

# 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.

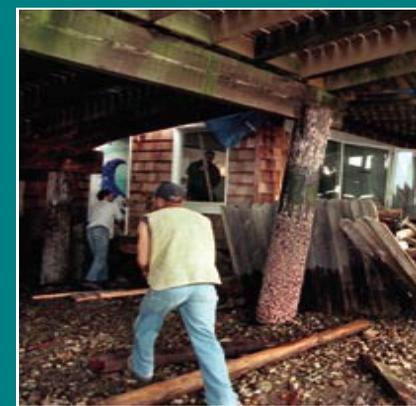
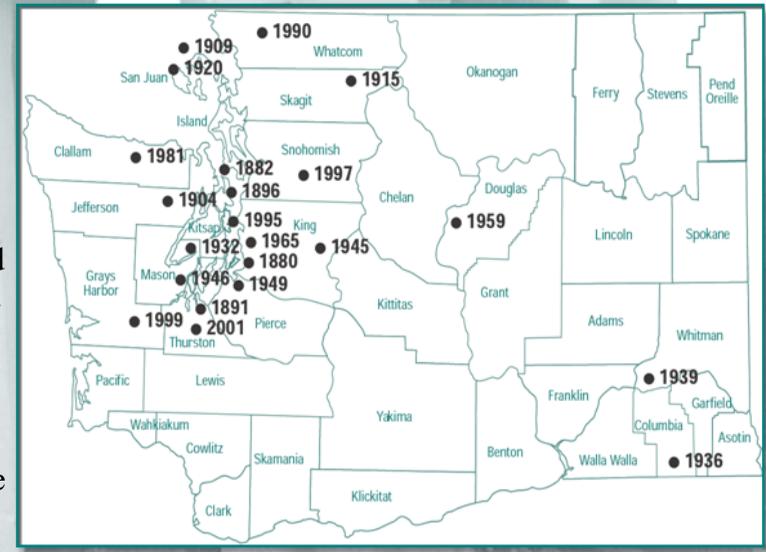
A strong earthquake may also generate a destructive tsunami (a series of giant waves) along the coast, in Puget Sound, or in large lakes. These safety tips will help you and your household know how to prepare for an earthquake. By taking action now, you can save lives and reduce the damage caused by earthquakes and other geologic hazards.

## Earthquakes are a significant risk in Washington

More than 1,000 earthquakes are registered in Washington State each year.

- Historically, large earthquakes occurred in Washington, registering magnitudes 6 to 7.5 every 30 to 50 years.
- 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.
- In February 2001, the Nisqually Earthquake collapsed buildings and bridges, disrupted gas, electric, and phone service, and triggered destructive landslides. Damages were estimated over \$500 million dollars. The earthquake injured over 400 people and resulted in one death due to a heart attack..

### Major earthquakes in Washington since 1880



# HOW TO BE PREPARED FOR AN EARTHQUAKE



www.emd.wa.gov

June 2011

# What to do BEFORE

## 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.

(for more detailed information go to: [www.emd.wa.gov](http://www.emd.wa.gov))

## Disaster Supply Kit (3-day minimum)

- Store one gallon of water per person per day, bleach for purifying
- Store non-perishable food for each person per day
- Medications / first aid supplies
- Flashlight / extra batteries / light sticks
- Toiletries (including toilet paper, feminine supplies, soap, personal hygiene supplies, etc.)
- Important documents (wills, insurance papers, etc.)
- Money, including change
- Multi-purpose tools, garbage & zip lock bags
- Radio (battery or wind-up) / extra batteries
- Special needs (elderly, baby, pets)
- Extra clothes / shoes / blankets

# What to do DURING



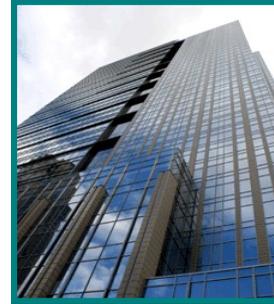
## INDOORS

- Get under a table and hold on or move to an inside wall.
- Move away from windows, bookcases, heavy mirrors and other objects that could fall.



## KITCHEN

- Move away from the refrigerator, refrigerator, and overhead cupboards.
- Open cabinets cautiously.
- Watch for falling objects.



## HIGH-RISE BUILDING

- Get under a desk or crouch near an inside wall.
- Stay away from windows and outside walls.
- Stay inside.
- Do not use the elevators.



## OUTDOORS

- Move away from trees, signs, and downed electrical wires or poles.
- Near buildings; duck into the doorway to protect yourself from falling bricks, glass and other debris.



## STORES

- Do not rush to an exit.
- Move away from display shelves. Stay away from windows.
- Protect your head with your arms.



## WHEELCHAIR

- Stay in your chair.
- Move to safe cover, if possible.
- Lock the wheels.
- Protect your head with your arms.



## STADIUM or THEATER

- Stay in your seat or get under your seat.
- Protect your head with your arms.
- Do not leave until the shaking is over.
- Leave in an orderly manner.



## DRIVING

- Drive to the side of the road.
- Avoid overpasses, power lines, and other hazards.
- Stay inside your vehicle until the shaking stops.

# What to do AFTER

## What to do after an earthquake:

- Call 9-1-1 only to report a life threatening emergency.
- If you are in a tsunami hazard area. Follow evacuation signs or quickly move to higher ground.
- Check yourself and those around your for injuries.
- Shut off the gas/propane only if you smell gas (usually smells like rotten eggs), hear a hissing sound, and/or you notice the meters dials spinning more rapidly than normal. Do not use matches, candles, open flames or electric switches indoors.
- Clean up spill of potentially harmful materials, such as medicines, drugs, and household cleaners.
- 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 for an official "all clear" notice. Radio stations will broadcast what to do, the location of emergency shelters, medical aid stations, and extent of damage.
- Evacuate severely damaged buildings. Do not re-enter until declared safe by authorities.

(for more detailed information go to: [www.emd.wa.gov](http://www.emd.wa.gov))

## For additional information visit these websites:

Washington State Emergency Management:

[www.emd.wa.gov](http://www.emd.wa.gov)

Federal Emergency Management Agency: [www.fema.gov](http://www.fema.gov)

United States Geological Survey: [www.usgs.gov](http://www.usgs.gov)

University of Washington Geophysics Program:

[www.geophys.washington.edu](http://www.geophys.washington.edu)

Washington State Department of Natural Resources:

[www.wa.gov/dnr](http://www.wa.gov/dnr)

Western States Seismic Policy Council: [www.wsspc.org](http://www.wsspc.org)

Cascadia Regional Earthquake Workgroup:

[www.crew.org](http://www.crew.org)

Alaska Tsunami Warning Center:

<http://wcatwc.arh.noaa.gov>