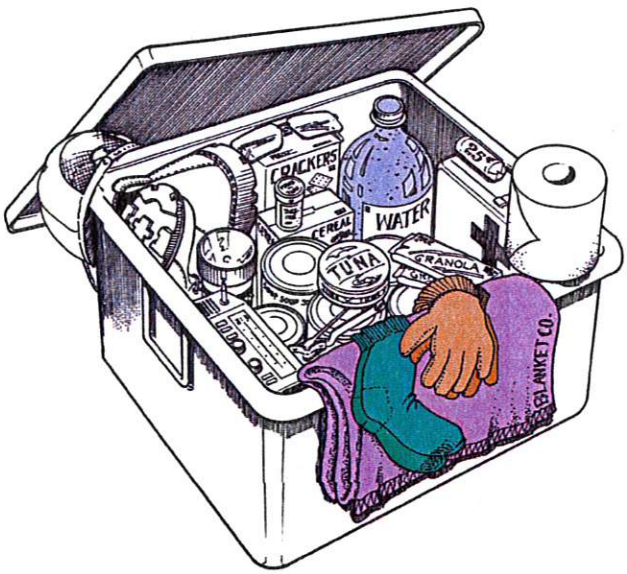
72-hour Comfort Kits

ACTIVITY 4

Storing Emergency Supplies

Chances are you will have to rely upon supplies you have available in your home for at least the first three days following any major disaster.

Store these items in something that is portable and easily carried, like a plastic tub with a tight-fitting lid. In the event of fire or rapid evacuation, you'll appreciate having more than just the clothes on your back.



The container should be able to withstand moisture, insects, and some abuse when the quake happens. If you have a large family, several smaller tubs may be easier to carry than one large container.

Place items in plastic bags to protect against condensation, which causes mildew and rust. The bags newspapers come in are a good choice - these can later be used for disposing of waste.

Locate these supplies as close to your primary house exit as possible. You may have to find it in the dark or after the upheaval of an earthquake.

✔ Water

Keep at least a three-day supply of water for each person in your household. Two-liter soda pop bottles work great. That means six two-liter bottles per person. (See pages 6 - 7 for more information on storing an emergency supply of water.)

Food

Store at least a three-day supply of non-perishable food. Select foods that require no refrigeration or cooking, and little or no water.

- canned meats, fruits, and vegetables
- canned juices and soups
- high energy foods – peanut butter, granola bars, trail mix, beef jerky
- "comfort" foods – cookies, hard candy, etc.

First Aid Supplies

- sterile 4" adhesive bandages
- sterile 4" x 4" gauze pads
- 4" rolled gauze bandages
- large triangular bandages
- butterfly bandages
- adhesive tape
- scissors and tweezers
- moistened towelettes
- bar soap
- latex gloves
- aspirin & non-aspirin pain reliever
- antacid
- anti-diarrhea medication
- insect repellent
- hydrogen peroxide to disinfect wounds
- antibiotic ointment to dress wounds
- sunscreen
- safety pins
- needle & thread
- plastic bags
- sanitary pads
- instant cold packs
- pocket knife
- splinting materials

use a film canister to store an extra pair of latex gloves in the car glove compartment

Tools & Supplies

- paper cups, plates, and plastic utensils
- battery-operated AM radio
- extra batteries
- flashlight
- non-electric can opener
- ABC fire extinguisher
- whistle
- toilet paper and towelettes
- liquid soap
- feminine supplies
- roll of plastic and duct tape to seal broken windows

Special Items

- extra eye glasses
- prescription drugs and medications
- baby diapers, food, and formula
- a family picture
- games and books
- copies of insurance policies
- bank account numbers
- inventory of valuables
- family records
- contact lens solution
- denture adhesive

Clothing & Bedding

- one complete change of clothes
- blankets or sleeping bags
- mylar blankets
- sturdy shoes
- warm socks
- hat and gloves

Preparing for disasters is a long-term goal. To make this task manageable, choose just two or three items that you will get each month.

Month #1 items to buy

Item #1 _____

Item #2 _____

Month #2

Item #1 _____

Item #2 _____

Month #3

Item #1 _____

Item #2 _____

Month #4

Item #1 _____

Item #2 _____

Month #5

Item #1 _____

Item #2 _____

Month #6

Item #1 _____

Item #2 _____

Plan to rotate the items in your kit annually. This includes making sure the clothes you have stored still fit!

Prepare in a Year

Important Documents

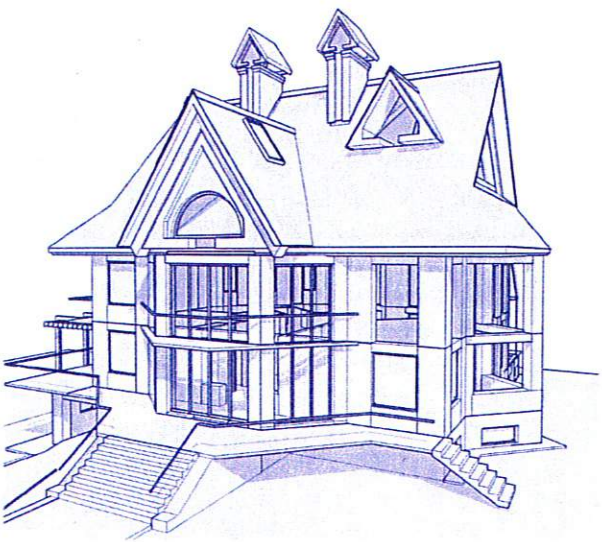
ACTIVITY 5

Preparing to Recover

After a major disaster, you may need financial assistance and will want to document any property loss for insurance and income tax purposes. Having ready access to the documents necessary for completing application forms, as well as those which could be difficult to replace, will help reduce delay and frustration.

At A Minimum:

1. Gather property insurance papers (home, auto, boat, etc.) and make copies.
2. Gather health insurance papers (medical provider, dental provider, life, extended disability, etc.) and make copies.
3. Gather financial papers (bank, investment, retirement, etc.) and make copies.
4. Gather wills, powers of attorney, and estate papers and make copies.
5. Take photos or videos of all valuables as documentation for insurance claims.
   - store these copies and photos in a safe deposit box, or in a ziplock bag in your freezer (you may want to disguise these documents by putting them in a clean box like a frozen pizza box).



Important Contact Information

Because it may be difficult to think during the stress of a disaster, and because normal routines have been disrupted, take a few moments and create a written record of these important phone numbers:

Work

Adult name: _____

Place of work: _____

Work phone: _____

Cell phone: _____

Adult name: _____

Place of work: _____

Work phone: _____

Cell phone: _____

Adult name: _____

Place of work: _____

Work phone: _____

Cell phone: _____

School

Child name: _____

School name: _____

School phone: _____

Cell phone: _____

Child name: _____

School name: _____

School phone: _____

Cell phone: _____

Child name: _____

School name: _____

School phone: _____

Cell phone: _____

Extended Event Supplies

ACTIVITY 6

Choosing comfort over inconvenience

Coping with the impact of a disaster is never fun. However, much of the inconvenience and discomfort the disaster causes can be reduced by planning alternative ways to take care of your needs.

✔

❑ Acquiring emergency supplies

At first glance, the list below may seem totally over-whelming. At second glance, you'll find that you probably already have many of these items.

✘ Check those items you already have.

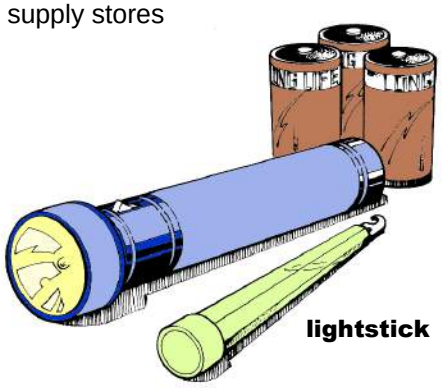
◯ Circle those you don't have, but are important to the comfort of you and your loved ones.

✍ Choose two of those circled, and add them to your weekly shopping list.

❑ Lighting

Caution: The use of candles is no longer recommended as a source of emergency light. Experience shows they are responsible for too many secondary fires following the disaster. Additionally, they are very dangerous in the presence of leaking natural gas.

- flashlights and extra batteries
- camping lanterns – store extra fuel, wicks, mantles and matches
- lightsticks – these can provide light for 1 to 12 hours and can be purchased at many camping supply stores



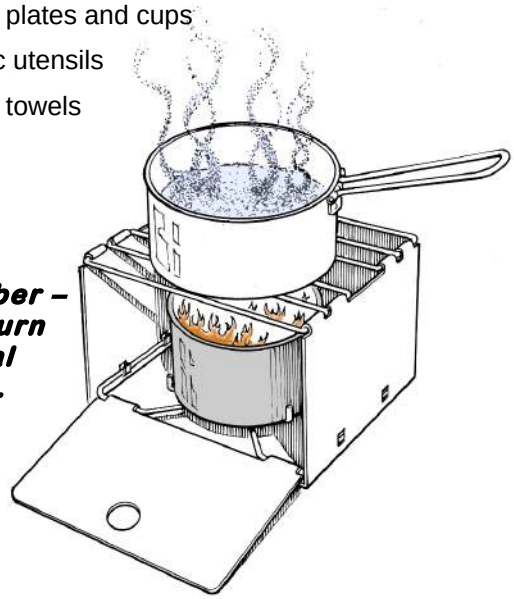
lightstick

❑ Cooking

Caution: Never burn charcoal indoors. This could cause carbon monoxide poisoning.

- camp stoves, sterno stoves, or barbecues – store extra propane, charcoal or sterno, lighter fluid, and matches
- fireplaces – do not use until the chimney and flue have been inspected for cracks. Sparks may escape into your attic through an undetected crack and start a fire.
- paper plates and cups
- plastic utensils
- paper towels

Remember – never burn charcoal indoors.



❑ Shelter

It is common for people to not want to sleep in their homes for the first few days following a major earthquake. Having an alternate means of shelter will help you and your family be as comfortable as possible.

- tent or waterproof tarp
- sleeping bags or blankets, and pillows
- rain gear
- mylar blankets are compact and easy to store
- newspapers provide insulation from the cold or heat

Protecting stored foods when the power goes out

- Keep refrigerator and freezer doors closed as much as possible.

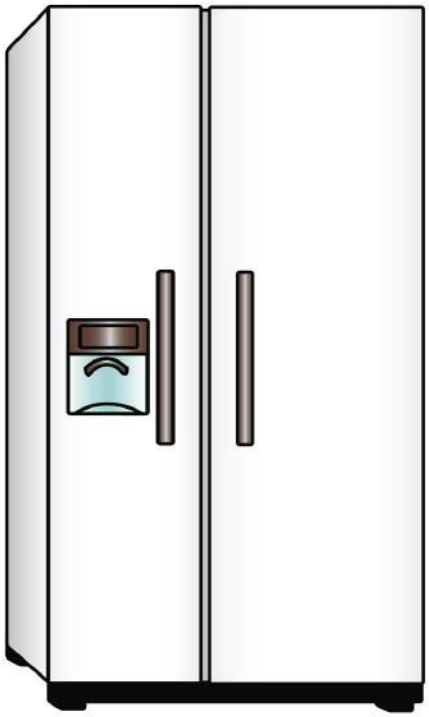
  A full refrigerator will maintain safe temperatures for up to six hours.

  A full freezer will maintain safe temperatures for up to two days; a half-full freezer for one day.

  Discard at-risk refrigerated foods that are warmer than 40° Fahrenheit. If in doubt, throw it out.

- If you think the power will be out for several days, try to find some ice to pack inside the refrigerator and freezer.

  Remember to keep your raw foods separate from your ready-to-eat foods.



Foods to be concerned about

- Foods are categorized into groups:

  A. **Potentially hazardous foods** are the most important. These include meats, fish, poultry, dairy products, eggs and egg products, soft cheeses, cooked beans, cooked rice, cooked potatoes, cooked pasta, custards, puddings, etc.

  B. Some foods **may not be hazardous** but the quality may be affected. These foods include salad dressings, mayonnaise, butter, margarine, produce, hard cheeses, etc.

  C. Some foods are **safe**. These are carbonated beverages, unopened bottled juices, ketchup, mustard, relishes, jams, peanut butter, barbecue sauces, etc.

When do I save and when do I throw out food?

- Refrigerated foods should be safe as long as the power is out no more than a few hours and the doors have been kept closed. **Potentially hazardous foods** should be discarded if they warm up above 40°F.

  - Frozen foods which are still frozen are not a problem.

    If **potentially hazardous foods** are thawed but still have ice crystals, you should use them as soon as possible.

  - If **potentially hazardous foods** are thawed and warmer than 40°F, you should discard them.

How do I know if the food is unsafe to eat?

- You cannot rely upon appearance or odor. Never taste food to determine its safety.
- Some foods may look and smell fine, but if they've been warm too long, food poisoning bacteria may have grown enough to make you sick.
- If possible, use a thermometer to check the temperature of the foods. If potentially hazardous foods are colder than 40°F, they are safe.

What happens when the power goes back on?

- Allow time for refrigerators to reach the proper temperature of lower than 40°F before restocking. Start with all fresh foods.

Remember - when in doubt, throw it out.

Sanitation

The lack of sanitation facilities following major earthquakes can quickly create secondary problems unless basic guidelines are followed. If the water lines are damaged, or if damage is suspected, do not flush the toilet.

Avoid digging holes in the ground and using these. Untreated raw sewage can pollute fresh ground water supplies. It also attracts flies and promotes the spread of diseases.

- Store a large supply of heavy-duty plastic bags, twist ties, disinfectant, and toilet paper.

- A good disinfectant that is easy to use is a solution of one-part liquid bleach to ten-parts water.

  Dry bleach is caustic and not safe for this type of use.

- If the toilet is *not* able to be flushed, it can still be used. This is less stressful for most people than using some other container. Remove all the bowl water. Line bowl with a heavy-duty plastic bag. When finished, add a small amount of deodorant or disinfectant, securely tie the bag, and dispose of it in a large trash can with a tight fitting lid. This large trash can should also be lined with a sturdy trash bag.

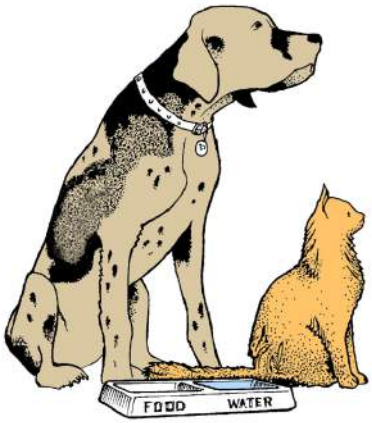
  Eventually, the city will provide a means to dispose of these bags.

- Portable camp toilets, small trash cans, or sturdy buckets lined with heavy-duty plastic bags can be used. Those with tight fitting lids are best.

- Large ziplock plastic bags and toilet paper should be kept at work and in the car for use if you are away from home. These can be wrapped in newspaper in preparation for future disposal.

Pets

Always keep a week's supply of food and water for your pet on hand.



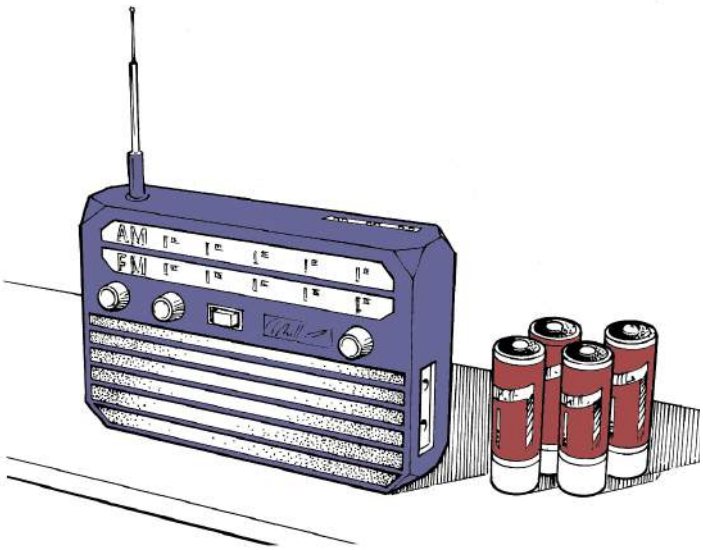
- toilet bowl water is an excellent supply of water for pets following an earthquake

Emergency information

Obtain a battery-powered radio and a supply of extra batteries.

Identify the primary Emergency Alert Station (EAS) for your area and write it here:

_____



Prepare in a Year

Under-the-Bed Items

ACTIVITY 7

Ready to respond - day or night

When disaster strikes, it may be difficult to think as rationally and as quickly as you would like. The more procedures you have in place, and the easier they are to remember and implement, the more effective and efficient will be your response.

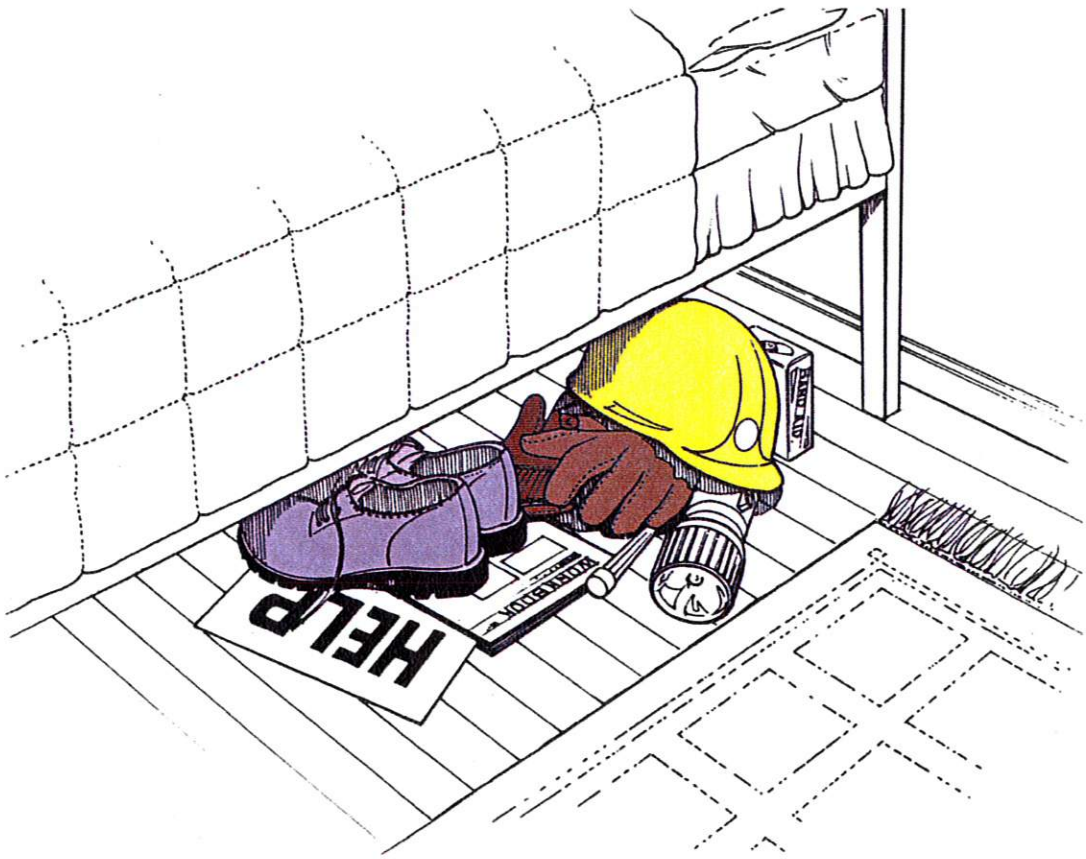
We recommend that you keep these basic response supplies under the bed. That way, day or night, you'll know where to go to get the essentials.

✔ ❑ **At A Minimum:**

Keep a pair of sturdy shoes to protect your feet by each loved one's bed at all times

Critical under-the-bed items

- sturdy shoes - to protect your feet from broken glass
- work gloves, preferably leather - to protect your hands from broken glass
- hardhat - to protect you from falling objects like chimney bricks, and downed trees and branches
- flashlight & light sticks - essential for a nighttime response
- an OK / Help card, found either in the MYN (Map Your Neighborhood) handout available from your local office of Emergency Management, or one that you prepare yourself
- a few bandaids - to hang the OK / Help card in the window or on the front door



Utility Safety

ACTIVITY 8

Natural gas

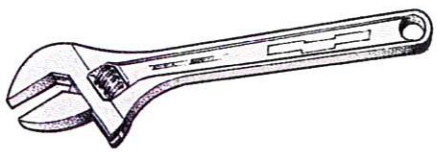
Natural gas leaks and explosions are responsible for a significant number of fires following any major earthquake. It is vital that all household members know how to shut off the natural gas.

Preparing to shut off the natural gas

- Locate the shut-off valve (see illustration). Make sure this valve will turn. To shut off the gas, turn the valve 90°, or 1/4 turn, so that it crosses the pipe (see illustration).

  If your valve is rusted open, do not put WD-40™ lubricant on it. It may corrode the O-rings that allow the valve to turn.

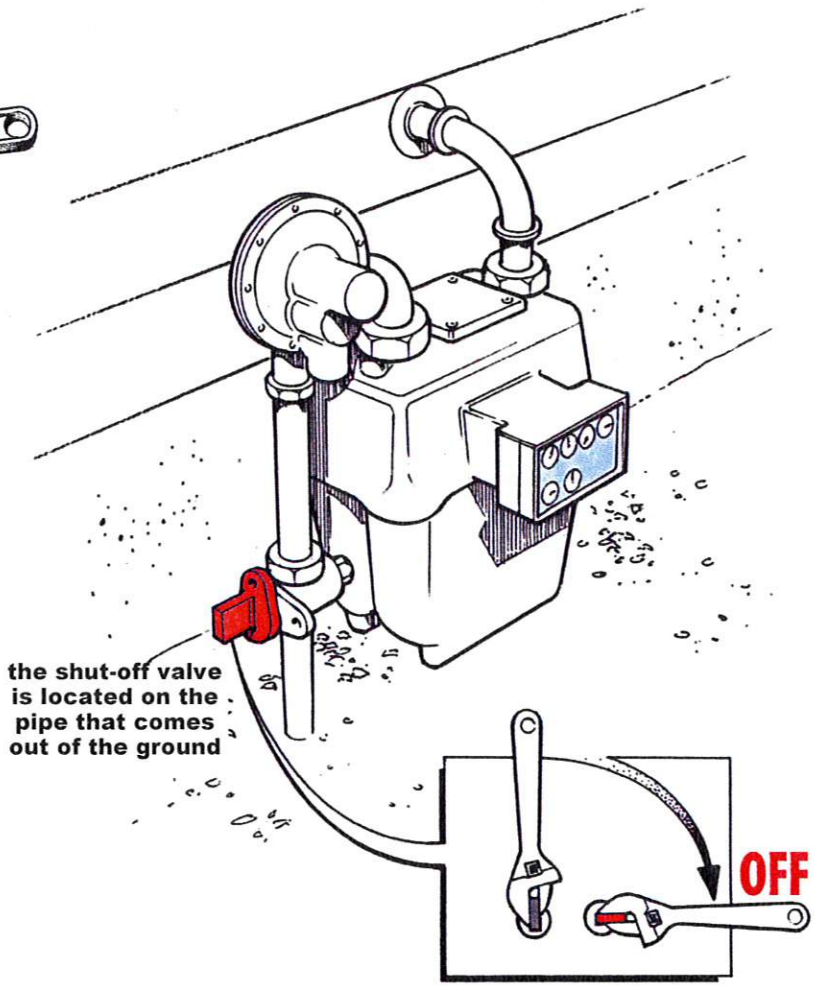
- Attach a wrench to the meter or to the wall directly behind the meter.



  - choose a crescent wrench that is at least 12" long
  - adjust it to fit your valve before hanging it behind the meter in case it rusts

Shutting off the gas after an earthquake

- Shut off the gas immediately **only** if you smell the characteristic odor of gas, you hear a hissing sound, and/or you notice the meter dials spinning more rapidly than normal.
- Do not use matches, lighters, open flame appliances, or operate any electrical switches until you are sure no gas leaks exist. Sparks from electrical switches could ignite the gas.
- If you smell natural gas, immediately get everyone out of and away from the house. Open the windows and doors to provide ventilation. Shut off the gas at the meter.



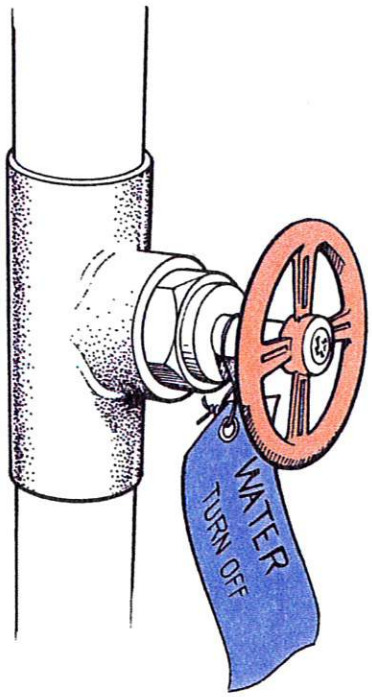
Water

Water quickly becomes a precious resource following many disasters. It is vital that all household members learn how to shut off the water at the main house valve.

- Cracked lines may pollute the water supply to your house. It is wise to shut off your water until you hear from the authorities that it is safe for drinking.
- The effects of gravity may drain the water in your hot water and toilet tanks unless you trap it in your house by shutting off the main house valve (not the street valve in the cement box at the curb – this valve is extremely difficult to turn and requires a special tool).

❑ Preparing to shut off water

- Locate the shut-off valve for the water line that enters your house. It may look like this:



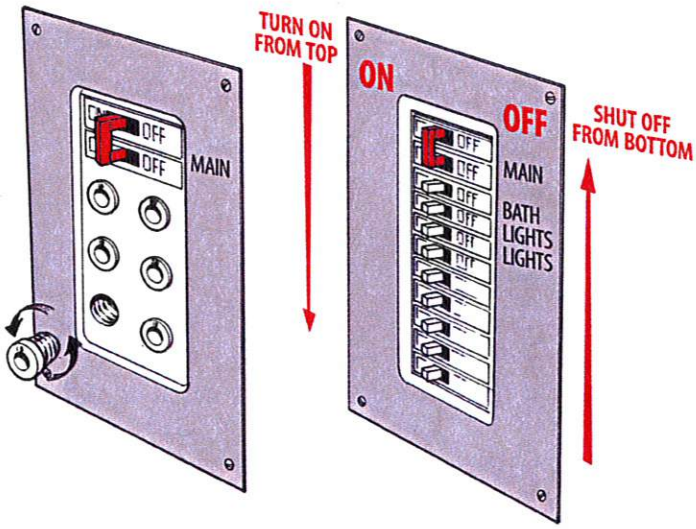
- Make sure this valve can be completely shut off. Your valve may be rusted open, or it may only partially close. Replace it if necessary.
- Label this valve with a tag for easy identification, and make sure all household members know where it is located.

Electricity

Electrical sparks have the potential of igniting natural gas if it is leaking. It is wise to teach all responsible household members where and how to shut off the electricity.

❑ Preparing to shut off electricity

- Locate your electricity circuit box.
- Teach all responsible household members how to shut off the electricity to the entire house.



FOR YOUR SAFETY: Always shut off all the individual circuits before shutting off the main circuit breaker.

Prepare in a Year

Drop•Cover•Hold

ACTIVITY 9

Conquering the instinct to run

During earthquakes, many people's fight/flight instinct urges them to *run!* – even when they *know* they should "drop, cover, hold." Why? Rational thought (in other words, the *knowing*) flees.

We learn to counter this instinctual response to run by ***practicing*** doing the safe thing.

Studies show that people in our country tend to be hurt by falling objects, not collapsing structures. If you are on your feet trying to move, you are in danger from toppling bookcases, breaking windows, flying dishes, falling televisions, collapsing fireplaces, or shifting furniture. Safety comes from quickly getting to a place of safety.

Practicing being safe

1. **Choose** a safe place to go in *each* room:
   - bedrooms
   - living room
   - kitchen
   - bathroom
   - play room
   - garage
2. **Practice** quickly moving to that safe place.
3. **Hold *Earthquake Drills*** to practice taking cover in your safe places.

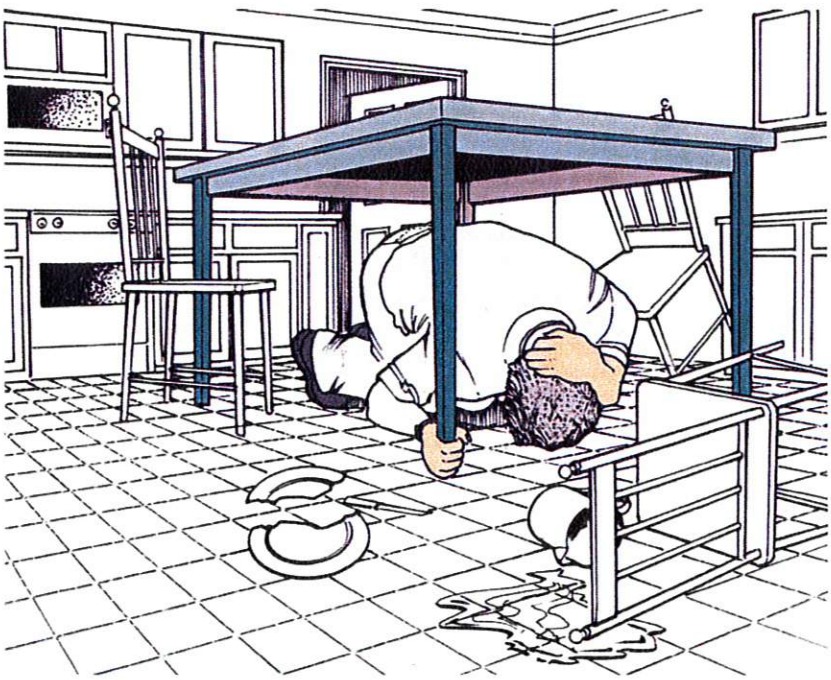
   Regularly call out "earthquake!!" Allow everyone time to react. Then, come together and discuss where each of you went, and why it was or was not the safest place to go.

   Key to Success: Practice, Practice!

   Practicing is what helps ensure you will quickly move to your safe place instead of responding to the instinctive urge to run.

Drop•Cover•Hold – What Does It Mean?

- *Drop – under something sturdy and taller than you are*
- *Cover – the back of your head and neck with one arm*
- *Hold on – in case the thing you're under moves*
- *Close your eyes – you'll do better psychologically if you don't watch, and you'll protect your eyes*



Drop•Cover•Hold is the national standard for earthquake safety in our country. You may have read articles claiming the value of the "triangle of life." Many of the 'facts' used to justify its merits are unproven and questionable.

Whenever the ground begins to shake, and wherever possible, quickly take cover under a sturdy desk or table.

Fire Safety

ACTIVITY 10

Pre-planning: key to your safety

When it comes to fire – *be smart!* If the fire is too big for you to handle, immediately get out of the house. Don't stop to gather anything or to do anything. Once you are outside, stay outside. Intense heat and toxic fumes can kill you.

Planning & practicing fire safety

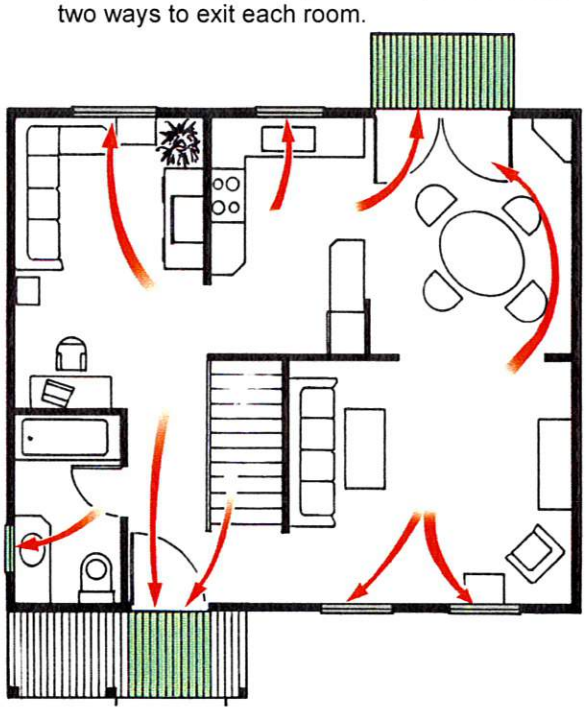
1. Choose a reunion place outside your home.

   Our fire reunion place is: _____

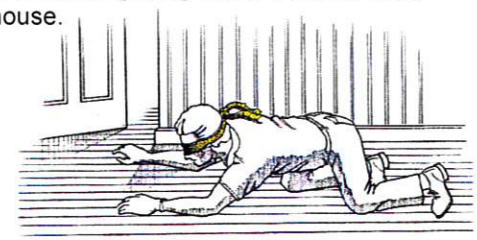
   _____

   - Regularly remind all household members where this place is.

2. Draw the floor plan of your home, and discuss two ways to exit each room.



3. Hold a fire drill at least twice each year. Blindfolded, practice crawling your exit routes to simulate getting out of a smoke-filled house.



Fire extinguishers

- Locate your fire extinguishers with care. Ready access to them is critical. Fire moves quickly – quick access can be the difference between putting a small fire out or suffering much damage.

- Several smaller extinguishers located throughout the house are better than one large one that may be difficult to get to quickly.

  Key places for your extinguishers are:

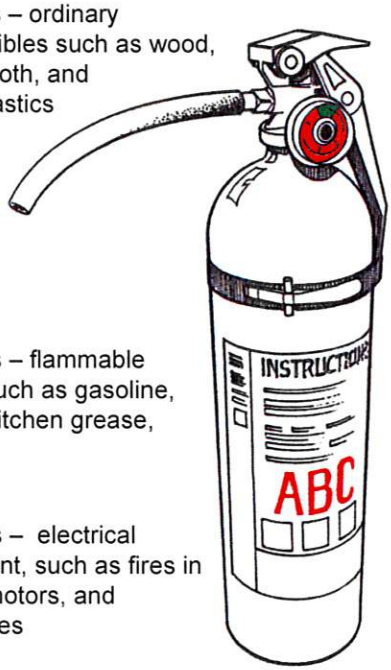
  - the kitchen
  - the garage, and
  - one on every level if your home has multiple floors.

- **A:B:C extinguishers are recommended:**

  "A" fires – ordinary combustibles such as wood, paper, cloth, and many plastics

  "B" fires – flammable liquids such as gasoline, paints, kitchen grease, and oils

  "C" fires – electrical equipment, such as fires in wiring, motors, and appliances



- Check your extinguishers on a regular basis to ensure they are properly charged.

Using a fire extinguisher

- Try to keep calm.
- VITAL: Keep an escape route open between you and the *small* fire you are attempting to extinguish. If the fire is large or becomes too large, immediately get out of the house. Close the door on your way out to slow the spread of flames.
- Always point the extinguisher at the base of the fire rather than at the top of the flames.
- Remember, if the fire is too big for you to handle, immediately get yourself and your family out of the house. Don't stop to gather anything or to do anything. Seconds can make all the difference.
- Once you are outside, stay outside. Intense heat and toxic fumes can kill you in seconds.

Possible fires following earthquakes

- **Natural gas fires –**

  First, shut off the gas.

  Second, put the fire out by using an extinguisher, dirt, or water.

- **Electrical fires –**

  First, shut off the electricity.

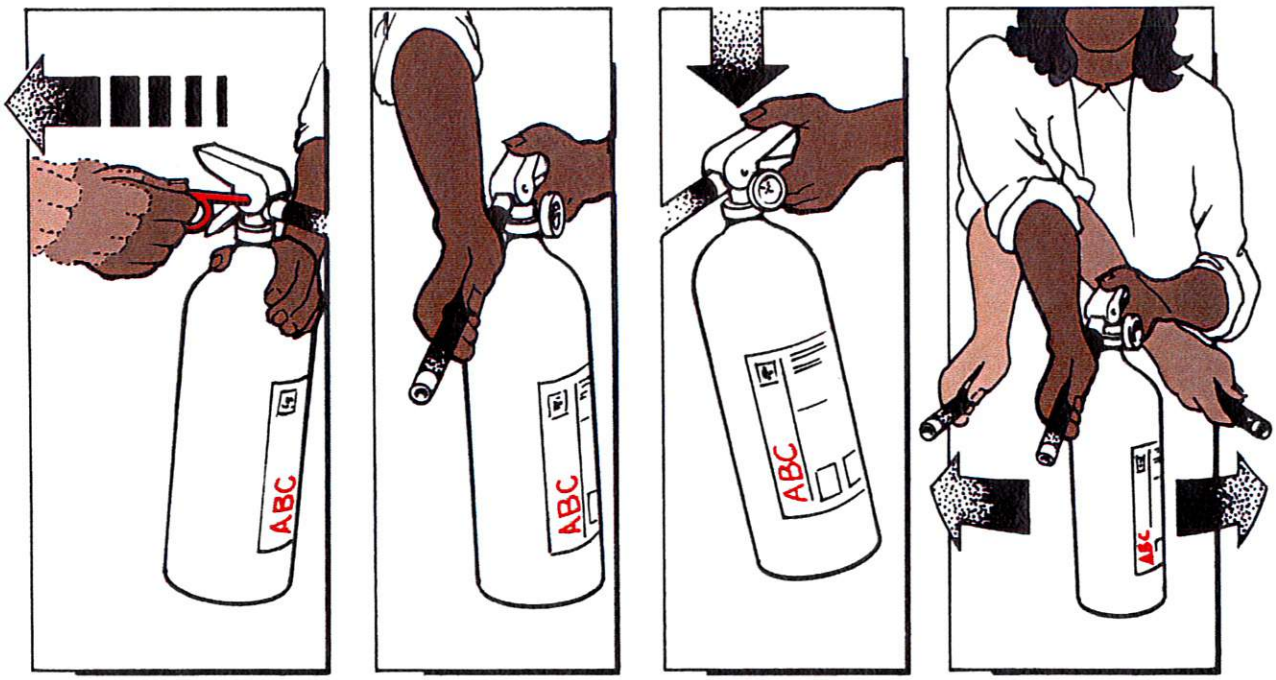
  Second, put out the fire by using an extinguisher, dirt, or water.

  (CAUTION: If the electricity cannot be shut off, DO NOT use water on the fire.)

- **Oil or grease fires –**

  Use baking soda, a lid, a bread board, or a fire extinguisher to smother the flames. NEVER use water on a grease or an oil fire.

P.A.S.S. - a proven and effective system for putting out fire



P. Pull the pin. **A. Aim at the base of the fire.** **S. Squeeze the handle.** **S. Sweep the hose side to side.**

Sheltering in Place

ACTIVITY 11

Creating a "Safe Room" in Your Home

WHY Your house provides a good first-layer barrier against chemical airborne agents. Additional protection is achieved by tightly sealing one room of your home that you have pre-designated and prepared.

WHAT A safe room is one that easily and quickly can be sealed to protect you from airborne agents, and that has a few supplies to get you through the hours that you will need to stay inside it. All doors and windows of that room will be sealed with plastic sheeting and tape, and dampened towels or cloths will be placed under the doors. You will probably need to stay inside several hours, but not several days. So, choose a room that can accommodate your needs for several hours. A master bedroom with an attached bathroom is ideal to give you access to the toilet and running water.

Preparing a Safe Room

- choose one room of your home that you can tightly seal
- purchase plastic sheeting and cloth tape or duct tape
- pre-cut the plastic to fit all windows, vents, and doors of this room, and label each piece
- create a box or container to hold the pre-cut plastic, tape, and these additional supplies: a battery-powered AM / FM radio (power may be out), extra batteries, some snack foods, some water, and some towels and blankets (if this is another room than the bedroom). Store this box in your safe room.

Generally

- shelter where you are unless directed otherwise by response officials
- it is only natural to want to be with your loved ones, but it is safer to stay where you are. Do not attempt to get your children from school or day care.
- typically, events of this type do not last long. The hazardous agents are moved about by air and wind, which is constantly circulating.
- in extreme cases of contamination, breathing through a wet cloth provides additional protection

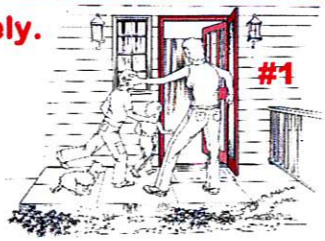
If in your car

- tightly roll up all windows
- shut off the motor to avoid drawing outside air in through the engine
- turn off all heating and cooling and close all vents
- breathe through a dampened cloth
- turn on the radio and listen for instructions

Shelter-in-Place Instructions

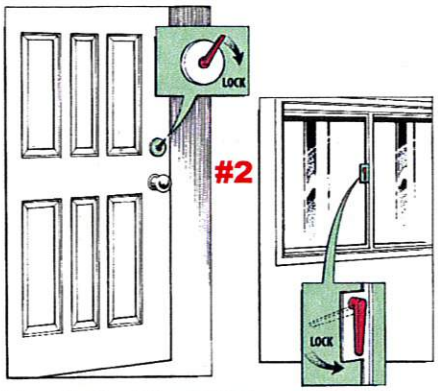
1. Go inside immediately.

- Remember your pets.



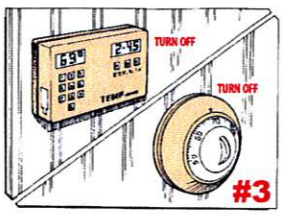
2. Tightly lock all doors & windows.

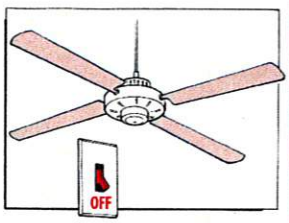
- The more immediately you do this - and the more tightly - the less likely it will be that contaminants will get inside.



3. Shut off fans & devices that circulate air throughout your home.

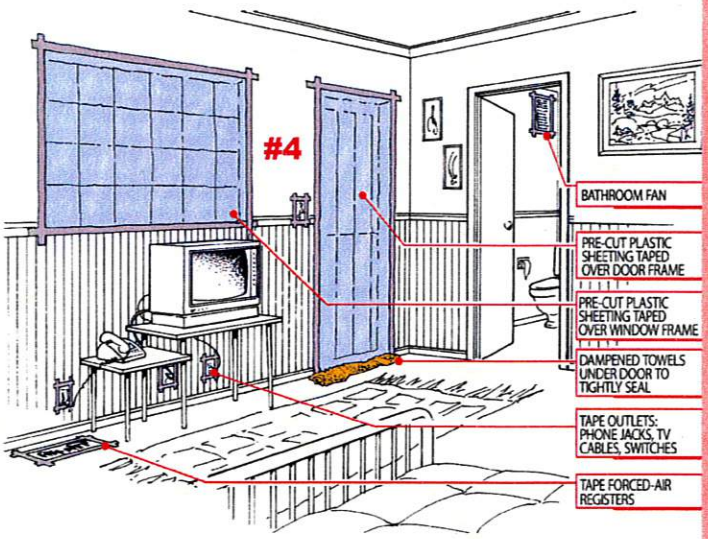
- Shut off fans.
- Adjust the thermostat of furnaces & air conditioners to shut off and stay off.
- Tightly close woodstove & fireplace dampers.
- If a fire is lit, put it out, close the damper, shut the vents and doors.





4. Go into your pre-selected room & seal it tightly.

- Tape plastic sheeting over windows, doors, vents, bathroom fans, electrical outlets, phone jacks, and TV & cable outlets. Remember - you are creating a tightly sealed room, so freely use the tape.
- Place dampened towels under door cracks to tightly seal them.

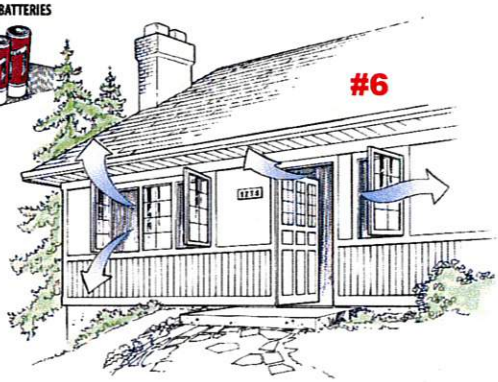


5. Listen to the radio for instructions.

- Officials will be giving instructions about whether or not to evacuate, and when it is safe to come out.

6. Thoroughly air out your home once the emergency is over.

- Open all your doors and windows. This will allow small particles that may have gotten in to dissipate.



Home Hazard Hunt

ACTIVITY 12

Identifying potential home hazards

All of Washington State has the potential of being impacted by a major earthquake. Earthquakes strike suddenly and without warning. When they occur, they cause the ground to undulate and shake, perhaps violently. Buildings – and their contents – are vulnerable to this rocking and rolling. Fortunately, experts teach how to secure homes to their foundations, and contents to wall studs.

30 minutes well spent

Take 30 minutes to walk through your home. Imagine the ground movement of a significant earthquake. Identify potential hazards by completing this worksheet.

1. Check your water heater. Is it securely fastened to the wall studs with heavy-duty metal strapping, top and bottom (and not metal plumber's tape)?

   _____yes _____no

   Does your water heater have flexible water and gas connectors?

   _____yes _____no

   (See ***Getting Ready*** for instruction on securing your water heater.)

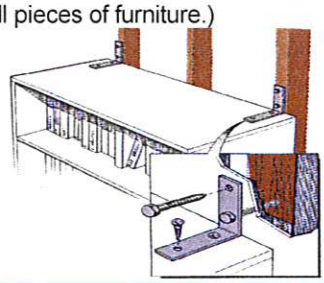
2. Tall pieces of furniture are especially vulnerable in earthquakes. Identify each bookcase, china hutch, and armoire which needs fastening.

   _____

   _____

   _____

   (See ***Getting Ready*** for ideas on how to secure your tall pieces of furniture.)



3. Identify heavy or breakable objects on high shelves. Pay especial attention to objects with sentimental value.

   _____

   _____

   _____

   _____

   (Move heavy objects that are located on high shelves to low shelves. See ***Getting Ready*** for suggestions on how to secure your valuables.)

4. Identify computers, stereos, and televisions, and microwaves and other small appliances that need to be secured.

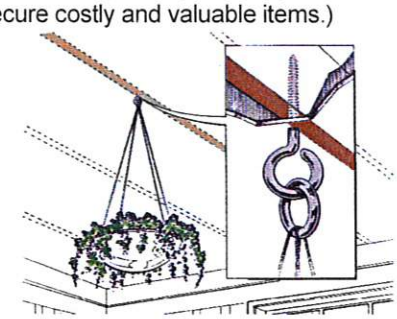
   _____

   _____

   _____

   _____

   (See ***Getting Ready*** for suggestions on how to secure costly and valuable items.)



5. Identify hanging plants, especially in heavy baskets, and hanging lights near windows.

   _____

   _____

   _____

   (See ***Getting Ready*** for ideas on how to secure your hanging plants and objects.)

6. Identify mirrors, heavily-framed pictures, and framed artwork that needs to be secured to wall studs.

_____

_____

_____

_____

_____

(Pay especial attention to artwork, pictures, and mirrors over beds. Consider moving these to another location. See ***Getting Ready*** for suggestions on how to secure your artwork.)

7. Identify kitchen, bedroom, and garage cabinets that need to be secured to keep their contents inside during the ground shaking.

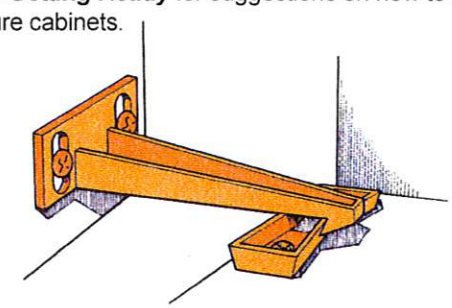
_____

_____

_____

_____

(See ***Getting Ready*** for suggestions on how to secure cabinets.



8. Inspect the foundation of your home. Is your home securely fastened to it?

_____yes _____no

(Check with your local city office which issues building permits for regulations.)

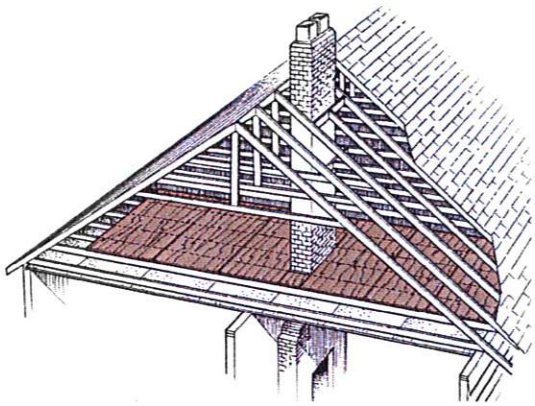
9. Does your chimney have loose bricks?

_____yes _____no

Has your attic been reinforced with ply wood to help prevent chimney bricks from falling into living areas?

_____yes _____no

(See ***Getting Ready*** for a method to reinforce your attic.)



10. Identify poisons, toxics, or solvents in breakable containers that are located in high or dangerous locations.

_____

_____

_____

_____

_____

(See ***Getting Ready*** for suggestions on separating dangerous chemicals, and securing them to prevent spills during earthquakes.)