

The hazards of wind

Although the Pacific Northwest escapes the threat of hurricanes, the region is no stranger to strong, damaging winds. Each fall and winter season, several Pacific low pressure systems impact the Pacific Northwest, producing strong winds to 60 mph, and causing some power outages and property damage. About once every decade, storms with powerful winds of 70 mph or more pound the region, producing widespread power outages and significant property damage.

On Columbus Day, October 12, 1962, the strongest non-tropical windstorm ever to hit the lower 48 states in recorded American history struck the Pacific coast. The storm claimed 46 lives, injured hundreds more, and knocked power out for several million people.

The Columbus Day Storm is considered the benchmark of all windstorms, against which all others are compared. The storm struck northern California in the morning, moved quickly north along the Oregon and Washington coasts during the day before dissipating in British Columbia that night. Wind speeds peaked along the Oregon coast, with sustained winds of 150 mph and gusts up to 179 mph reported from Cape Blanco, and gusts to 138 mph at Newport, Oregon. Many wind reports were lost because of power outages, with peak winds likely occurring after the power was out.

The storm packed hurricane-force winds causing \$235 million in property damage (\$1.4 billion in 2001 dollars). In addition, it blew down over 15 billion board feet of timber (valued at \$750 million in 1962 dollars) from the west coast to as far inland as western Montana.

This brochure provides safety tips to help your household prepare for windstorms. By taking action now, you can save lives and reduce the damage caused by windstorms and other weather-related hazards.



Courtesy of The News Tribune



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Facts about windstorms

- ◆ Falling trees or blowing debris cause most fatalities, and also cause severe damage to buildings and vehicles.
- ◆ Power pole and line damage cause widespread power outage.
- ◆ Failure of roof cover and structures can lead to additional damage and entry of wind and rain into the house.
- ◆ Garage doors are the weakest link in the outer structure of a house. Failure at this point has a domino effect.
- ◆ Exterior load-bearing walls of buildings can fail resulting in the collapse of the roof.
- ◆ Weathered, loose window frames are exceptionally vulnerable during severe wind storms.
- ◆ A light metal building can totally collapse.
- ◆ Office buildings are generally structurally sound, but broken windows cause injuries inside and outside the building, leading to water damage.
- ◆ Bus stop shelters and other common areas where people seek shelter are vulnerable and could collapse, resulting in significant injuries and fatalities.

Stay informed

The best protection against weather-related and other natural hazards is knowing when potential dangers exist.

Weather Radios enable you to monitor weather-related forecasts, watches and warnings — 24 hours a day direct from the National Weather Service.

Weather Radios are available at most radio electronic retailers and Internet outlets for about the cost of a pair of shoes.

For additional information, contact:

**Washington State Military Dept.
Emergency Management Division**
www.wa.gov/wsem

National Oceanic and Atmospheric Administration
www.noaa.gov

National Weather Service
www.nws.noaa.gov

All photos in this brochure show damage resulting from the 1962 Columbus Day storm. Cover photo courtesy of The News Tribune

WINDSTORMS

Protect Your Family and Property from the Hazards of Violent Windstorms



**Washington State Military Dept.
Emergency Management Division**



**National Oceanic and Atmospheric Administration
National Weather Service**



Courtesy of Washington State Archives, Dept. of Transportation

What to do before a windstorm:

The list below will help you weather any storm safely and effectively.

- ◆ Contact your local Emergency Management Office or the National Weather Service to find out what types of storms are most likely to occur in your community.
- ◆ Assemble a disaster supply kit.
- ◆ Contact vendors to know the proper use of home generators.
- ◆ 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 evacuation routes.
- ◆ Know what emergency plans are in place at your workplace, school and daycare center.
- ◆ Conduct a home safety evaluation, including the garage door, and nearby trees.
- ◆ If you have an electric garage door opener, locate the manual override.

What to do during a windstorm:

- ◆ Don't panic. Take quick action to protect yourself and help others.
- ◆ Turn off the stove if you're cooking when the power goes out, and turn off natural gas appliances.
- ◆ If you are indoors, move away from windows or other objects that could fall, and to lower floors in multi-story homes.

- ◆ If you are outdoors, move into a building and avoid downed electric power lines, utility poles, and trees.
- ◆ If you are driving, pull off the road and stop away from trees. If possible, walk into a safe building. Avoid overpasses, power lines and other hazards.
- ◆ Listen to your radio for emergency instructions.

What to do after a windstorm:

- ◆ 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 indoors — open windows and leave the building. Turn off the gas source and call your gas company. Do not use matches, candles, open flames or electric switches indoors.
- ◆ If the power goes out, keep refrigerator and freezer doors closed to keep food frozen for up to two days.
- ◆ Provide assistance to your neighbors, especially the elderly or disabled.
- ◆ Try to make contact with your out-of-area phone contact, but avoid making local telephone calls.
- ◆ Monitor your portable or weather 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 the extent of damage.



Courtesy of The News Tribune

Disaster Supply Kit

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

- ◆ Store 1 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 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 a EAS-type NOAA Weather Radio with a tone alert.
- ◆ Sleeping bag, blanket 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.



Courtesy of Washington State Archives, Dept. of Transportation

