





American Red Cross Cascades Region

Serving Oregon and Southwest Washington

redcross.org/cascades



@RedCrossCasc

RedCrossCascades

Introduction

Disaster can strike at any time. Whether it's a house fire at 3 a.m. or a 9.0 magnitude earthquake at 3 p.m., a single disaster can change your physical, emotional and financial health in a matter of seconds. And while the American Red Cross and other partner agencies work 365 days a year to prevent and respond to emergencies, disaster preparedness starts with you.

This book will guide you through the steps you and your family need to follow to be self-sufficient after a major disaster. It will inform you about your disaster risks, walk you through making a family disaster plan and guide you stepby-step in creating a disaster kit. It will also discuss specific disasters with guidance on what to do before, during and after certain situations that are common in the Pacific Northwest.

It's impossible to predict every emergency, but you can take steps right now to lessen the effects, and in many cases, prevent these disasters from happening in the first place. So take advantage of this resource. Complete the checklists and share it with family, friends and co-workers. Keep it in a safe place with your other disaster items. Knowing what to do in a disaster situation and being able to respond calmly and with confidence can save your life.

Table of Contents

1.	Be informed
2.	Make a plan 5 Create a plan before a disaster occurs. Talk about your plan with other household members and practice.
3.	Get a kit.6Know what supplies should go into a disaster kit and get your financial documents in order.
4.	Download the Red Cross Apps9Put disaster preparedness in the palm of your hand.
5.	Preparing for specific disasters 10 What to do before, during and after these disasters 10 What to do before, during and after these disasters 10 Residential fire 10 Wildfire 10 Earthquake 10 Tsunami 10 Winter storms 10 Flood 10 Medical emergencies 10 Biological or chemical threat, terrorism or pandemic flu 10 Volcanoes 10
6.	Individuals with access and functional needs
7.	Seniors
8.	Your mental health
9.	Preparing your pet for disaster
10.	What you need to know about your utilities
11.	What you need to know about water and water storage
12.	Additional resources
13.	Be Red Cross Ready checklist
14.	Free smoke alarm installation back cover

1. Be Informed

Before you make a plan and build a kit, it's important to know what disaster risks you face. The Pacific Northwest is known for its natural beauty, but behind this beauty lays great risk. We're all vulnerable to house fires, wildfires, earthquakes, floods and dangerous winter weather conditions. Also, depending where you live, you may be at risk for tsunamis and landslides. The content in this section provides an overview on disasters in your region and information on how local emergency agencies will notify you.

Regional risks

Below is a snapshot of some risks you may face in the Pacific Northwest.

- **Home fires**—The Cascades Region of the Red Cross responds to home fires more than any other type of disaster. Fire experts agree that people may have as little as **two minutes** to escape a burning home before it's too late to get out. Fires kill more Americans each year than all natural disasters combined and only 26 percent of families have developed and practiced a home fire escape plan. (*For more information, see p. 10*)
- Wildfire—Parts of Oregon and Washington are prone to deadly wildfires. Droughts and dry conditions throughout the year increase wildfire risk. Careless use of fire in highly wooded areas can also dramatically increase the chance of a wildfire, that can then quickly spread across trees and dry brush and threaten homes and businesses. (For more information, see p. 11)
- **Earthquake**—Earthquakes strike suddenly, without warning, and they can occur at any time of the year, day or night. Residents and visitors to the Pacific Northwest face serious risk of crustal earthquakes, including the threat of a high-magnitude quake caused by the Cascadia Subduction Zone, a 600-mile fault line off the Oregon, Washington and California coasts. (*For more information, see p. 12*)
- **Tsunamis**—With the risk of earthquakes comes the risk of tsunamis, a series of large ocean waves generated by major earthquakes beneath the ocean floor or major landslides into the ocean. When the waves enter shallow water, they may rise to several feet or, in rare cases, tens of feet, striking the coast with devastating force. (*For more information, see p. 14*)
- **Floods**—Floods are among the most frequent and costly natural disasters. Conditions that cause floods include heavy or steady rain for several hours or days that saturates the ground. Flash floods occur suddenly due to rapidly rising water along a stream or low-lying area. (*For more information, see p. 16*)
- Winter storms—Heavy snowfall, ice storms or extreme cold can immobilize our entire region. Even with our mild Northwest winters, we can experience paralyzing cold. Storm results can range from isolation to major traffic hazards or icy highways. (*For more information, see p. 15*)

Indoor risks

In addition to knowing your external risks, it's equally important to look around your home and office to identify problem areas. Do a "hazard hunt" in your home. Find items that might fall during an earthquake and secure them. Look for fire hazards, such as frayed wires and overloaded outlets and make them safe. Ask yourself questions like:

- Do I know the number and location of all smoke detectors in my house?
- Do I know how to test them and how often to replace the batteries?
- Do I have a fire extinguisher and know how to use it?
- Do I know how to identify a gas leak?
- Do I know how to shut off our water, power and natural gas sources?
- Do I know how to properly store water?

All of these questions and many more will be answered throughout this resource guide.

Know how you'll be notified

Public safety officials will communicate with the public in several different ways depending on the situation. These communication tools may include:

- The Emergency Alert System (EAS) on television, radio and National Oceanic and Atmospheric Administration (NOAA) weather radios;
- Wireless Emergency Alerts (WEA) available on many smartphones;
- Community emergency notification systems at the county or city level. These systems typically send messages to landline phones and to cell phones, and email addresses to those who opt in. Residents in the greater Portland-Vancouver metro area and surrounding counties can sign up for their local system by visiting www.publicalerts.org;
- The local media;
- Social media including Twitter, Facebook and other social media tools; and
- Door-to-door notifications (in some instances).

Know the difference between an advisory, watch and warning

When you are alerted about a disaster, oftentimes a warning level will be associated with it. For example, a radio broadcast may announce a winter storm warning in your area, or a TV station may issue a wildfire watch or a tsunami advisory in your zip code. It's important to have an understanding of what this means, and know which warning level poses the most imminent threat. According to the National Weather Service Forecast Office, these terms are defined as:

Advisory

An advisory is issued when a hazardous weather event is occurring, imminent or likely. Advisories are for less serious conditions than warnings that cause significant inconvenience and if caution is not exercised, could lead to situations that may threaten life or property.

Watch

A watch is used when the risk of a hazardous weather event has increased significantly, but its occurrence, location or timing is still uncertain. It is intended to provide enough lead time so those who need to set their plans in motion can do so. A watch means that hazardous weather is possible. People should have a plan of action in case a storm threatens, and they should listen for additional information and possible warnings, especially when planning travel or outdoor activities.

Warning

A warning is issued when a hazardous weather or event is occurring, imminent or likely. A warning means weather conditions pose a threat to life or property. People in the path of the storm need to take protective action.

Know your nearest resources

Dial 2-1-1 (toll-free) if you need information about where to donate or volunteer during a disaster, how to find transportation or evacuation routes and where to get basic needs met such as food and shelter. You can also text your zip code to 898211 or visit *www.211info.org*.

American Red Cross Cascades Region Chapters

Northwest Oregon Chapter

Serves the residents of Clackamas, Clatsop, Columbia, Gilliam, Hood River, Lincoln, Marion, Multnomah, Polk, Sherman, Tillamook, Wasco, Washington and Yamhill counties.

Regional Office 3131 N. Vancouver Ave. Portland, Oregon 97227 Tel: (503) 284-1234

Salem Office 675 Orchard Heights Rd. NW Suite 200 Salem, Oregon 97304 Tel: (503) 585-5414

Central and Eastern Oregon Chapter

Serves the residents of Baker, Crook, Deschutes, Grant, Harney, Jefferson, Morrow, Umatilla, Union, Wallowa and Wheeler counties and Warm Springs Reservation.

Bend Office 815 SW Bond St. Suite 110 Bend, Oregon 97701 Tel: (541) 382-2142

Southwest Oregon Chapter

Serves the residents of Benton, Coos, Curry, Douglas, Jackson, Josephine, Klamath, Lane, Lake and Linn counties.

Eugene Office 862 Bethel Dr. Eugene, Oregon 97402 Tel: (541) 344-5244

Medford Office 60 Hawthorne St. Medford, Oregon 97504 Tel: (541) 779-3773

Southwest Washington Chapter

Serves the residents of Clark, Cowlitz, Klickitat, Pacific, Skamania and Wahkiakum counties.

Vancouver Office 3114 E 4th Plain Blvd. Vancouver, WA 98661 Tel: (360) 693-5821

redcross.org/cascades

2. Make a Plan

After a disaster, basic services may be unavailable. Plan for power outages, limited communication, road closures and lack of clean water. In the event of a major catastrophe, a delay in help from emergency responders is inevitable. Your pre-established emergency plan will help you to be safe and comfortable, and possibly make you available to help others, before outside help arrives.

Talk

- Talk with your family, friends and co-workers about how to prepare for and respond to emergencies.
- Talk with your neighbors to learn what resources they have, and how they might be pooled to help the community (e.g., generator, chain saw, medical skills, etc.)
- Learn each person's needs and abilities. For example, is someone vision impaired, hearing impaired or mobility impaired?
- Identify your own risks and vulnerabilities.
- Identify each person's role and plan to work together as a team.

Plan

• Choose two places to meet up after a disaster. One should be near your home, in case of a local emergency like a fire. One should be outside your neighborhood, in case your entire area is affected by a larger disaster.

• Choose an out-of-state contact. Everyone in your family should have the contact's phone number to check in as safe. After a disaster, local phone lines may be down or jammed. It may be easier to make a long distance call than a local one. To let loved ones know you are safe, sign up on the Red Cross Safe and Well service by visiting www.redcross.org/safeandwell.

- Store emergency contact information in your cell phone under "ICE" for In Case of Emergency. Keep a landline with a corded phone, which doesn't need electricity.
- Consider insurance. Your residential policy may not cover damage caused by a disaster. In most cases, damage from a flood, earthquake or tsunami is not covered by your homeowner's policy. A separate policy is required.
- Learn what you need to do for your pet in a disaster situation. (For more information, see p. 22)
- If you have children in school, ask about the school's emergency plans.
- If you know someone in assisted-living facility, ask about the facility's emergency plans.

Practice

- Practice earthquake and fire drills twice a year. It's easy to remember to do it when you change your clocks.
- Practice escaping your home twice a year using multiple exit routes. Bring your emergency kit and pets, as you would in a real disaster. Make it fun for kids by having a picnic with your emergency supplies. Be sure to replace the supplies.



Do you have a smartphone? Making a preparedness plan is easy with Red Cross emergency apps. Visit page 9 to learn more.

3. Build a Kit

Being prepared means being equipped with the proper supplies you may need in the event of an emergency or disaster. Keep your supplies in an easy-to-carry emergency preparedness kit that you can use at home or take with you if you evacuate. Start with these items:

- □ Water—one gallon per person per day for a **minimum** of three days*
- Food—items that don't need to be refrigerated or cooked (e.g., peanut butter, canned meats, energy bars, canned fruits and vegetables, etc.)

□ First aid kit—include any prescription and over-thecounter medications (see p. 7 for more information)

Additional supplies*

- □ Flashlight (battery or alternative-powered)
- □ Radio (battery or alternative-powered)
- □ Extra batteries
- □ Solar charger
- □ Copies of important documents
- □ Family contact information and copy of family's emergency plan
- □ Cash—small denominations, such as \$1 or \$5
- □ Pet supplies
- □ Hygiene items such as toothbrush, toothpaste, soap, etc.
- □ Multi-purpose tool and work gloves
- $\hfill\square$ Comfort items, such as toys, games, family photos, etc.
- □ Manual can opener
- Duct tape and plastic sheeting

Fred Meyer

Vehicle and work supplies (keep in plastic tub or other container with a lid)

- □ Blanket(s) and/or sleeping bag
- □ Booster cables and tool kit (car only)
- □ Bottled water (use a heavy plastic bottle specifically made for water storage and fill with tap water)
- Canned fruits/nuts
- Manual can opener
- Prescriptions
- □ Emergency flares and distress flag/sign
- □ First aid kit and reference guide
- □ Cell phone charger

Your personal kit should contain a minimum of three days* of supplies for one person in a bag or backpack. Keep a kit at home, in your car and at work. Your family kit should contain two weeks of supplies for the entire family in a sturdy container, kept at home. Review your supplies every six months. Replace any items nearing expiration dates. Assemble your own kit or buy one at *redcrossstore.org*.

"By the bed" mini-kit

Keep a sturdy pair of shoes, a flashlight and an extra pair of glasses (if you wear them) in a bag attached to the foot of your headboard. If an emergency strikes at night, you'll be able to walk across debris and see where you're going.

*NOTE: While the Red Cross recommends preparing for a minimum of three days, every disaster is different and some situations may result in being cut off from resources for two weeks or longer. Understand your risks and plan accordingly.

There is a high probability that a Cascadia Subduction Zone earthquake, reaching a magnitude of nearly 9.0, will occur in our lifetime. Being prepared to be self-sufficient for two weeks is an achievable goal. You can get there over time, you don't have to get there today.

First aid kit

You can buy a first aid kit or build one using the list below. Check and replenish first aid supplies yearly. Consider enrolling your family in a first aid class. Children over the age of 10 can be enrolled in Red Cross basic first aid training. Visit *www.redcross.org* to buy a kit or register for a class.

- Disposable gloves, 2 pairs
- □ Scissors and safety pins
- $\hfill\square$ Roll of gauze and elastic bandages
- □ Non-stick sterile pads (different sizes)
- □ Assorted adhesive bandages
- □ Triangle bandages, 3
- □ Aspirin or substitute*
- □ Antibiotic ointment*
- □ Antihistamines*
- □ Sanitary napkins
- □ Current prescription medicines*
- □ Disinfectant (for cleaning wounds)*
- □ Petroleum jelly
- □ Cotton balls
- □ Sunscreen
- □ Thermometer
- □ Tongue depressors, 2
- □ Soap and clean cloth / moistened towelettes
- □ Waterless hand cleaner
- $\hfill\square$ Tweezers / needle
- □ Eye dressing or pad
- □ Paper tape
- □ Small plastic cup
- □ Pen and note paper
- □ Emergency phone numbers
- □ American Red Cross first aid reference guide or first aid manual
- □ Include non-prescription medications, including pain relievers, antacids, ipecac, laxatives, hydrocortisone cream and vitamins*

*Keep all medications in original containers. Check expiration dates and replace as needed.

Sanitation

□ Large plastic trash bags (for trash, waste and water protection)

- □ Large trash can
- □ Bar soap and liquid detergent
- □ Shampoo
- □ Toothpaste/toothbrushes
- □ Feminine and infant supplies
- Toilet paper
- Household liquid bleach for water purification, plus eyedropper for measuring (See Water Storage, p. 24)
- □ Newspaper to wrap garbage and waste
- □ Pre-moistened towelettes
- □ Bucket, plastic trash bags, bleach and two boards to construct a makeshift toilet

Tools and supplies

- Crescent wrench, 12 inches or longer (store near natural gas shut-off in waterproof container)
- □ Axe, shovel, pry bar, broom
- □ Screwdrivers, pliers, hammer
- □ Coil of 1/2 inch nylon rope (50 feet)
- Pocket knife and staple gun
- □ Pen and paper (stored in watertight container)
- □ Heavy gloves for cleaning up debris
- □ Sturdy shoes (keep pair by bed)
- □ Clothes for protection from cold and rain or extreme heat
- □ Matches, kept in waterproof, child-resistant container
- □ Glow sticks or light sticks
- Garden hose with shut-off nozzle for fighting fire
- □ Tent and tarps
- □ Whistle to signal for help

Financial preparedness

Four Ways to Keep Finances Intact in a Natural Disaster

To prevent a natural disaster from becoming a financial catastrophe, take the following steps:

1. Stockpile savings. An emergency fund with three to six months' worth of savings is a key part of any household financial plan. But it's also important in an emergency. Funds that you can draw on quickly and easily can be a lifesaver in the wake of a natural disaster.

2. Protect your credit. Part of protecting your finances involves protecting your credit. Include the contact information for your creditors—such as your mortgage lender, credit card companies and utilities—in your financial preparedness kit. If you have to evacuate, reach out to your creditors as soon as possible to request a temporary reprieve from payments.

3. Review your insurance. Your insurance policies can help you recover financially from a disaster, provided you have the right coverage. Review your property, flood, life and disability insurance policies once a year when you receive the new documents from your insurer.

4. Put together an emergency kit with important

documents. Some people rent bank safe deposit boxes for important papers. It's also recommended to scan important documents and save them electronically, whether by e-mailing important documents to yourself, saving documents to a thumb drive or storing important documents to the "cloud." In addition, it's a good idea to prepare an emergency kit to store at home, containing photocopies of those you're likely to need after a disaster. Your emergency kit should be a fireproof, waterproof, lock box in a place that's easily accessible. Once assembled, mark your calendar with a reminder to go through it in a year to make sure the contents remain current. For additional security, consider sending copies of vital documents to a trusted family member or friend who lives in a community far enough away that it's unlikely that it would also be hit if a large-scale disaster should strike. Some items to consider including in your emergency kit include:

- □ A small amount of cash (in case your bank is inaccessible)
- □ Birth, death and marriage certificates
- □ Negatives of irreplaceable family photos stored in protective plastic sleeves
- Adoption papers
- □ Photos or video of possessions
- Military records
- □ Social Security cards
- □ Mortgage/property deeds
- □ Car titles
- □ Insurance policies
- □ List of credit card and debit card numbers, including "800" contact numbers
- □ Book of blank checks
- A thumb drive of important scanned documents (or saved via e-mail or in "cloud" storage)
- □ Safe deposit box location, list of contents and key
- □ Recent pay stubs and employee benefits information
- □ Retirement account records
- □ Recent tax returns

4. Download the Red Cross Apps

One of the easiest ways to learn about disaster preparedness and have disaster-ready tools at your fingertips is to download the free American Red Cross mobile apps. These apps are available to both iPhone and Android users and contain a wealth of information about what to do before, during and after a disaster. All apps contain an "I'm safe" feature, locations to the nearest shelter, and a tool kit with items like a built-in flashlight, strobe light and whistle. These fun, easy-to-use, informative apps can be lifesavers in times of emergency.

Emergency App

The Red Cross Emergency App combines many other Red Cross apps in one, giving users instant access to weather alerts, life-saving information, and ways to contact family and friends in one free, easy-to-use app for mobile devices. It's an all-inclusive app and provides expert advice on what to do in case of disasters such as hurricanes, earthquakes, floods, tornadoes, home fires, wildfires and more. It contains important first-aid information, water safety, shelter locations and detailed disaster prevention and safety tips. "Family Safe" is a feature that allows the app user to notify loved ones who are in an area affected by an emergency or disaster. The recipient can instantly see the alert details as well as specific "what to do now" steps and then respond with either "I'm safe" or "I'm not safe." This feature works even if the recipient has not downloaded the Emergency App.

First Aid App

The Red Cross First Aid App puts free and simple lifesaving information in the hands of smart phone users. Download the app to have instant access to expert advice for everyday emergencies and disaster safety and preparedness tips. The app features step-by-step instructions on handling common first aid situations, as well as useful videos and animations.

Wildfire App

The Red Cross Wildfire App provides alerts and warnings within 100 miles of a specific location so users can track fires and get ahead of the danger by using "Blaze Tracker" information. "Blaze Warnings" show where conditions are favorable for potential wildfires. "Blaze Alerts" signal when a wildfire has begun within 100 miles of a user's location. "Blaze Path Tracker" shows an existing wildfire's perimeter, how it has spread and its current location. Because wildfires are an ever-present danger in many areas of the country, it's vital that people know what to do to help protect themselves, their loved ones and their property.

Flood App

The Red Cross Flood App features include audible NOAA [National Oceanic and Atmospheric Administration] flood and flash flood watches and warnings so people can gather loved ones and head to safety. National Flood Insurance Program says that floods are the most common natural disaster in the U.S. While most people associate floods with hurricanes and tropical storms, common weather conditions such as heavy rain and melting ice or snow can saturate the ground and cause floods or flash floods.

Earthquake App

The Red Cross Earthquake App users can register to monitor specific geographic areas for quake activity, showing the epicenter, impact magnitude and local geographical impact data provided by the U.S. Geological Survey. A "Shock Zone Impact Map" provides users with personalized local impact information on the status of their community to help them make crucial decisions. The app also includes preparedness information for events that may happen after earthquakes, such as fires and tsunamis.

Pet First Aid App

The Red Cross Red Cross Pet First Aid App puts lifesaving information right in the hands of dog and cat owners so they can provide emergency care until veterinary assistance is available. The Pet First Aid app provides access to step-bystep instructions, videos and images for more than 25 common first aid and emergency situations. Users learn how to treat wounds, control bleeding and care for breathing and cardiac emergencies. Additional topics include burns, car accidents, falls and what to do for cold- and heat-related emergencies.

5. Preparing for Specific Disasters



Residential fire

Did you know that more than 60 percent of home fire deaths occur in homes without working smoke alarms?

The most effective way to protect yourself and your home from fire is to identify and remove fire hazards. During a home fire, working smoke alarms and a regularly-practiced fire escape plan can save lives. Know the most common causes of fires. In many cases, the causes are preventable.

Cooking

- □ Stay in the kitchen when you are frying, grilling, or broiling food. If you leave the kitchen for even a short period of time, turn off the stove.
- □ Wear short, close-fitting or tightly rolled sleeves when cooking.
- Position barbecue grills well away preferably at least 10 feet - from siding and deck railings, and out from under eaves and overhanging branches.

Smoking

- Extinguish cigarettes in a can filled with sand or soak cigarette butts and ashes in water before throwing them away. Never toss hot cigarette butts or ashes in the trash can.
- Never smoke in a home where oxygen is used, even if it is turned off. Oxygen can be explosive and makes fire burn hotter and faster.
- □ Chairs and sofas catch on fire fast and burn fast. Don't smoke in bed or on furniture.

Electrical and appliance safety

- Replace all worn, old or damaged appliance cords. Do not run cords under rugs or furniture, or overload extension cords or wall sockets.
- Buy electrical products evaluated by a nationally recognized laboratory, such as Underwriters Laboratories (UL).
- □ If an appliance has a three-prong plug, use it only in a three-slot outlet. Never force it to fit into a two-slot outlet or extension cord.

Fireplaces and woodstoves

- □ Inspect and clean woodstove pipes and chimneys annually and check monthly for damage or obstructions.
- □ Use a fireplace screen heavy enough to stop rolling logs and big enough to cover the entire opening of the fireplace to catch flying sparks.
- □ Store cooled ashes in a tightly sealed metal container outside.

More fire prevention tips

- □ Never leave burning candles unattended. Always extinguish them when you leave the room.
- □ Teach fire safety to children.
- □ Keep combustible and flammable liquids away from heat sources.
- Portable generators should NEVER be used indoors and should only be refueled outdoors or in wellventilated areas.

Before

- \Box Make a plan (see p. 5) and build a kit (see p. 6).
- Install smoke alarms in every sleeping room, outside each separate sleeping area and on every level of the home.
 Change the batteries every six months. A good reminder is to change them when you change your clocks.
- □ Don't overload electrical outlets.
- □ Keep flammable items like cloth or paper away from heat sources.
- □ If you have bars on doors or windows, make sure they have internal quick-release devices.

During

- □ If a fire starts in a pot or pan, don't throw water on it. Cover the pot with a lid to cut off oxygen, and then remove the pot from the heat.
- □ To evacuate from a fire, stay low to avoid smoke. Feel closed doors for heat. If the door feels hot, there's fire on the other side. Use another escape route. Get out quickly and stay out.
- □ When smoke alarm sounds, get out and stay out. Go to your family's outside meeting place and call 9-1-1.
- Never go back inside for possessions, pets or even other people.
- □ If you cannot get out, close the door and cover vents and cracks around the door with cloth or tape to keep smoke out. Call 9-1-1 or your fire department. Stay where you are and then signal for help at the window with a light-colored cloth or a flashlight.

After

- □ Have injuries treated by a medical professional. Wash small wounds with soap and water. To help prevent infection of small wounds, use bandages and replace them if they become soiled, damaged or waterlogged.
- Remain calm. Pace yourself. You may find yourself in the position of taking charge of other people. Listen carefully to what people are telling you and deal patiently with urgent situations first.



Wildfire

Did you know that a wildfire moves at speeds of up to 14 miles an hour?

.....

Oregon and Washington are prone to deadly wildfires. Droughts and dry conditions throughout the year increase wildfire risk. Careless use of fire in highly wooded areas can also dramatically increase the chance of a wildfire, which can then quickly spread across trees and dry brush and threaten homes and businesses that are in the vicinity.

Before

- □ Learn about the wildfire risks in your area.
- \Box Make a plan (see p. 5) and build a kit (see p. 6).
- □ Make sure driveway entrances and your house number or address are clearly marked so fire vehicles can get to your home.
- □ Identify and maintain an adequate water source outside your home, such as small pond, cistern, well or swimming pool.
- □ Set aside household items that can be used as fire tools: a rake, ax, handsaw or chainsaw, bucket and shovel.
- □ Select building materials and plants that resist fire.
- □ Regularly clean roofs and gutters.
- □ Keep a garden hose that is long enough to reach any area of the home and other structures on the property.
- □ Install freeze-proof exterior water outlets on at least two sides of the home and near other structures or property.

During

- □ Be ready to leave at a moment's notice.
- □ Listen to local radio and television stations for updated emergency information.
- □ Check emergency kit and replenish any items missing or in short supply. Keep nearby.
- □ Arrange for temporary housing at a friend or relative's home outside the threatened area.
- □ Back your car into your garage for easier evacuation.

- □ Confine pets to one room so you can find them if you need to evacuate quickly.
- Listen and watch for air quality reports and health warnings about smoke.

□ Check with the fire department to make sure your

goggles and/or a hard hat when necessary.

□ Anyone entering your damaged home should wear long

pants, a long-sleeved shirt, closed-toed rubber-soled

shoes or boots and work gloves, plus dust masks, safety

номе

ZONI

SAFETY

residence is safe to enter.

- Keep indoor air clean by closing windows and doors to prevent outside smoke from getting in.
- □ Use the recycle or recirculate mode on the air conditioner in your home or car.
- □ When smoke levels are high, do not use anything that burns or adds to indoor air pollution, such as candles, fireplaces and gas stoves. Avoid vacuuming.
- □ If you have asthma or another lung disease, follow your health care provider's advice.
- □ Dress to protect yourself; wear cotton/woolen clothing including long-sleeve shirts, long pants and gloves.

If outdoors

- \Box If you are trapped, crouch in a pond, river or pool.
- Don't put wet clothing or bandanas over your nose or mouth.

After

- □ Let friends and family know you're safe.
- Do not enter your home until fire officials say it's safe.
- Use caution when entering burned areas as hazards may still exist, including hot spots, that can flare up without warning.
- Avoid damaged or fallen power lines, poles and downed wires.
- □ Watch for ash pits and mark them for safety.



Earthquake

Did you know that doorways are no stronger than any other part of the house structure during an earthquake? During an earthquake remember to drop, cover and hold on!

Before

- \Box Make a plan (see p. 5) and build a kit (see p. 6).
- Pick safe places in each room of your home, workplace and/or school. A safe place could be under a piece of furniture or against an interior wall away from windows, bookcases or tall furniture that could fall on you.
- Practice "drop, cover and hold on" in each safe place. If you do not have sturdy furniture to hold on to, sit on the floor next to an interior wall and cover your head and neck with your arms.
- □ Keep a flashlight and sturdy shoes by your bed in case the earthquake strikes in the middle of the night.
- □ Make sure your home is securely anchored to its foundation.
- Bolt and brace water heaters and gas appliances to wall studs.
- □ Bolt bookcases, china cabinets and other tall furniture to wall studs.
- □ Hang heavy items, such as pictures and mirrors, away from beds, couches and anywhere people sleep or sit.
- □ Brace overhead light fixtures.
- □ Install strong latches or bolts on cabinets. Large or heavy items should be close to the floor.
- □ Learn how to shut off the gas valves in your home and keep a wrench handy for that purpose.
- □ Learn about your area's seismic building standards and land-use codes before you begin new construction.

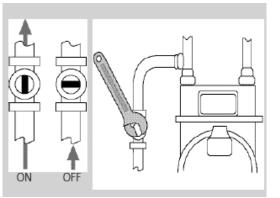
During

If you are inside when the shaking starts

- Drop, cover and hold on. Move as little as possible.
- □ If you are in bed, stay there, curl up and hold on. Protect your head with a pillow.
- □ Stay away from windows to avoid being injured by shattered glass.
- □ Stay indoors until the shaking stops and you are sure it is safe to exit. When it is, use stairs rather than the elevator in case there are aftershocks, power outages or other damage.
- Be aware that fire alarms and sprinkler systems frequently go off in buildings during an earthquake, even if there is no fire.

If you are outside when the shaking starts

- Find a clear spot (away from buildings, power lines, trees, streetlights) and drop to the ground. Stay there until the shaking stops.
- □ If you are in a vehicle, pull over to a clear location and stop. Avoid bridges, overpasses and power lines if possible. Stay inside with your seatbelt fastened until the shaking stops. Then, drive carefully, avoiding bridges and ramps that may have been damaged.
- □ If a power line falls on your vehicle, do not get out. Wait for assistance.
- If you are in a mountainous area or near unstable slopes or cliffs, be alert for falling rocks and other debris. Landslides are often triggered by earthquakes.



Shutting off your gas in your home in a natural disaster

- Locate the shut-off valve on the riser pipe from the ground to your meter or, on newer meters, the service line going from your meter into the house.
- Use an adjustable pipe or crescent-type wrench to turn the valve a quarter turn in either direction. When the valve head is parallel to the pipe, it is in the OPEN position.
- Turn the vale head crosswise (perpendicular) to the pipe and to set in OFF position. There are also shut-off valves on the lines fueling individual pieces of equipment.
- Once the gas is off, leave it off. Call your nearest gas utility company when you are ready for the gas to be restarted. A qualified service technician will check your system, turn on your service and re-light your appliances. Do not attempt to do this yourself.



Download the earthquake app and receive earthquake alerts, including information on what to do before, during and after an earthquake.

After

- □ After an earthquake, the disaster may continue. Expect and prepare for potential aftershocks, landslides or even a tsunami. Tsunamis are often generated by earthquakes. (see p. 14 to learn more about tsunamis)
- □ Each time you feel an aftershock, drop, cover and hold on. Aftershocks frequently occur minutes, days, weeks and even months following an earthquake.
- □ Check yourself for injuries and get first aid, if necessary, before helping injured or trapped persons.
- Put on long pants, a long-sleeved shirt, sturdy shoes and work gloves to protect against injury from broken objects.
- □ Look quickly for damage in and around your home and get everyone out if your home is unsafe.
- □ Listen to a portable, battery-operated or hand-crank radio for updated emergency information and instructions.
- □ Check the telephones in your home or workplace to see if you can get a dial tone. Make brief calls to report life-threatening emergencies.

- □ Look for and extinguish small fires. Fire is the most common hazard after an earthquake.
 - □ Clean up spilled medications, bleach, gasoline or other flammable liquids immediately.
 - Open closet and cabinet doors carefully as contents may have shifted.
 - □ Help people who require special assistance, such as infants, children and the elderly or disabled.
 - □ Watch out for fallen power lines or broken gas lines and stay out of damaged areas.
 - □ Keep animals under your direct control.
 - □ Stay out of damaged buildings.
 - If you were away from home, return only when authorities say it is safe to do so. Use extreme caution and examine walls, floors, doors, staircases and windows to check for damage.
 - □ Be careful when driving after an earthquake and anticipate traffic light outages.

The Cascadia Subduction Zone

The world's largest faults are associated with subduction zones and have produced earthquakes in the 9+ magnitude range. The last great earthquake on the Cascadia Subduction Zone occurred on January 26, 1700, more than 300 years ago. Geologists have found evidence for at least 40 great Cascadia earthquakes during the past 10,000 years and estimate they occur irregularly at intervals anywhere between 200 and 800 years. The next Cascadia earthquake may be similar to the earthquake that set off the 2011 Japan earthquake or the 2004 Indian Ocean tsunami. It could cause strong ground shaking from northern California to Southern Canada lasting for up to five minutes.

*From *Living On Shaky Ground: How to Survive Earthquakes and Tsunamis in Oregon*, ©2009, Humboldt State University/Oregon Emergency Management



Tsunami

Did you know that a tsunami can occur during any season of the year and at any time, day or night?

.....

Tsunamis are series of large ocean waves caused by major earthquakes or landslides beneath the ocean. When the waves enter shallow water, they may rise several feet or, in rare cases, near 100 feet, striking the coast with devastating force. Tsunamis can be local or distant. A local tsunami can arrive within minutes of the earthquake. A distant tsunami can take 4 to 12 hours to arrive on shore. If you feel the ground shake while at the beach or low coastal area, walk inland and uphill as soon as possible.

Before

- □ Find out if your home, school, workplace or other frequently visited locations are in tsunami hazard areas.
- \Box Make a plan (see p. 5) and build a kit (see p. 6).
- □ Know the height of your street above sea level and the distance of your street from the coast. Evacuation orders may be based on these numbers.
- Plan evacuation routes from your home, school, workplace and other places you could be where tsunamis present a risk. If possible, pick areas 100 feet (30 meters) above sea level or go as far as 2 miles (3 kilometers) inland, away from the coastline. If you cannot get this high or far, go as high or far as you can. Every foot inland or upward may make a difference. You should be able to reach your safe location on foot within 15 minutes.
- □ Learn the evacuation plan where your child attends school. Find out if the plan requires you to pick your children up from school or from another location. During a tsunami watch or warning, telephone lines may be overloaded and routes to and from schools may be jammed.
- Practice your evacuation routes. Familiarity may save your life. Be able to follow your escape route at night and during inclement weather. Practicing your tsunami survival plan makes the appropriate response more of a reaction, requiring less thinking during an actual emergency.
- □ If you are a tourist, familiarize yourself with local tsunami evacuation information. You may be able to safely evacuate to the third floor or higher in reinforced concrete hotel structures.

During

- □ If you feel an earthquake while you are on the coast, drop, cover and hold on if inside and avoid falling objects if outside (see Earthquakes, page 12).
- □ When the shaking has stopped, move quickly inland and to higher ground. Go on foot if possible.
- □ Take your disaster supplies kit, but don't delay leaving.

- If a tsunami watch is issued, listen to a NOAA weather radio, Coast Guard emergency frequency station or other reliable sources for updated emergency information and be ready to evacuate.
- Remain inland and on higher ground until an "all clear" announcement is made by local officials.

After

- Continue using a NOAA weather radio or tuning to a Coast Guard station, or a local radio or television station for the latest updates.
- Return home only after local officials tell you it is safe. A tsunami is a series of waves that may continue for hours.
 Do not assume that after one wave the danger is over.
 The next wave may be larger than the first one.
- □ Check yourself for injuries and get first aid as needed before helping injured or trapped persons.
- □ If someone needs to be rescued, call professionals who have the right equipment to help. Many people have been killed or injured trying to rescue others.
- □ Help people who require special assistance—infants, elderly people, those without transportation, people with disabilities and large families who may need additional help in an emergency situation.
- □ Avoid disaster areas. Your presence might interfere with emergency response operations and put you at further risk from the residual effects of floods.
- □ Use the telephone only for emergency calls.
- □ Stay out of any building that has water around it. Tsunami water can cause floors to crack or walls to collapse.
- Use caution when re-entering buildings or homes.
 Tsunami-driven floodwater may have damaged buildings where you least expect it. Carefully watch every step you take.
- □ To avoid injury, wear protective clothing and be cautious when cleaning up.
- □ Watch animals closely and keep them under your direct control.



Winter Storms

Did you know that if you plan to be away during cold weather, you should leave the heat on in your home set to a temperature no lower than 55° F?

Winter storms can range from a moderate snow over a few hours to a blizzard with blinding, wind-driven snow that lasts for several days. Many winter storms are accompanied by dangerously low temperatures and sometimes by strong winds, icing, sleet and freezing rain. Regardless of the severity of a winter storm, you should be prepared in order to remain safe during these events. Know the difference between an advisory, watch and warning on p. 4.

Before

- \Box Make a plan (see p. 5) and build a kit (see p. 6).
- □ Winterize your vehicle and keep the gas tank full. A full tank will keep the fuel line from freezing.
- □ Insulate your home by installing storm windows or covering windows with plastic from the inside to keep cold air out.
- □ Maintain heating equipment and chimneys by having them cleaned and inspected every year.
- □ If you will be going away during cold weather, leave the heat on in your home, set to a temperature no lower than 55° F.
- □ Add sand, rock salt or non-clumping kitty litter to your disaster kit to make walkways and steps less slippery.
- □ Have warm coats, gloves or mittens, hats, boots and extra blankets and warm clothing accessible for all household members.

During

- □ Listen to a NOAA weather radio or other local news channels for critical information from the National Weather Service (NWS) on snow storms and blizzards.
- □ Bring pets/companion animals inside during winter weather. Move other animals or livestock to sheltered areas and make sure that their access to food and water is not blocked by snow drifts, ice or other obstacles.
- □ Running water, even at a trickle, helps prevent pipes from freezing.
- □ All fuel-burning equipment should be vented to the outside and kept clear.

- □ Keep garage doors closed if there are water supply lines in the garage.
- Open kitchen and bathroom cabinet doors to allow warmer air to circulate around the plumbing. Be sure to move any harmful cleaners and household chemicals out of the reach of children.
- □ Keep the thermostat set to the same temperature both during the day and at night. By temporarily suspending the use of lower nighttime temperatures, you may incur a higher heating bill, but you can prevent a much more costly repair job if pipes freeze and burst.
- Go to a designated public shelter if your home loses power or heat during periods of extreme cold.
- Avoid driving when conditions include sleet, freezing rain or drizzle, snow or dense fog. If travel is necessary, keep a disaster supplies kit in your vehicle.
- Before tackling strenuous tasks in cold temperatures, consider your physical condition, the weather factors and the nature of the task.
- Protect yourself from frostbite and hypothermia by wearing warm, loose-fitting, lightweight clothing in several layers. Stay indoors, if possible.
- □ Help people who require special assistance such as elderly people living alone, people with disabilities and children.

After

- □ Let friends and family know you're safe.
- □ Make sure to replenish disaster supplies if used during the storm.



Flood

Did you know that flood waters only a half-foot deep can be strong enough to sweep a person off their feet?

.....

Floods are among the most frequent and costly natural disasters. When heavy or steady rain saturates the ground over several hours or days, flood conditions may occur. Flash floods occur suddenly due to rapidly rising water along a stream or low-lying area.

Before

- \Box Make a plan (see p. 5) and build a kit (see p. 6).
- □ Listen to area radio and television stations and a NOAA weather radio for possible flood warnings and reports of flooding in progress or other critical information from the National Weather Service (NWS).
- □ Be prepared to evacuate at a moment's notice.
- Because standard homeowner's insurance doesn't cover flooding, it's important to have protection from the floods associated with hurricanes, tropical storms, heavy rains and other conditions that impact the U.S. For more flood safety tips and information on flood insurance, please visit the National Flood Insurance Program Web site atwww.FloodSmart.gov.

During

- □ When a flood or flash-flood warning is issued for your area, head for higher ground and stay there.
- □ Stay away from floodwaters. If you come upon a flowing stream where water is above your ankles, stop, turn around and go another way. Six inches of swiftly moving water can sweep you off of your feet.
- □ If you come upon a flooded road while driving, turn around and go another way. If you are caught on a flooded road and waters are rising rapidly around you, get out of the car quickly and move to higher ground. Most cars can be swept away by less than two feet of moving water.
- Keep children out of the water. They are curious and often lack judgment about running water or contaminated water.
- □ Be especially cautious at night when it is harder to recognize flood danger.

After

- □ Let friends and family know you're safe.
- Do not enter your home until officials say it's safe.



Landslide

Did you know that landslides take place most often where they've happened in the past? They're also more common in areas recently burned by a wildfire.

Before

 \Box Make a plan (see p. 5) and build a kit (see p. 6).

During

- □ If you suspect imminent danger, evacuate immediately. Inform affected neighbors if you can, and contact your public works, fire or police department.
- □ Listen for unusual sounds that might indicate moving debris, such as trees cracking or boulders knocking together.
- □ If you are near a stream or channel, be alert for any sudden increase or decrease in water flow and notice whether the water changes from clear to muddy. Such changes may mean there is debris flow activity upstream so be prepared to move quickly.
- Be especially alert when driving—watch for collapsed pavement, mud, fallen rocks and other indications of possible debris flow.
- □ If you are ordered or decide to evacuate, take your animals with you.
- Consider a precautionary evacuation of large or numerous animals as soon as you are aware of impending danger.

After

- □ Stay away from the slide area. There may be danger of additional slides.
- □ Check for injured and trapped persons near the slide, without entering the direct slide area. Direct rescuers to the person's locations.
- □ Listen to local radio or television stations for the latest emergency information.
- Watch for flooding, which may occur after a landslide or debris flow. Floods sometimes follow landslides and debris flows because they may both be started by the same event.
- □ Look for and report broken utility lines to appropriate authorities. Reporting potential hazards will get the utilities turned off as quickly as possible, preventing further hazard and injury.
- □ Check the building foundation, chimney, and surrounding land for damage. Damage to foundations, chimneys, or surrounding land may help you assess the safety of the area.
- Replant damaged ground as soon as possible since erosion caused by loss of ground cover can lead to flash flooding.



Medical Emergencies

In the event of a disaster, emergency medical response may be delayed.

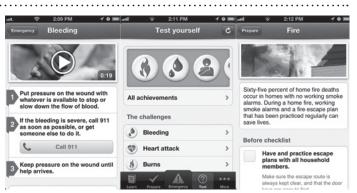
Your emergency training could mean the difference between life and death.

The guidelines here **do not** constitute comprehensive Red Cross training or certification for emergency medical care. To receive training and certification for first aid, CPR, and other emergency preparedness topics, contact your local Red Cross chapter or visit *www.redcross.org*.

If you encounter someone who is injured or ill:

Check—Call—Care

- □ **Check** the scene to make sure it is safe for you to approach. *Then* check the victim. Someone who has a life-threatening condition, such as severe bleeding or difficulty breathing, requires immediate care and may need treatment by advanced medical professionals. Call out for bystanders to help.
- □ Call 9-1-1, the workplace emergency number or your local emergency number. If you are unable to get through to 9-1-1, call local fire, police or a local hospital. In a large-scale disaster, you may not be able to get through to the emergency medical services system at all. Also, you may not have access to telephones. In these situations, you should shout for help to alert nearby neighbors or others who may have access to a phone.
- □ **Care** for the person based on the conditions you find. If there are multiple victims at a scene, you may need to establish treatment priorities based on the most effective use of resources and responders.



The Red Cross First Aid App puts important information in the palm of your hand.

First Aid and CPR Training

Would you know what to do in a cardiac, breathing or first aid emergency?

Red Cross *First Aid/CPR/AED* courses give you the skills to save a life. Contact your local Red Cross chapter to register for a class (See p. 4 to find your chapter office).

- Severe external bleeding: Use direct pressure on the wound and apply a clean dressing and pressure bandages. If dressing soaks through, continue direct pressure and apply more dressings and bandages.
- □ **Breathing emergencies:** Find cause of difficulty. If patient is conscious, ask!

Choking

- □ Encourage patient to cough forcefully.
- If the patient is unable to cough, use a combination of back blows and abdominal thrusts to attempt to dislodge object.
- Back blows: Bend patient forward, supporting chest.
 Deliver five sharp firm back blows between shoulder blades.
- □ Abdominal thrust: Stand behind patient, wrap your arms around their waist, finding patient's navel. Place the thumb side of one of your hands two inches above the navel, cover with your other hand and deliver five upward thrusts to patient's abdomen.
- □ Continue alternating back blows and abdominal thrusts until object is dislodged.

Disease prevention

The risk of getting a disease while giving first aid is extremely rare.

To further reduce the risk:

- □ Avoid direct contact with blood and other body fluids.
- □ Use protective equipment, such as disposable gloves and breathing barriers.
- □ Whenever possible, thoroughly clean your hands with soap and water or waterless hand-cleaner immediately after giving care.

Shock

Shock is a life threatening condition in which not enough oxygenated blood is being delivered to vital organs and tissues. It can arise from traumatic, medical, or psychological events. Symptoms of shock may include:

- □ Restlessness or irritability
- □ Altered level of consciousness
- □ Nausea or vomiting
- □ Pale, ashen or grayish cool, moist skin
- □ Rapid breathing and pulse
- □ Excessive thirst

Care for shock

- □ Have patient lie down. This is often the most comfortable position.
- Do not move patient unless the scene is becoming dangerous.
- □ Control any external bleeding.
- \Box Protect from chill or excess heat.
- □ Loosen restrictive clothing and reassure the person.
- Do not give patient anything to eat or drink.
- Continually monitor patient's level of consciousness, airway, breathing and circulation and treat for other conditions you find.

Care for injuries to muscles, bones and joints

- □ Apply a cold/ice pack to reduce pain and swelling.
- Avoid any movement or activity that causes pain.
- If you must move the victim because the scene is becoming unsafe, immobilize the injured area to minimize further damage.

Care for burns

- □ Stop the burning by cooling the burn with large amounts of water.
- Remove any chemicals from skin by flushing with water.
 Brush dry chemicals from skin before flushing.
- □ Cover the burn with dry, clean dressings or cloth.
- □ Do not attempt to remove any clothing stuck to burned skin.

Know how to save a life

- CPR and First Aid—At least one person in your household should learn these life-saving skills. Call 1-800-RED CROSS to sign up for a class or visit www.redcross.org/take-a-class.
- □ Donate blood—Call 1-800-RED CROSS to make an appointment or visit *www.redcrossblood.org*.
- □ Volunteer—To volunteer with the American Red Cross, visit *www.redcross.org/volunteer*.
- CERT and NET—Learn basic disaster response skills by joining your local Community Emergency Response Team (CERT) or Neighborhood Emergency Team (NET). To learn more, go to www.citizencorps.gov/cert.



Biological or Chemical Threat, Terrorism and Pandemic Flu

In cases of a biological or chemical threat, terrorism or pandemic flu, authorities may advise you to shelter in place. "Shelter in place" means to take immediate shelter where you are—at home, work, school, or in between. It may also mean

"seal the room;" in other words, take steps to prevent outside air from coming in if chemical or radiological contaminants are released into the environment. It is important to listen to TV or radio to understand whether the authorities wish you to merely remain indoors or to take additional steps to protect yourself and your family. (*The following information is provided by the Centers for Disease Control and Prevention.*)

Before

At home

- □ Choose an internal room for your shelter, preferably one without windows and one on the highest level. A large room, preferably with a water supply, is desirable— something like a master bedroom that is connected to a bathroom.
- Contact your workplaces, your children's schools, nursing homes where you may have family and your local town or city officials to find out what their plans are for "shelter-in-place."
- □ Find out when warning systems will be tested. When tested in your area, determine whether you can hear or see sirens and/or warning lights from your home.
- Develop your own family emergency plan so that every family member knows what to do. Practice it regularly.
- □ Assemble a disaster supplies kit that includes emergency water and food supplies.

At work

- Help ensure that the emergency plan and checklist involves all employees. Safety volunteers or recruits should be assigned specific duties during an emergency. Alternates should be assigned to each duty.
- □ The shelter kit should be checked on a regular basis and batteries for the radio and flashlight should be replaced regularly.

During

If you are told to "shelter-in-place," act quickly. Follow the instructions of local authorities. In general:

- □ Bring children and pets indoors immediately. If your children are at school, do not try to bring them home unless told to. The school will shelter them.
- □ Close and lock all outside doors and windows. Locking may provide a tighter seal.
- □ If you are told there is danger of explosion, close the window shades, blinds or curtains.
- □ Turn off the heating, ventilation or air conditioning system. Turn off all fans, including bathroom fans operated by the light switch.
- □ Close the fireplace or woodstove damper. Become familiar with proper operation of flues and dampers ahead of time.

- Get your disaster supplies kit, and make sure the radio is working.
- □ Take everyone, including pets, into an interior room with no or few windows and shut the door.
- □ The room should have 10 square feet of floor space per person in order to provide sufficient air to prevent carbon dioxide buildup for 5 hours. In this room, you should store scissors, plastic sheeting pre-cut to fit over any windows or vents and rolls of duct tape to secure the plastic. Access to a water supply is desirable, as is a working land line telephone. Don't rely on cell phones because cellular telephone circuits may be overwhelmed or damaged during an emergency. Also, a power failure will render most cordless phones inoperable.
- □ If you have pets, prepare a place for them to relieve themselves where you are taking shelter. Pets should not go outside during a chemical or radiation emergency because it is harmful to them and they may track contaminants into your shelter. The Humane Society suggests that you have plenty of plastic bags and newspapers, as well as containers and cleaning supplies, to help deal with pet waste.
- □ If you are instructed to seal the room, use duct tape and plastic sheeting, such as heavy-duty plastic garbage bags, to seal all cracks around the door into the room. Tape plastic over any windows. Tape over any vents and seal electrical outlets and other openings. As much as possible, reduce the flow of air into the room.
- Call your emergency contact and keep the phone handy in case you need to report a life-threatening condition.
 Otherwise stay off the phone, so that the lines will be available for use by emergency responders.
- □ Keep listening to your radio or television until you are told all is safe or you are told to evacuate. Do not evacuate unless instructed to do so.

After

When you are told that the emergency is over, open windows and doors, turn on ventilation systems, and go outside until the building's air has been exchanged with the now clean outdoor air. Follow any special instructions given by emergency authorities to avoid chemical or radiological contaminants outdoors.



Volcanoes

Did you know that the Cascade Mountain Range is a chain of large and small volcanoes that have erupted several times in the past 200 years?

The eruption of Mount St. Helens on May 18, 1980, devastated a wide area of our region. Explosive volcances blast hot solid and molten rock and gases in the air, resulting in ash flows, mudflows, rock falls, earthquakes and floods for miles around the blast site.

Before

- □ Learn about your community warning systems and emergency plans.
- \Box Make a plan (see p. 5) and build a kit (see p. 6).
- □ Plan an evacuation route out and have a back-up route in mind.

During

Indoors

- □ Be prepared to follow evacuation orders issued by authorities.
- □ Close windows, doors and dampers.
- □ Bring animals and livestock into closed shelters.

Outdoors

□ Seek indoor shelter.

□ If caught in a rock fall, roll into a ball to protect your head.

- □ If caught near a stream, be aware of mudflows; move up slope.
- Protect yourself from ash fall: Wear long-sleeved shirts and long pants, use goggles to protect your eyes, use a dust mask or hold a damp cloth to your face to help breathing.
- □ Keep car or truck engines off.

After

- □ Stay indoors until local health officials advise it is safe to go outside.
- □ Stay away from volcanic ash fall areas.
- Avoid ash fall: Keep skin covered to avoid irritation from contact with ash, use goggles to protect your eyes, use a dust mask or hold a damp cloth you're your face to help breathing.
- Avoid driving that might stir up ash and stall vehicles.

6. Individuals with Access & Functional Needs

Individuals who are vision impaired, hearing impaired or mobility impaired should take additional steps to prepare for disasters.

- Complete an honest assessment of your abilities and needs. Would you be able to climb out a window if necessary? Can you hear emergency announcements?
- □ If you anticipate the need for special assistance from first responders after a disaster, have you spoken with family, care givers, friends or neighbors who can assist and be part of your emergency plan?
- Write out an emergency information card, including any medications you take, allergies, sensory or mobility impairments, equipment you need and emergency contact numbers.
- □ If you live in an assisted living facility, find out what its emergency plans are.
- □ If you're mobility impaired, identify two accessible escape routes.

- □ If you use a wheelchair, keep a wheelchair patch kit to repair a flat. If you use a motorized chair, keep a non-powered backup chair.
- □ Form a support team of at least three different people to check on you after a disaster. Exchange house keys. Tell each other when you're out of town. Teach your support team how to use any home medical equipment.
- □ Write an information card which includes the best way to communicate with you or move you if necessary.
- □ If you're hearing-impaired, install smoke detectors with strobe light alarms. Also, keep a pen and paper in your emergency kit to communicate with first responders.
- □ If you're blind, mark your emergency supplies with Braille. Keep an extra cane by your bed.

The website *accessibleemergencyinfo.com* has preparedness information in Braille and videos in ASL.

7. Seniors

Whether you live alone or depend on a caregiver, it is vital to have a plan for what to do before, during and after a disaster. Discuss emergency plans with family, friends and neighbors. It is also important to let them know about your risks and vulnerabilities. When creating your emergency plan, know the answers to the following questions and plan accordingly.

- □ Do you live alone?
- □ Do you drive or own a car?
- \Box How good is your sense of smell?
- □ Do you have any physical, medical, thinking or learning limitations?
- □ Has your sense of hearing or vision decreased?
- □ Are you reliant upon any medical equipment?
- □ Are you reliant upon a caregiver?

You should also be informed about your community's disaster plans. Ask local officials about your area's response and evacuation plans in the event of an emergency. If available, take advantage of advance registration systems in your area for those who need help during community emergencies. If you receive home care, speak with your case manager to see what their plan is in times of emergency and how they can assist you.

In addition to the standard items that should be in your emergency kit, you should consider storing your supplies in a container or bag with wheels.

- □ Label any equipment—such as wheelchairs, canes or walkers—that you would need with your name, address and phone numbers.
- Keep hearing aids, glasses or assistive devices near the bedside. You may want to attach the equipment with Velcro as some disasters, particularly earthquakes, may cause items to shift.

Conduct a "hazard hunt" in your residence and remove any items that could be an impediment when evacuating.

- □ To prevent falling, secure or remove throw rugs and carpet, keep floors dry, wipe up spills immediately, and be sure to use non-wax cleaning products on floors.
- □ If you use a wheelchair, make sure your escape routes are wheelchair accessible.
- □ Keep support items like wheelchairs and walkers in a designated place so they can be found quickly.
- □ Know the safe places within your home in case you need to shelter during extreme weather events.

8. Your Mental Health

You can reduce the emotional impact of a disaster by being prepared. Review this resource guide with your family. Practice your evacuation plans. Make sure your supplies are in order and emergency contact information is up-to-date. You can't take away the feeling of shock after a disaster, but you can reduce the feeling that everything is out of control.

Disasters may cause highly emotional responses among family members. Normal responses include:

- \Box Numbness, apathy or depression
- Difficulty concentrating or making decisions
- □ Anxiety, restlessness, irritability or fear
- Disorientation
- □ Sleep disturbance
- □ Fatigue

Mental health survival tips

- \Box Stay calm and assured
- □ Don't stay by yourself if you can avoid it
- □ Accept help from others

- □ Notice positives; don't blame
- □ Talk about your feelings

For your long-term adjustment

- □ Allow yourself to cry
- Get some exercise
- □ Avoid excessive alcohol/drugs
- □ Seek counseling if you continue to feel depressed, anxious or debilitated

After you and your family are out of danger, sit down together and collect yourselves. Limit family decisions to today's needs. Avoid discussions of long-term disaster recovery issues.

9. Preparing Your Pet for Disaster

In the event of a disaster, if you must evacuate, the most important thing you can do to protect your pets is to evacuate them, too. If it's not safe for you to stay behind then it's not safe to leave pets behind either. Take action now so you know how to best care for your animal friends when the unexpected occurs.

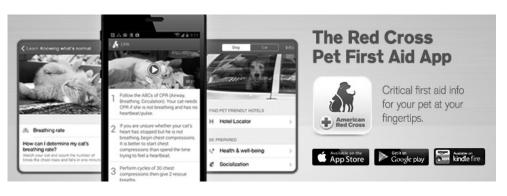
Know a safe place to take your pets

- Local and state health and safety regulations do not permit facilities to allow pets in disaster shelters.
 (Service animals are allowed in Red Cross shelters.)
- Contact hotels and motels outside your local area to check their policies on accepting pets and restrictions on number, size and species. Ask if "no pet" policies can be waived in an emergency. Keep a list of "petfriendly" places, including phone numbers, with your disaster supplies.
- □ Ask friends, relatives or others outside the affected area if they could shelter your animals.
- Make a list of boarding facilities and veterinarians who could shelter animals in an emergency; include 24-hour phone numbers.
- □ Ask local animal shelters if they provide emergency shelter or foster care for pets during a disaster.

Assemble a pet emergency preparedness kit

Keep your pet's essential supplies in sturdy containers that can be easily accessed and carried (a duffle bag or covered trash containers, for example). Your pet emergency preparedness kit should include:

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



The American Red Cross Pet First Aid app allows pet owners to be prepared to act when called upon for everyday emergencies. It includes videos, interactive quizzes and simple steps to track warning signs and preventive care for cats and dogs. Learn more atredcross.org/mobile-apps/pet-first-aid-app.

10. What You Need to Know About Your Utilities

Natural gas

Your gas company adds an odorant into your gas before it is distributed, which smells like sulfur or rotten eggs. The odorant is highly concentrated so even the smallest amount of natural gas can be detected. Any odor of natural gas inside your home may indicate a leak. If you smell natural gas or hear a blowing or hissing sound, remember: Smell. Go. Let us know. (See p. 12 for information on how to turn off natural gas in your home.)

- \Box Leave the area immediately.
- \Box Don't try to find the leak.
- □ Don't use phones, light switches, or electronic devices that have a battery: they can create a spark.
- □ Don't use candles, matches or lighters.
- Don't start a car near a natural gas odor and don't use your garage door opener.
- □ Once you're away, call NW Natural at 800-882-3377 or your local gas company.

.....

Electricity

If the power goes off:

- □ Check your fuse or breaker box for blown fuses or tripped circuits. If they're okay, check to see if your neighbors are without power.
- □ Call your power company immediately to report the outage. Please call only once so other customers can get through. Some utilities, like PGE, offer ways to report outages online or by text.
- □ Turn off all electrical equipment including your water heater, electric furnace or heaters, stove, washer and dryer, stereo and TV, to help prevent overloading the system when power is restored (major appliances can be turned off at the breaker box).
- □ Turn on a porch light and one inside light so you and repair crews will know when service is restored.
- □ Keep refrigerators and freezers closed to minimize food loss.
- □ Listen to the radio or check social media, or your power company's website for updates on major outages. If your neighbor's power comes back on but yours does not, call your power company again.
- □ If your lights are very dim or very bright once power is restored, turn off the power at the breaker or fuse box and call your power company.



Downed power line safety

You cannot see electricity—a downed line doesn't have to spark to be live. And a wire can be dangerous even if you're not touching it: The electricity from a wire can be conducted through other things touching the wire, such as water, metal, tree branches, concrete and other materials. Stay far back from any downed lines and keep other people and pets away, too. When you see a downed line, take the following precautions:

- □ Don't touch it! Call your electric utility, immediately to report any downed utility line.
- □ If a line is touching a person, call 9-1-1 and stay away; you could become a victim if you touch the person. If a line falls across your vehicle, stay in the vehicle until help arrives. If you have to get out of the vehicle due to a fire, or other life-threatening situation, jump clear of the car with both feet together, making sure not to touch the car and the ground at the same time. Then, keeping your feet together at all times, shuffle or hop far away from the car and power line.
- □ Keep on the lookout for crews repairing downed lines. Slow down near work areas and always obey flaggers.

Generator safety

Owners of portable or auxiliary generators should note these precautions:

- Never plug your generator into a wall outlet. It can result in injury to you or others and damage to your electrical system.
- Portable generators are gasoline-powered and should always be operated outside away from doors, windows and your garage. Use an outdoor-rated, grounded (three-prong) extension cord to connect your generator to an appliance.
- □ Gas-powered generators can become very hot during operation. Use extreme caution to avoid burns and let the engine cool before you refuel.
- Notify your power company if you have a permanent generator. Permanently-installed auxiliary generators must meet electrical codes and have a transfer switch to prevent dangerous back-feed of electricity into power lines.
- □ If a family member depends on medical life-support equipment, a back-up generator is important to consider in case of an extended power outage.

11. What you Need to Know About Water

After a major disaster you may not have access to clean water. It is important to store plenty of extra water, and know how to access alternative sources of water.

Alternative sources of water

- Melted ice cubes
- Liquid in canned vegetables
- Water stored in your water heater—To drain, first shut off the gas or electricity supply, and turn off the water intake valve. Next open the drain at the bottom of the tank and turn on a hot water faucet in your house, to let air into the system.
- Water stored in your pipes—To drain, first shut off the main water valve for your home. Next, open a faucet at the highest level in your home to let the air into the plumbing and then take water from the lowest faucet in the house.

UNSAFE WATER SOURCES: Radiators, waterbeds and swimming pools, toilet tank or bowl.

Water storage

You will need more water than you might think in an emergency. Store a minimum of three days' worth of water per person: one gallon per person per day (and the same amount for each pet). If you are running low on water in an emergency, do not ration. Drink what you need today, try to find more for tomorrow. Fill up the tub if you have time, but do not use for drinking.

Follow these steps to access the water in your hot water tank:

- 1. Find your incoming water valve. Shut it off to avoid possibly contaminated water coming into the tank.
- 2. Turn off the gas or electricity to the tank.
- 3. Turn on a hot water faucet in the house.
- 4. Collect water as needed from the tap at the bottom of the hot water heater.

Proper water storage

- Store bottled drinking water out of direct sunlight, away from chemicals that might permeate the container and in an area not likely to freeze.
- If bottling tap water, buy empty containers or use wellwashed and sanitized plastic soda bottles (do not use empty bleach, detergent or milk containers). Bottles can be sanitized by rinsing with bleach water. Every six months, empty tap water from containers, wash containers and refill.
- Pouring water back and forth between two containers will add oxygen and make the water taste better.

Treating water

If you are uncertain about the purity of any water source, treat it before you use it for drinking, food preparation or hygiene. In addition to having a bad odor and taste, water from questionable sources may be contaminated by a variety of microorganisms that can cause dysentery, cholera, typhoid and hepatitis.

There are two ways to treat water to make it safe for use.

- 1. Filter the water using a piece of cloth or coffee filter to remove solid particles, then heat and bring to a rolling boil for at least one minute.
- 2. If boiling is not possible, water can be made safe to use by adding a disinfectant such as unscented household chlorine bleach or iodine.
 - Filter water through a clean cloth or coffee filter, or allow water to settle and draw off clear water.
 - To use bleach, add 1/8 teaspoon (or 8 drops) per 2-liter bottle of water. Sodium hypochlorite (concentration 5.25% to 6%) should be the only active ingredient in the bleach. There should be no added soap or fragrance.
 - Stir to mix and let stand 30 minutes.
 - If the water smells of chlorine, it is okay to use. If it does not smell of chlorine, repeat steps above. If after this second try the water smells of chlorine, it is okay to use. Otherwise, discard and find another source of water.
 - Store the disinfected water in clean, sanitized containers with tight covers.

If using iodine or water purification tablets, follow package instructions.

In addition, there are many economical water treatment devices available, such as backpacking water filters, water filter straws, etc.

*NOTE: While the Red Cross recommends preparing for a minimum of three days, every disaster is different and some situations may result in being cut off from resources for two weeks or longer. Understand your risks and plan accordingly.

There is a high probability that a Cascadia Subduction Zone earthquake, reaching a magnitude of nearly 9.0, will occur in our lifetime. Being prepared to be self-sufficient for two weeks is an achievable goal. You can get there over time, you don't have to get there today.

Additional Resources

Regional safety and emergency resources

2-1-1 Information & Referral

www.211info.org

Serves Oregon and Southwest Washington

Oregon Department of Transportation (ODOT) www.TripCheck.com

Oregon Department of Environmental Quality (800) 452-4011

www.oregon.gov/deq

Information regarding the protection and enhancement of Oregon's water and air quality clean up and release of hazardous materials and management of proper disposal of hazardous and solid wastes.

Washington Department of Ecology

(360) 407-6300 www.ecy.wa.gov

The Oregon Department of Geology and Mineral Industries

(971) 673-1555 oregongeology.com/sub/earthquakes/earthquakehome.htm

Information on earthquakes and other natural disasters in the Pacific Northwest.

Pacific Disaster Center

www.pdc.org

Information on disasters on the Pacific coast.

Oregon Emergency Management

(503) 378-2911 www.oregon.gov/omd/oem

Information about the prevention, mitigation and management of emergencies or disasters that present a threat to the lives and property of citizens and visitors to the State of Oregon.

Washington State Emergency Management Division (800) 562-6108

www.emd.wa.gov

Oregon Office of the State Fire Marshal (503) 378-3473

www.oregon.gov/OSP/SFM

Information regarding the protection of Oregonians lives and property from fire and hazardous materials.

Oregon Poison Center

(800) 222-1222 ohsu.edu/poison/

Other useful web sites

American Red Cross

www.redcross.org

Extensive information on disaster preparedness, response and relief, health and safety training, blood services and volunteer opportunities.

Safe and Well

www.redcross.org/safeandwell

Online registration enables family and friends to search for loved ones following a disaster.

Federal Emergency Management Agency—FEMA www.ready.gov

A clearinghouse for information on all types of disasters.

Institute for Business and Home Safety www.disastersafety.org

Extensive "how-to" information to protect your home and business from natural disasters.

U.S. Department of Homeland Security

www.dhs.gov

Up-to-date information on homeland security activities and national threat levels.

Center for Disease Control and Prevention

www.cdc.gov

Information on emergency preparedness and flu pandemic.

National Fire Protection Association

www.nfpa.org or www.sparky.org

Extensive fire prevention and safety information. "Sparky the Fire Dog" site contains several multimedia educational activities for kids.

U.S. Geological Survey

www.usgs.gov

Easily accessible information about geological hazards for each state.

National Weather Service

www.weather.gov

Latest forecasts, preparedness information, explanations of the different types of weather warnings and more.

PublicAlerts

www.publicalerts.org

News and information on major service disruptions in the Portland-Vancouver metro area. Also sign up to receive notifications by landline phone, cell phone, email and/or text message.

Oregon Hazards Explorer

http://oregonexplorer.info/hazards

Oregon HazVu: Statewide Geohazards Viewer http://www.oregongeology.org/sub/hazvu/index.htm

U.S. Geological Survey: Prompt Assessment of Global Earthquakes for Response (PAGER) http://earthquake.usgs.gov/earthquakes/pager/

USGS Earthquake Hazards Program http://earthquake.usgs.gov/earthquakes/shakemap/list. php?y=2015&n=pn

Pacific Northwest Seismic Network http://pnsn.org/

National Flood Insurance Program *www.floodsmart.gov/floodsmart/*

Red Cross Ready Rating www.readyrating.org

Disaster Distress Hotline

(800) 985-5990 Text: TalkWithUs to 66746 www.samhsa.gov/find-help/disaster-distress-helpline

Utilities contact information

Contact your local utility company to report a power outage (remember that cordless phones will not work in a power outage), to report a downed power line or to restart gas lines.

Clark Public Utilities (360) 992-8000

NW Natural (800) 882-3377

Pacific Power (877) 508-5088

Portland General Electric (800) 544-1795

Emergency contacts

In case of police, fire or medical emergency, call 9-1-1. For non-emergency concerns, refer to your phone book. Unnecessary calls to 9-1-1 can prevent others from getting the help they need. Use the back of this book to fill in the names and numbers of important contacts and make copies for each family member.



The American Red Cross prevents and alleviates human suffering in the face of emergencies by mobilizing the power of volunteers and the generosity of donors.

To schedule a Red Cross preparedness presentation for your school, business or community group, contact **preparedness@redcross.org** or call **503-284-1234**.

.....

Prepare! A Resource Guide was created and produced by the American Red Cross Cascades Region. This book or any portion thereof may not be reproduced or used without consent of the American Red Cross Cascades Region.

Be Red Cross Ready Checklist

	have tested my smoke alarms		My family has practiced our escape plan		
	have working smoke alarms on every floor and in every oom where someone sleeps		I know how to shut off my water, power and gas in an emergency		
	know what disasters are most likely in my area		I have found and secured potential hazards in my home		
	Лу family has an evacuation plan		My family has an emergency supplies kit		
	member of my household is certified in CPR/First Aid		I have a personal emergency kit: □ At home □ At work □ In my car		
	re filled out an emergency contact card and chosen out-of-state contact		Emergency contact cards		
Write contact information for each member of your household. Make copies for each family member.					
Out-of-state contact person:					
School(s):					
Work site(s):					
Doctor(s):					
Neig	Neighbor(s):				
Day care:					
E-mail(s):					
Other:					
Insurance agent(s):					
Family meeting places:					
Outside your home in case of fire:					
Οι	Outside your neighborhood in case you can't return home:				
Caretaker for pets:					
Veter	inarian:				
Utiliti	es:				
Water District (broken water pipes in street):					
Lo	Local Fire Bureau:				
Ot	her utility:				
Othe	r emergency contacts:				
REN	IEMBER TO:				
	Create list for all family members		Store with emergency supplies		
□ F	Post on refrigerator		Update all copies when numbers change		



Free Smoke Alarm Installation

You may have as little as

2 MINUTES

to escape a burning home before it's too late.

The Red Cross responds to an average of two home fires every day in our region.

A working smoke alarm can cut the risk of death from a home fire in half.

The Red Cross Home Fire Campaign aims to reduce death and injury by installing free smoke alarms in homes that need them.



----- **CALL** ----- 2. (503-528-5783

to schedule an appointment.

There are three easy ways to get free smoke alarms installed by trained Red Cross volunteers:

- 1. Call: 503-528-5783
- 2. Online: www.redcross.org/CascadesHomeFire
- 3. E-mail: preparedness@redcross.org

In Oregon, this campaign is in partnership with the Office of the State Fire Marshal.