



# **Earthquakes**

When you feel the ground begin to shake Drop, Cover, & Hold On. This is the national standard for earthquake safety in our country. Conquer the instinct to run; conduct earthquake drills and practice earthquake safety.

#### Be prepared for an earthquake:

- Prepare disaster kits for your home, workplace, and vehicle.
- Establish an "out-of-area" contact and keep the phone number handy. This is the person family members will call if you are separated.
- Know what emergency plans are in place at your work, school, and daycare.
- Find out who in your area might need special assistance: elderly, disabled, or non-English speaking neighbors.
- Check with your veterinarian for animal care instructions in an emergency.
- Conduct a home hazard evaluation to determine what can be done to improve your home to protect it against earthquake damage.

#### **During an earthquake:**

• If you are **indoors.** stay inside. Move under a desk or sturdy table and hold on to it. If it moves, move with it. Stay away from windows, bookcases, refrigerators, heavy mirrors, hanging plants and other objects that could fall. Do not go outside until the shaking stops.



- If you are in a **crowded store or public place**, do not rush for an exit. Move away from display shelves holding objects that could fall on you, and "drop, cover, and hold on."
- If you are in a **theater or stadium**, stay in your seat, protect your head with your arms or get under the seat. Do not leave until the shaking stops.

- If you are **outdoors**, move to a clear area away from trees, signs, buildings or downed electrical wires and poles.
- If you are on a sidewalk near a tall building, get into a building's doorway or lobby to protect yourself form falling bricks, glass, and other debris.
- If you are driving, slowly pull over to the side of the road and stop. Avoid overpasses, power lines and other hazards. Stay inside the vehicle until the shaking stops.
- If you are in a wheelchair, stay in it. Move to safe cover if possible, lock your wheels, and protect your head with your arms.

#### After the earthquake:

- Be prepared for aftershocks.
- Check yourself and those around you for injuries.
- Call 9-1-1 only to report a life-threatening emergency.
- Try to contact your out-of-area phone contact.
- Listen to your radio.
- If you were evacuated, wait until you are told it is safe before returning home or going back inside.
- Stay away from downed power lines.
- Do not drive unnecessarily.
- If you smell gas or hear a hissing sound open a window and leave the building.
   Shut off the main gas valve outside.
- Check on neighbors, particularly elderly or disabled persons.

# Join Us

World's Largest Earthquake Drill

Third Thursday in October!



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122



# **Tsunamis**

A tsunami is a series of destructive waves affecting shorelines. Tsunamis are usually generated by earthquakes. Tsunamis may also be caused by underwater landslides or underwater volcanic eruptions.

#### Tsunami dangers:

- Tsunami waves can be created by events thousands of miles from beaches.
- Tsunami waves can be as tall as 30 feet when they come ashore; 60 feet in extreme cases.
   They can move inland from several hundred feet to several miles.
- A tsunami can cause a series of waves that arrive over several hours. Later waves can be larger than the first wave.
- Tsunamis move faster than a person can run.
- Tsunamis have enormous power enough to move rocks weighing several tons, boats, and other debris. Homes and other buildings can be destroyed. People can be killed or injured by the force of the water.

#### What to do at the beach:

Immediately head for higher ground: do not wait for a warning if:

- The ground shakes...drop, cover, and hold on, then run to high ground.
- You hear a siren...run to high ground.
- The ocean recedes dramatically from the shoreline...run to high ground.

#### Follow the tsunami evacuation signs:

 Tsunami evacuation route signs have been placed along coastal roadways to indicate the direction inland or to higher ground. In some places, there may be more than one route to safer areas. These routes may be marked with several signs showing you additional options for evacuation. You should know the evacuations routes for your area.





WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122

Web site: www.mil.wa.gov/ emergency-management-division 253-512-7000; (800) 562-6108

#### Tsunami definitions:

The National Oceanic and Atmospheric Administration (NOAA) can issue an official tsunami alert within minutes after an earthquake.

#### **Tsunami Warning:**

- A warning is issued when a tsunami with potential significant widespread flooding is imminent or expected.
- Move to higher ground or inland immediately.
- If no higher ground is nearby, go to upper levels of reinforced buildings.
- Continue to monitor your local radio and NOAA Weather Radio for further information.

#### Tsunami Advisory:

- An advisory reports a threat of a tsunami that may produce strong currents or waives dangerous to those in or near the water.
- Stay away from beaches, ports, and harbors and listen to your radio, NOAA Weather Radio, or TV for updates.
- Know well in advance what your safest evacuation route will be.
- Local officials will determine appropriate actions such as closing beaches, evacuating people, repositioning ships, etc.

#### Tsunami Watch:

- A tsunami watch is issued about events that may later impact the area. The watch may be updated to a warming or advisory - or cancelled.
- Listen to your radio, NOAA Weather Radio, or TV for updates.
- Know well in advance what your safest evacuation route will be.

**Tsunamis** 

# Volcanoes

### olcanoes/

Volcanic dangers include not only an eruption of a mountain and associated lava flows, but also ash fall and debris flows, often called Lahars. If you are near a mountain range, be familiar with your evacuation routes.

#### Before a volcanic eruption:

- Plan ahead. Have emergency supplies, food, and water stored.
- Plan an evacuation route away from rivers or streams that may carry mud or debris flow.
- Keep a battery-operated/wind-up radio available at all times. Have extra batteries.
- If there is an eruption predicted, monitor the radio or TV for evacuation information Follow the advice given by authorities.

#### After a volcanic eruption:

- Do not approach the eruption area.
- Be prepared to stay indoors and avoid downwind areas if ash fall is predicted.
- Evacuate if ordered to do so by authorities.
- Be aware of stream and river channels when evacuating.
- Move toward higher ground if mudflows are approaching.
- Follow the evacuation signed posted along roads and highways.



Remember! Take your Disaster Kit with you so you will have needed supplies.



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122

Web site: www.mil.wa.gov/ emergency-management-division 253-512-7000; (800) 562-6108

#### If there is ash fall in your area:

- Protect your lungs. Infants, the elderly and those who have respiratory conditions such as asthma, bronchitis, emphysema, or other chronic lung and heart disease should be particularly careful to avoid breathing ash.
- Stay inside. Close doors, windows, and dampers. Place damp towels at door thresholds and other draft sources.
- Those most at risk should limit outdoor activities. Keep children and pets indoors.
- When outside, wear a single-use (disposable) facemask. Remember that these masks may not fit small children properly. Note: Masks may make breathing more difficult for people with respiratory conditions.
- If you have asthma or another respiratory condition - or have a child with asthma - pay attention to symptoms such as sneezing and coughing, or more severe symptoms such as chest pain or tightness, shortness of breath and severe fatigue. Stay indoors and follow vour asthma management plan. Contact vour doctor if you have trouble breathing.
- Replace disposable furnace filters or clean permanent furnace filters frequently.
- If you wear contact lenses, protect you eyes by wearing glasses or protective goggles or by removing your contacts.
- If you find ash in your drinking water use an alternate source of drinking water such as purchased bottle water.
- Put stoppers in the tops of your drainpipes.
- Protect dust-sensitive electronics.
- Keep roofs free of ash in excess of four inches.
- Remove outdoor clothing before entering a building.
- Wash vegetables from the garden before eating them.
- Minimize travel ash may be harmful to your vehicle, frequently change oil and air filters.

# Volcanic Lahars



# Volcanic Lahars

Lahar is an Indonesian term that describes a hot or cold mixture of water and rock fragments that flows down the slopes of a volcano and typically enters a river valley.

#### Lahars

A lahar is also called a volcanic mudflow or debris flow. A mixture of water and volcanic debris that moves rapidly downstream. Consistency can range from that of muddy dishwater to that of wet cement, depending on the ratio of water to debris. They form in a variety of ways, chiefly by the rapid melting of snow and ice by pyroclastic flows, intense rainfall on loose volcanic rock deposits, breakout of a lake dammed by volcanic deposits, and as a consequence of debris avalanches.

#### Before a Lahar:

- Learn more about the volcanoes that affect you and locate volcano hazard zones.
- Contact your county geologist or county planning department, they may have specific information on areas vulnerable to lahars.
- Ask your local emergency management office, your school, your workplace about their plans for handling a volcanic eruption and potential lahar.
- Check with your insurance agent to see if your policy covers volcanic lahars. Is it part of your earthquake and flood insurance?

#### Make evacuation plans:

Lahars may cause roads to be blocked or closed. Plan at least two evacuation routes from every location where you would normally spend time (home, work, school, etc.)



# VOLCANO EVACUATION ROUTE

WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122

Web site: www.mil.wa.gov/ emergency-management-division 253-512-7000; (800) 562-6108

# If you are ON a volcano during an eruption:

- Move AWAY from hazard zones as fast as possible.
- You may be exposed to falling ash and volcanic rocks, lava flows, <u>lahars</u>, volcanic gases, and fast-moving torrents of hot rock and gas (pyroclastic flows).
- Your route to safety might be cut off. If you are on a snow and ice covered volcano, stay off valley floors and out of low-lying areas.
- Pay attention to closure signs and evacuation routes; they can save your life.

# If you are NEAR or DOWNWIND of a volcano during an eruption:

- Stay out of valleys and low lying areas that lead away from the mountain.
- Listen carefully to official reports via emergency broadcasts.
- If officials warn of an approaching lahar, seek high ground off the valley floor as quickly as possible, such as moving up a hillside. Then, seek shelter.
- Evacuate if necessary.

#### After a Lahar:

Until a lahar deposit solidifies, the thick slurry may not support a significant amount of weight.

- Do not attempt to drive across a lahar by vehicle and be cautious in walking across the deposit. As it travels downstream, the lahar can incorporate sharp metal and other hazardous materials.
- Use gloves and tools to clean up lahar debris.
- Be aware that lahar sediments will be remobilized by rain and normal river drainage for years after a volcanic event, which may result in destructive flooding.

# **Floods**



Floods are the most common and widespread of all natural disasters.

Take preparedness action now to minimize your risk and reduce the time and effort it takes to recover from a flood.

#### What to do before a flood:

- Call you local building department or office of emergency management for information.
- Listen to your radio or television for reports of flood danger.
- Plan for evacuation including where you are going to go and the route you will follow.
- Purchase flood insurance.
- Keep all insurance policies and a list of valuable items in a safe place.
- Take photos or a videotape of your valuables you keep in your home.
- Keep your car filled with gas.

#### What to do during a flood:

- Do not try to walk or drive through flooded areas. Water can be deeper than it appears and water levels rise quickly. Follow official emergency evacuation routes. If your car stalls in floodwater get out quickly and move to higher ground.
- Stay away from moving water; moving water six inches deep can sweep you off your feet. Cars are easily swept away in just two feet of water
- Stay away from disaster areas unless authorities ask for volunteers.
- Stay away from downed power lines.
- If your home is flooded, turn the utilities off until emergency officials tell you that it is safe to turn them on. Do not pump the basement out until floodwater recedes. Avoid weakened floors, walls, and rooftops.
- Wash your hands frequently with soap and clean water if you come in contact with floodwaters.

#### What to do after a flood:

- Wear gloves and boots when cleaning up.
- Open all doors and windows. Use fans if possible to air out the building.
- Wash all clothes and linens in hot water.
- Discard mattresses and stuffed furniture; they can't be adequately cleaned.
- Wash dirt and mud from walls, counters, and hard surfaced floors with soap and water.
   Disinfect by wiping surfaces with a solution of one cup bleach per gallon water.
- Discard all food that has come into contact with floodwater. Canned food is alright, but thoroughly wash the can before opening.
- If your well is flooded, your tap water is probably unsafe. If you have public water, the health department will let you know through radio and television if your water is not safe to drink. Until your water is safe, use clean bottled water.
- Learn how to purify water. If you have a well, learn how to decontaminate it.
- Do not use your septic system when water is standing on the ground around it. The ground below will not absorb water from sinks or toilettes. When the soil has dried, it is probably safe to again use your septic system. To be sure, contact your local health department.
- When floodwaters have receded watch out for weakened road surfaces.



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122





# Landslides & Mud Flows

Landslides and mudflows usually strike without warning. The force of rocks, soil, or other debris moving down a slope can devastate anything in its path.

#### Before a landslide:

 Contact your county geologist or county planning department, they may have specific information on areas vulnerable to landslides. Consult a professional geotechnical expert for advice on corrective measures you can take.

#### Minimize home hazards:

- Plant ground cover on slopes to stabilize the land and build retaining walls. Get expert advice in selecting the best ground cover for your area.
- Build channels or deflection walls to direct the flow around buildings.

Remember: If you build walls to divert debris flow and the flow lands on a neighbor's property, you may be liable for damages.

#### Make evacuation plans:

 Plan at least two evacuation routes since roads may become blocked or closed.

#### **Purchase Insurance:**

• Mudflow is covered by flood insurance policies from the *National Flood Insurance Program*. Flood insurance can be purchased through a local insurance agency.

# Learn to recognize the landslide warning signs:

- Doors or windows seem to stick or jam for the first time.
- New cracks appear in plaster, tile, brick, or foundations.
- Outside walls, walks or stairs begin pulling away from the building.
- Slowly developing, widening cracks appear on the ground or on paved areas.
- The ground slopes downward in one specific direction and may begin shifting in that direction under your feet.
- Bulging ground appears at the base of a slope.
- Water breaks through ground surface.
- Fences, retaining walls, utility poles, or trees tilt or move.
- Underground utility lines break.



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122

Web site: www.mil.wa.gov/ emergency-management-division 253-512-7000; (800) 562-6108

#### During a landslide:

#### • If inside a building:

- Stay inside.
- Take cover under a desk, table, or other piece of sturdy furniture.

#### • If outdoors:

- Run to the nearest high ground in a direction away from the path.
- If rocks and other debris are approaching, run for the nearest shelter such as a group of trees or a building.
- If escape is not possible, curl into a tight ball and protect your head.

#### After a landslide:

- Remember that flooding may occur after a mudflow or a landslide.
- Stay away from the immediate slide areas; there may be danger of additional slides.
- Check for injured and trapped persons near the slide area. Give first aid. Call 9-1-1 if there are life-threatening injuries.
- Remember to help your neighbors who may require special assistance —infants, elderly people, and people with disabilities.
- Listen to a battery-operated radio or television for emergency information.
- Check for damaged utility lines. Report damage to the utility company.
- Check the building foundations, chimney, and surrounding land for damage.
- Replant damaged ground as soon as possible.
   Erosion caused by loss of ground cover can lead to flash flooding.

Landslides & Mud Flows



# Hot Weather

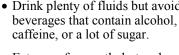
Severe heat may cause illness or even death. When temperatures rise to extreme highs, reduce risks by taking the following precautions.

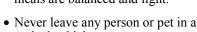
#### Hot weather precautions to reduce the risk of heat exhaustion and heat stroke:

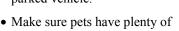
- Stay indoors and in an air-conditioned environment as much as possible unless
- Cover windows that receive morning or afternoon sun. Awnings or louvers can reduce the heat entering a house by as much as 80 percent.
- Drink plenty of fluids but avoid beverages that contain alcohol, caffeine, or a lot of sugar.
- Eat more frequently but make sure meals are balanced and light.
- parked vehicle.
- water.
- Avoid dressing babies in heavy clothing or wrapping them in warm blankets.
- elderly, ill or who may need help. If you might need help, arrange to have family, friends, or neighbors check in with you at periods.
- Salt tablets should only be taken if specified by your doctor. If you are on a salt-restrictive diet, check with a doctor before increasing salt intake.
- If you take prescription diuretics, antihistamines, mood-alerting or antispasmodic drugs, check with a doctor about the effects of sun and heat exposure.

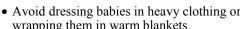


- you are sure your body has a high tolerance for heat.









- Check frequently on people who are least twice a day throughout warm weather



#### If you go outside:

- Plan strenuous outdoor activities for early or late in the day when temperatures are cooler; then gradually build up tolerance for warmer conditions.
- Wear a wide-brimmed hat, sun block and lightcolored, loose-fitting clothes, when outdoors.
- Take frequent breaks when working outdoors.
- At first signs of heat illness (dizziness, nausea, headaches, muscle cramps), move to a cooler location, rest for a few minutes and slowly drink a cool beverage. Seek medical attention immediately if you do not feel better.
- Avoid sunburn: it slows the skin's ability to cool itself. Use a sunscreen lotion with a high SPF (sun protection factor) rating.
- Avoid extreme temperature changes. A cool shower immediately after coming in from hot temperature can result in hypothermia, particularly for elderly or very young people.

#### If the power goes out or air conditioning is not available:

- If air conditioning in not available, stay on the lower floor out of the sunshine.
- Ask your doctor about any prescription medication you keep refrigerated. If the power goes out, most medications will be fine to leave in a closed refrigerator for a least three hours.
- Keep a few bottles of water in your freezer; if the power goes out, move them to your refrigerator and keep the doors shut.



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122



### Wildfires

Forest fires and wildfires threaten lives and destroy homes and natural resources. You can take action now that can help save lives and help prevent or reduce damage caused by wildfires.

#### What to do before a wildfire:

- Prepare your home for a wildfire. Clearly mark all driveways with names/addresses. Remove firewood, shrubs, and other combustibles away from the home. Call your local fire, forestry, or natural resources office, or got to <a href="https://www.firewise.org">www.firewise.org</a> for more ideas on home design and landscaping.
- Talk to your neighbors about wildfire safety and working together during a wildfire.
- Always call your local fire department before burning outside or using gas-powered equipment on dry, windy days.
- Be careful when cooking outdoors
- Identify local television and radio stations.
   They will have the latest information about fires in your area.
- Have an evacuation plan. You may need to leave your home to go to a safe place. Know where you are going and the possible routes to get there.
- Designate a "safety zone" in case all evacuation routes are burning.
- Put together an disaster kit. Include water, food, protective clothing—sturdy shoes, cotton or wool clothing, long pants, longsleeved shirts, gloves and a handkerchief. Store in easy-to-carry packs.
- Store copies of your vital records and lists/ photos/videotapes of valuable items in a safety deposit box. Include updated insurance policies.
- Make emergency plans for your pets and livestock.
- Family members should have an out-of area contact they can call to let them know they are safe when they are separated. Prepare out of area wallet cards with the contact's information.
- If you have special physical or medical needs, be sure to have an ample supply of medication and supplies to take with you if you evacuate. People with heart and lung disease must be especially careful around wood smoke. Discuss your emergency plans with your medical provider.

#### When wildfire threatens:

- Set up a ladder, garden hoses, and sprinklers on the roof. To conserve water, wait until the embers start falling.
- Put on protective clothing to protect your body, face, and lungs.
- Remain calm. Listen to the radio and television for fire reports and evacuation information. Follow the advice given by authorities. (however, if you feel threatened, do not wait to leave.)
- Phone/tell your family and friends you may need to evacuate and let them know where you are going. Use your out-of-area contact card.
- Pre-load your vehicle with emergency supplies, vital records, and other valuables.
   Face your vehicle in the direction of escape.
   Keep pets confined nearby.
- Prepare a note to post at your home that tells when you left and where you are going.

# If advised to evacuate, do so immediately:

- If there is time close all windows, vents, doors, and remove lightweight curtains. Shut off gas utilities.
- Turn on your home's lights.
- Post your preparedness note on the main entrance.
- Lock your doors.
- Choose a route away from fire hazards. Drive with your lights on and watch for emergency vehicles.
- If your evacuation route(s) are burning - go to your designated "safety zone."
- Do not attempt to re-enter the area until firefighters have declared it safe.



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122

# Winter Storms

# Winter Storms

Winter Storms can range from moderate snow over a few hours to blizzard conditions with blinding, wind-driven snow or freezing rain that last several days. The time to prepare is <u>before</u> the snowfall or ice forms.

#### **Preparing for winter storms:**

- Listen to your radio or television for winter storm forecasts and other information.
- Prepare your home for cold weather. Install storm windows, insulate outside walls, attics and crawl spaces. Wrap pipes, especially those near cold outer walls or in attics or crawl spaces. Repair leaks in the roof, around the doors, and in the windows.
- Have appropriate cold weather clothing available.
- If you have a kerosene heater, refuel your heater outside and remember to keep it at least three feet from flammable objects.
- Make sure your fireplace functions properly.
- Have rock salt and sand on hand for traction on ice.
- Fill your gas tank before the snow starts falling.

#### **During a winter storm:**

- Wear several layers of loose-fitting, lightweight, warm clothing rather than one layer of heavy clothing. Wear mittens rather then gloves. Wear a warm, woolen cap.
- Reduce the temperature in your home to conserve fuel.
- Heat only the areas of your home you are using. Close doors and curtains or cover windows and doors with blankets.
- Use alternative heat methods safely. NEVER use a gas or charcoal grill, hibachi, or portable propane heater to cook indoors or heat your home.
- Never use a generator indoors or in a garage or carport.
- Be careful when shoveling snow. Do not over exert yourself.
- Be sure to eat regularly. Food provides calories that maintain body heat.
- Do not drive unnecessarily.

- Watch for signs of frostbite and hypothermia
   — slurred speech, disorientation, uncontrollable shivering, stumbling, drowsiness, and body temperature of 95°

   Fahrenheit or less.
- If you become trapped outside, get out of the wind and stay dry. Build a lean-to or snow cave if nothing else is available. Do not eat snow; it will make you too cold.

#### If in your vehicle:

- Keep an emergency kit in your vehicle. Include a three-day supply of water and non-perishable food that can be eaten without being cooked. Include a blanket or sleeping bag for each passenger, a flashlight, cell phone, shovel, bag of sand or kitty litter, booster cables, flare, coffee can with lid and toilet paper.
- Make sure someone knows where you are going. Stay on the main roads.
- If you must stop, remain inside the vehicle. Use a bright distress flag or your hazard lights to draw attention to your vehicle.
- If trapped in a blizzard, clear your tail pipes and run your engine and heater for 10 minutes every hour. Open your window slightly.
- During night hours, keep the dome light on in the car so rescue crews can see your vehicle.

#### **Important Reminder:**

Keep your vehicle's gas tank at least half (1/2) full.



You may not be able to get to the gas station, the power may be out and you will not be able to pump gas, or the station may be out of gas.



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122



# **Winter Travel & Vehicle Safety**

Winter conditions call for different driving tactics.

Before leaving home make sure you have your Vehicle Maintenance Kit and your Personal Safety Kit in the vehicle.

#### Ice and Snow, Take it Slow!

- \* Slower speed
- \* Slower acceleration
- \* Slower steering
- \* Slower braking

#### Winter driving tips:

- Start early; give yourself extra time to reach your destination safely. It is not worth putting yourself and others in a dangerous situation just to save time.
- Make sure someone knows your travel plans. If possible, stay on main roads.
- Drive with your headlights on.
- Keep your windows free of fog and grime.
- Drive for conditions. Do not get overconfident with four-wheel drive.
   Remember the posted speed limits are for dry pavement.
- Look farther ahead in traffic. Actions by other drivers will alert you to problems and give you extra time to react.
- Trucks take longer to stop. Do not cut in front of them.
- Avoid using cruise control or overdrive.
- Winter road conditions often result in longer stopping distances. Drivers should allow additional room between their vehicles and others.
- Avoid abrupt actions while steering, braking or accelerating to lessen the chances of losing control of the vehicle.
- Slow down when approaching intersections, off-ramps, bridges or shady spots. These areas have the potential of developing black ice and can make driving hazardous.
- Stopping on snow and ice without skidding requires extra time and distance. If you have anti-lock brakes, press the pedal down firmly and hold it. If you do not have anti-lock brakes, gently pump the pedal.

#### If you become stranded:

- Stay in your car, turn on your flashers or use a bright distress flag to draw attention to your vehicle.
- Call for help and wait until it arrives.
- Listen to your portable radio for emergency messages.
- During night hours, keep the dome light on in the cars so rescue crews and see you.
- If trapped in a snow storm, clear your tail pipe and run your engine and heater for 10 minutes every hour. Open your window slightly to avoid vehicle fumes and carbon monoxide poisoning.

#### Winterize your vehicle:

- Check systems: ignition, fuel, exhaust, heating/cooling, and defroster.
- Check fluid levels: oil, antifreeze, windshield washer, etc.
- Check battery, belts, brakes, tire pressure and tread (purchase snow tires if needed).
- **Replace** non-working lights, keep them clean.
- Replace worn wiper blades.

#### Vehicle Maintenance Kit:

- Fire extinguisher, (know how to use it)
- Battery-operated/crank radio/extra batteries
- Cat litter/sand for traction on ice/snow
- Chains
- Flashlight/extra batteries/crank type
- Ice Scraper
- Jumper Cables
- Utility Knife
- Latex Gloves (2 pair)
- Light Sticks
- Map of Area
- Plastic Shelter Tarps
- Plastic Storage Bags
- Road Flares
- Shovel





Fill your gasoline tank before leaving. Always keep it at least half full.

Remember: 1/2 tank means empty!

# Winter Travel & Vehicle Maintenance Kit

WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122

# Windstorms



# **Windstorms**

Every fall and winter, windstorms cause extensive damage, including the loss of electricity. By taking action now, you can save lives and reduce the damage caused by windstorms and other weather-related hazards.

#### What to do before a windstorm:

- 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.
- If you have a home generator, make sure you know how to use it safely. Follow all instructions and contact the vendor, if necessary. Improper use of a generator can cause carbon monoxide poisoning.
- Find out who in your area might need special assistance, such as the elderly, disabled, non-English speaking neighbors.
- Check with your veterinarian for animal care instructions in a emergency situation.
- Know what emergency plans are in place at your workplace, school, and daycare center.
- If you have an electric garage door opener, locate the manual override.
- Conduct a home safety evaluation to find out which nearby trees could fall in a windstorm.
- If you live on a coastal or inland shoreline, be familiar with evacuation routes.
- Monitor your portable or weather radio for instructions.

#### What to do during a windstorm:

- Turn off the stove if you are cooking when the power goes out and turn off natural gas appliances.
- Never use a gas stove for heat.
- Never burn charcoal indoors.
- Never use a generator indoors or in a garage or carport.
- If you are indoors, move away from windows or objects that could fall. Go to lower floors in multi-story homes.
- If you are outdoors, move into a building. 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.

#### What to do after a windstorm:

- Check yourself and those around you for injuries.
- Call 9-1-1 only to report a life-threatening emergency.
- Evaluate damaged buildings, evacuate if necessary. Do not re-enter until declared safe by authorities.
- If you smell gas or hear a hissing sound 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 in doors.
- 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 calls.
- Continue to 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 and medical aid stations, and the extent of the damage.

#### **Important Reminder:**

Keep your vehicle's gas tank at least half (1/2) full.



You may not be able to get to the gas station, the power may be out and you will not be able to pump gas, or the station may be out of gas.



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122





# **Thunder & Lightning Storms**

Go indoors if, after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder.

All thunderstorms are dangerous. Every thunderstorm produces lightning. Dry thunderstorms that do not produce rain that reaches the ground are most prevalent in the western United States. Falling raindrops evaporate, but lightning can still reach the ground and can start wildfires. Although most lightning victims survive, people struck by lightning often report a variety of long-term, debilitating symptoms. Other associated dangers of thunderstorms include tornadoes, strong winds, hail, and flash flooding. Flash flooding is responsible for more fatalities - more than 140 annually - than any other thunderstorm associated hazard.

#### Before a thunderstorm strikes:

The following are guidelines for what you should do if a thunderstorm is likely in your area:

- Postpone outdoor activities.
- Get inside a home, building, or hard-topped vehicle (not a convertible). However, the steel frame of a convertible provides increased protection if you are not touching metal.
- Remember, rubber-soled shoes and rubber tires provide NO protection from lightning.
- Secure outdoor objects that could blow away or cause damage.
- Shutter windows and secure outside doors. If shutters are not available, close window blinds, shades, or curtains.
- Avoid showering or bathing. Plumbing and bathroom fixtures can conduct electricity.
- Use a corded telephone only for emergencies.
   Cordless and cellular telephones are safe to use.
- Unplug appliances and other electrical items such as computers and turn off air conditioners. Power surges from lightning can cause serious damage.
- Use your battery-operated NOAA Weather Radio for updates from local officials.

#### During a thunderstorm - if you are:

- *In a forest:* Seek shelter in a low area under a thick growth of small trees.
- <u>In open area:</u> Go to a low place such as a ravine or valley. Be alert for flash floods.
- <u>On open water:</u> Get to land and find shelter immediately.

#### Avoid the following:

- Natural lightning rods such as a tall, isolated tree in an open area.
- Hilltops, open fields, the beach, or a boat on the water.
- Isolated sheds or other small structures in open areas.
- Anything metal tractors, farm equipment, motorcycles, golf carts, golf clubs, and bicycles.
- Anywhere you feel your hair stand on end (which indicates that lightning is about to strike) squat low to the ground on the balls of your feet. Place your hands over your ears and your head between your knees.

Make yourself the smallest target possible and minimize your contact with the ground. DO NOT lie flat on the ground.

# Aid for victims of lightning: Call 9-1-1 for medical aid immediately.

The following are things you should check when you attempt to give aid to a victim of lightning:

- **Breathing** if breathing has stopped, begin mouth-to-mouth resuscitation.
- **Heartbeat** if the heart has stopped, administer CPR.
- Pulse if the victim has a pulse and is breathing, look for other possible injuries. Check for burns where the lightning entered and left the body. Also be alert for nervous system damage, broken bones, and loss of hearing and eyesight.



WASHINGTON MILITARY DEPARTMENT Emergency Management Division Camp Murray, WA 98430-5122