

WASHINGTON STATE IS AT RISK FROM EARTHQUAKES

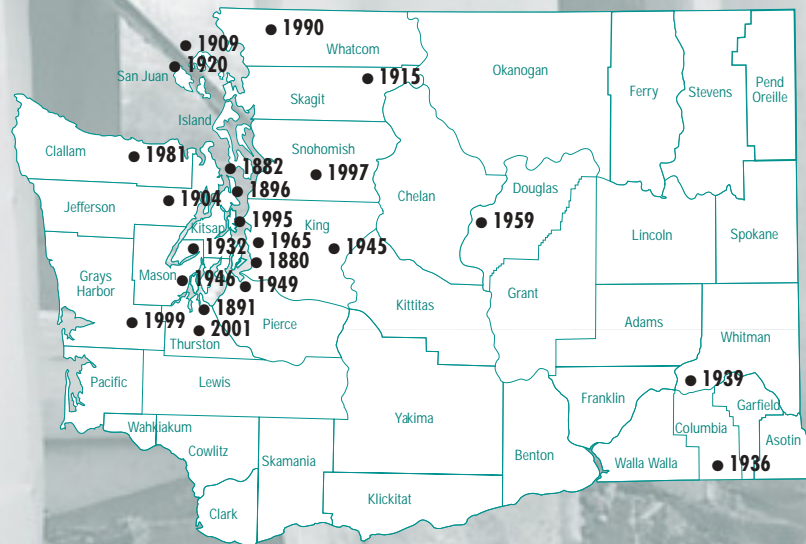
Washington has a history of large earthquakes. Due to increased population, new construction and infrastructure development in this state, we can expect the next large earthquake to result in loss of human life with significant economic impact. A strong earthquake may also generate a destructive tsunami (a series of giant waves) along the coast, in Puget Sound, or in large lakes.

These safety tips will help you and your household know how to prepare for an earthquake. By taking action now, you can save lives and reduce the damage caused by earthquakes and other geologic hazards.

Earthquakes are a significant risk in Washington

- All regions of Washington state have a history of earthquake activity.
- More than 1,000 earthquakes are registered in Washington state each year.
- n Cover photo shows damage suffered in Seattle from magnitude 7.1 earthquake in 1949.
- In 1965, Seattle and Tacoma suffered from a magnitude 6.5 tremor that killed seven people and severely damaged buildings.
- In July 1999, Grays Harbor County suffered a magnitude 5.8 earthquake near Satsop causing nearly \$8.1 million in damages, including damage to the Montesano Courthouse shown as background here.
- Historically, large earthquakes occurred beneath the Puget Sound waters registering magnitudes 6 to 7.5 every thirty to fifty years.

Major earthquakes in Washington since 1880



Create household, school, and workplace emergency preparedness plans:

Be prepared to be on your own for at least 3 days.

- Meet with your family and in your workplace and prepare disaster plans.
- Keep your disaster plan in a convenient place and make certain everyone knows its location.
- Practice and update your plans every six months.
- Discuss what to do during an earthquake.
- Identify safe spots within your home and workplace.
- Identify at least two escape routes from each room.
- Pick two meeting places. One outside of the building and one outside of the neighborhood in case you can't return.
- Ask a friend or relative located out of state to be your phone contact in case local phone lines are down.
- Show everyone how and when to shut off water, gas, sewer and electricity.
- Contact your local Emergency Management Office for additional information concerning disaster preparedness.

For more information, contact:

Local Emergency Management Office

Or visit these web sites:

Washington State Emergency

Management Division: www.wa.gov/wsem

Federal Emergency Management Agency: www.fema.gov

United States Geological Survey: www.usgs.gov

National Oceanic & Atmospheric Administration:
www.noaa.gov

University of Washington Geophysics Program:
www.geophys.washington.edu

Washington State Department of Natural Resources:
www.wa.gov/dnr

Western States Seismic Policy Council: www.wsspc.org

Cascadia Regional Earthquake Workgroup: www.crew.org

Alaska Tsunami Warning Center: www.wcatwc.gov



Washington Military Department
Emergency Management Division

Camp Murray
Washington 98430-5122



SEPT. 2001

WASHINGTON IS EARTHQUAKE COUNTRY



SEATTLE TIMES PHOTO

HOW TO BE PREPARED FOR AN EARTHQUAKE

What to do before, during, and after an earthquake

Know in advance what to expect in your community and how to deal with it. Expect that some people and animals may panic and act irrationally. Knowing what to do and how to help will make the situation manageable.

What to do before an earthquake:

- Contact your local Emergency Management Office to find out what types of hazards are most likely to occur in your community.
- Prepare disaster supply kits for your home, workplace, and vehicle.
- Find out who in your area might need special assistance, specifically the elderly, disabled, or non-English speaking neighbors.
- Check with your veterinarian for animal care instructions in an emergency situation.
- If you live on a coastal or inland shoreline, be familiar with tsunami evacuation routes.
- Know what emergency plans are in place at your workplace, school and daycare center.
- Know the risks in areas you might visit.
- Conduct a home hazard evaluation.
- Secure water heaters and gas appliances using steel straps. Anchor all top-heavy objects.
- Anchor overhead lights, hanging plants, heavy artwork and mirrors.
- Place heavy objects on lower shelves.

What to do during an earthquake or tsunami:

- When the ground shakes, **DROP, COVER** and **HOLD**.
- Don't panic or run. Earthquakes are usually immediately preceded by loud sounds. Take quick action to protect yourself and help others.
- If you are indoors, move away from windows, bookcases, file cabinets, heavy mirrors, hanging plants and other objects that could fall. Drop under a desk or sturdy table and grasp its legs. If it moves, move with it.
- Move away from refrigerator, stove, and overhead cabinets. **DROP, COVER** and **HOLD** under a table or near an inside wall.
- If you are on a sidewalk near a tall building, get into a doorway or lobby to protect yourself from falling bricks, glass and other debris.

- If you are outdoors, move to a clear area away from trees, signs, buildings, or utility wires and poles.
- If you are in a building, DO NOT rush for the exits. Move away from display shelves with objects that could fall on you, and **DROP, COVER** and **HOLD**.
- If you are driving, pull over to the side of the road and stop. Avoid overpasses, power lines, and other hazards. Stay in the vehicle until the shaking stops. Listen to your radio for emergency instructions.
- If you are in a wheelchair, stay in it. Move to safe cover in a doorway if possible, lock your wheels, and protect your head with your arms.
- If you are in a theater or stadium, stay in your seat, protect your head with your arms or get under the seat if possible. Do not attempt to leave until the shaking stops.

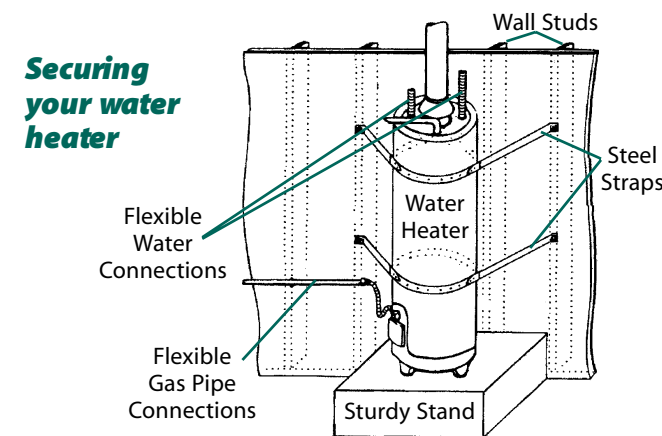
What to do after an earthquake:

- If you are in a tsunami hazard area, follow evacuation signs or quickly move to higher ground.
- Check yourself and those around you for injuries.
- Evacuate damaged buildings. Do not re-enter until declared safe by authorities.
- Call 9-1-1 only to report a life threatening emergency.
- If you smell gas or hear a hissing sound — open windows and leave the building. Do not use matches, candles, open flames or electric switches indoors.
- Clean up spills of potentially harmful materials, such as medicines, drugs, and household cleaners. Combined chemicals may produce toxic gas.
- Provide assistance to your neighbors, especially the elderly or disabled.
- Try to make contact with your out-of-area phone contact, but do not make local telephone calls.
- Monitor your portable radio for instructions or an official "all clear" notice. Radio stations will broadcast what to do, the location of emergency shelters, medical aid stations, and extent of damage.

Know how to turn off the utilities:

When disaster strikes, it often affects one or more of the utility systems in your home. Therefore, it is important to know where the main controls are located and when and how to turn them off. It is best to learn these things before disaster strikes.

- **Water:** Conserve all water. Turn off water at the main meter or at the water main leading into the house. This will prevent contaminated water from entering your water heater and plumbing.
- **Gas:** If you smell natural gas, evacuate immediately. Do not use matches, lighters, open flame appliances, or operate electrical switches. Sparks can ignite gas causing an explosion. Shut off gas if you smell gas or hear a hissing noise. Let the gas company turn the gas back on.
- **Sewer:** Make sure your sewer system is functioning properly before using it. This will prevent the contamination of your home and possibly the drinking water supply.
- **Electricity:** Locate your main electrical switch or fuse panel, and learn how to turn off the electrical power system.



- Mark your water heater at the front center, about one-third of the way down from the top and approximately one-third of the way up from the bottom.
- Ensure that the bottom mark is at least 4 inches above the water controls.
- Secure the water heater with a 16- to 20-gauge, pre-drilled steel strap.
- If the water heater is on a pedestal, you must secure the pedestal to the wall or floor to keep it from moving out from under the water heater during an earthquake.

For more information on securing your water heater and using tank water as a backup source for drinking water, contact your local Emergency Management Office or utility.

Disaster Supply Kit

Prepare a 3-day disaster supply kit that contains the following materials:

- Store one gallon of water per person per day (3 day minimum).
- Non-perishable food for each person — foods that require no refrigeration, cooking or preparation. Rotate the food supply every 6 months.
- Keep a 7-day supply of vital medications on hand at all times.
- First aid kit, including bandages, scissors, latex gloves, sterile pads, sterile roll bandages, tweezers, petroleum jelly, cleansing agents, antiseptic ointment or spray, ACE bandages and first aid booklet.
- Toilet paper, feminine supplies, plastic garbage bags and ties, infant supplies, soap, and personal hygiene items.
- Unscented household bleach to purify water.
- Tools and supplies, including paper plates, plastic utensils, small amount of cash, fire extinguisher, pliers, compass, aluminum foil, flares, wrench to shut off utilities, flashlight, extra batteries, non-electric can opener, matches, pencil and paper, whistle, shelter tarps, dust mask and work gloves.
- Battery-operated radio and extra batteries. A NOAA Weather Radio with a tone alert is optional, but very important.
- Include bedding and at least one complete change of clothing and footwear for all household members.
- Keep important family documents in a waterproof container in your home, and keep copies in your disaster kit: Wills, insurance policies, deeds, stock certificates, bonds, bank account numbers, passports, social security cards, immunization records, credit card numbers, and birth, marriage and death certificates.
- Extra food, drinking water, supplies and medicines for your pets.
- Maintain and know how to use a fire extinguisher.