

# Safety Rules

NOAA's Weather-Ready Nation is about building community resilience in the face of extreme weather and water events. Part of being weather-ready is being prepared for whatever mother nature happens to throw our way. The accompanying safety rules are intended to assist in that goal. You can find more information on NOAA's Weather-Ready Nation webpage at <http://www.nws.noaa.gov/com/weatherreadynation/>.

## Blizzard

Although less frequent in our part of the country, blizzard or near-blizzard conditions can catch motorists off-guard. If you become trapped in your automobile...

- (1) Avoid overexertion and exposure. Attempting to push your car, shovel heavy drifts, and other difficult chores during a blizzard may cause a heart attack even for someone in apparently good physical condition.
- (2) Stay in your vehicle. Do not attempt to walk out of a blizzard. Disorientation comes quickly in blowing and drifting snow. You are more likely to be found when sheltered in your car.
- (3) Keep fresh air in your car. Freezing wet snow and wind-driven snow can completely seal the passenger compartment.
- (4) Run the motor and heater sparingly, and only with the downwind window cracked for ventilation to prevent carbon monoxide poisoning. Make sure the tailpipe is unobstructed.
- (5) Exercise by clapping hands and moving arms and legs vigorously from time to time, and do not stay in one position for long.
- (6) Turn on the dome light at night. It can make your vehicle visible to work crews.
- (7) Keep watch. Do not allow all occupants of the car to sleep at once.

## Boating Weather

Plan for your boating excursion several days in advance by monitoring NOAA Weather Radio for the latest 7-day forecast. While on the water, stay alert...

- (1) Keep an eye out for the following: the approach of dark, threatening clouds which may foretell a squall or thunderstorms; a steadily increasing wind or sea; any developing decrease in visibility such as fog. Any increase in wind velocity opposite in direction to a strong tidal current could indicate the formation of a dangerous rip tide condition where steep waves are capable of broaching a boat.

- (2) Check radio weather broadcasts for the latest forecasts and warnings.
- (3) Heavy static on your AM radio may be an indication of nearby thunderstorm activity.
- (4) **When thunder roars, it's best to head for shore.** However, if a thunderstorm catches you off guard, remember that not only gusty winds but also lightning pose a threat to safety. Water is an excellent conductor of electricity!
  - a. Stay below deck if possible.
  - b. Keep away from metal objects not grounded to the boat's protection system.
  - c. Do not touch more than one grounded object simultaneously, or you may become a shortcut for electrical surges passing through the protection system.
  - d. Put on a life jacket and prepare for rough waters.

## Flash Flood

Flash flooding is a major weather-related killer in the United States, causing more deaths per year than thunderstorms or tornadoes. When a flash flood warning is issued for your area, or the moment you first realize that a flash flood is imminent, act quickly to save yourself. You may have only seconds.

- (1) Get out of areas subject to flooding. This includes low-water crossings, ditches, etc.
- (2) Avoid already flooded and high-velocity flow areas. Never attempt to cross a flowing stream on foot.
- (3) **Turn around, don't drown.** In a vehicle, do not attempt to cross a water-covered roadway. The roadbed may not be intact under the water. It only takes a few feet of water to float a car!
- (4) If the vehicle stalls, abandon it immediately and seek higher ground. Rapidly rising water may engulf the vehicle and its occupants and sweep them away. Remember, most flash flood deaths occur in automobiles!
- (5) Be especially cautious at night when it is harder to recognize flood dangers.
- (6) Do not camp or park your vehicle along streams and creeks, particularly during threatening conditions.

## Fog

Fog severely impacts aviation operations, bringing air traffic to a halt when visibilities fall below a certain threshold. The fog can also make the morning commute to work or school a slow go, so give yourself plenty of time to reach your destination.

- (1) When driving, use low-beam headlights. High beams actually impair your vision, as the light is reflected into the driver's eyes.
- (2) Slow down and allow plenty of room between your vehicle and the vehicle in front of you.
- (3) Keep the radio volume low and listen for traffic you cannot see.

- (4) Use windshield wipers and defrosters as necessary for maximum visibility.
- (5) Be patient! Do not pass lines of traffic even on a straight stretch of roadway.
- (6) Do not stop on a freeway or heavily traveled road. If your car stalls or becomes disabled, move away from the vehicle to avoid personal injury.
- (7) Consider postponing your trip until the fog clears. Visibilities usually improve by late morning.

## Heat Wave

The heat claims about 175 American lives each year—primarily because its victims overexert themselves in the face of dangerous heat. Overexposure to the heat can also result in such disorders as sunburn, heat cramps, head exhaustion, or even heat stroke. When summer arrives and the heat turns on...

- (1) Slow down. Strenuous activities should be reduced, eliminated, or rescheduled to the coolest time of the day, usually early morning or late evening. Individuals at risk, including the elderly, the very young, or those on certain medications, should stay in the coolest available place, which is not always indoors.
- (2) Dress for summer. Loose-fitting, lightweight, light-colored clothing reflects heat and sunlight, and helps your body maintain its normal temperature.
- (3) Try not to eat as much. Foods (like proteins) that increase metabolic heat production also increase water loss.
- (4) Drink plenty of water or other non-alcoholic fluids even if you are not thirsty (unless your physician has directed otherwise). Your body needs water to keep cool.
- (5) Do not drink alcoholic beverages. This is the same advice given for extremely cold weather. Alcohol constricts the blood vessels, which can prevent adequate blood circulation to remove excess heat.
- (6) Do not take salt tablets unless directed by a physician.
- (7) Spend more time in air-conditioned places. Air conditioning in homes and other buildings markedly reduces danger from the heat. If you cannot afford an air conditioner, spending some time each day in an air-conditioned environment (such as a shopping center) affords some protection.
- (8) Do not get too much sun. Sunburn makes the job of heat dissipation even more difficult. Always wear adequate sunscreen if you must work outdoors.
- (9) **Beat the heat, check the back seat.** Never leave children or pets unattended in a closed vehicle.

## Thunderstorm & Lightning

Thunderstorms pose a threat in a number of ways, from lightning to hail and damaging winds. Watch for clues to an approaching storm, including increasing wind, flashes of lightning, rumbles of thunder, and static on your AM radio. Remember, if you can hear

thunder, you are close enough to the storm to be struck by lightning. Move to a safe shelter immediately! ***When thunder roars, go indoors...***

- (1) Get inside a home, sturdy building, or an all-metal (not convertible) automobile.
- (2) Do not use the telephone or electrical appliances unless in an emergency.
- (3) Avoid taking a bath or shower during a thunderstorm.
- (4) Do not stand underneath a natural lightning rod such as a tall, isolated tree or a telephone pole.
- (5) Avoid projecting above the surrounding landscape by standing on a hilltop, observation tower, or other elevated object.
- (6) In a forest, seek shelter in a low area under a thick growth of small trees. In open areas, go to a low place such as a ravine or valley, but watch for rising flood waters.
- (7) Get away from open water, tractors and other metal farm equipment, or small metal vehicles such as motorcycles, bicycles, or golf carts. Avoid boating and swimming.
- (8) Avoid wire fences, clotheslines, or metal pipes and rails. Put down your golf clubs!
- (9) Finally, if you are caught in a level field or in the open, away from shelter, and you feel your skin tingle or your hair stand on end, lightning may be ready to strike you. Crouch low to the ground with your hands on your knees. The idea here is to get as low as possible while minimizing contact with the ground.

## Tornado

Tornadoes occur most often in the spring, but can occur any time of the year. Remain alert for signs of an approaching tornado, including a dark greenish tinted sky, large hail, a loud roar (like a freight train or large waterfall), and a rotating wall cloud. When a tornado threatens, immediate action can save your life.

- (1) Stay away from all windows!
- (2) Avoid doors and outside walls. Always protect your head! Consider protecting it with a sturdy book or helmet. Remember that flying debris is responsible for most tornado deaths and injuries.
- (3) In homes and small buildings, seek shelter in a basement. Try to avoid locations below heavy objects on the floor above, such as a refrigerator, fireplace, or brick chimney. These objects could fall on you and cause injury or death.
- (4) If a basement is not available, go to an interior closet, bathroom, or hallway on the lowest floor possible. Close the door and get underneath something sturdy.
- (5) In schools, nursing homes, hospitals, factories, and shopping centers, go to pre-designated shelter areas. Interior hallways on the lowest floor are usually the safest.
- (6) In high-rise buildings, go to interior small rooms or hallways.
- (7) Leave mobile homes or vehicles and go to a substantial shelter. If there is not shelter nearby, lie flat in the nearest ditch or depression with your hands shielding your head. Be alert for rapidly rising waters in these low areas!

## Winter Storm

Severe winter storms can easily shut down an entire city in a matter of hours. The elements of snow, ice, strong winds, and bitterly cold temperatures make it nearly impossible to remain outdoors for any length of time. But you can keep ahead of winter storms by preparing ahead...

- (1) Check battery-powered equipment before the storm arrives. A portable radio or television set may be your only contact with the outside world for days.
- (2) Check your food stock, bottled drinking water, and extra supplies. Your supply should include food that requires no cooking or refrigeration in case of power failure.
- (3) Stay indoors during storms unless you are in peak physical condition. If you must go out, avoid overexertion.
- (4) Do not kill yourself shoveling snow! It is extremely hard work for anyone in less than prime physical condition, and can bring on a heart attack, a major cause of death during and after winter storms.
- (5) For winter travel:
  - a. If the storm exceeds or even tests your limitations, seek available refuge immediately.
  - b. Plan your travel and always have alternate routes.
  - c. Check the latest weather information on your radio.
  - d. Try not to travel alone; two or three persons are preferable.
  - e. Always fill your gasoline tank before entering open country, even for a short distance.
  - f. A suggested winter storm survival kit includes: blankets or sleeping bags; bottled water; high-calorie, non-perishable food; matches and candles; tissues and paper towels; extra clothing; first-aid kit; compass and road maps; shovel; sack of sand; flashlight or signal light with extra batteries; whistle; windshield scraper and brush; booster cables; tire chains; tow chains; fire extinguisher; catalytic heater; and axe.

For more information on the aforementioned weather elements, contact the National Weather Service in Paducah for the following safety brochures:

- ✓ "Safe Boating Weather Tips"
- ✓ "Floods: The Awesome Power"
- ✓ "Heat Wave: A Major Summer Killer"
- ✓ "Thunderstorms, Tornadoes, Lightning: Nature's Most Violent Storms"
- ✓ "Winter Storms: The Deceptive Killers"

You may also obtain a copy of these and other pamphlets by pointing your browser to <http://www.nws.noaa.gov/om/brochures.shtml>, part of the NWS Office of Climate, Water, and Weather Services web site.