

Winter storms may seem less ominous than other types of storms. However, each year 41 people are directly killed by winter storms and many more lives are lost due to poor driving conditions and extreme cold.

HYPOTHERMIA

Hypothermia is a serious condition and happens when your body loses heat faster than it produces. Warning signs of hypothermia in adults include:

- Shivering
- Exhaustion
- Confusion
- Memory loss
- Slurred speech
- Drowsiness

In infants:

- Bright red, cold skin
- Very low energy

If a person’s temperature is below 95°, get medical attention immediately. If medical help is not available:

- Get the victim to a warm location.
- Remove wet clothes.
- Warm the center of the body first. Use an electric blanket; skin-to-skin contact; or layers of blankets, clothing, or towels.
- Wrap their entire body in a blanket, including their head and neck.
- Give them warm, non-alcoholic, non-caffeinated beverages.
- Seek medical attention as soon as possible.



WIND CHILL INDEX

The Wind Chill index is the temperature your body feels when the air temperature is combined with wind speed. When wind speeds are high, serious health problems such as frostbite and hypothermia can occur, even when temperatures are only cool.

		TEMPERATURE (°F)								
Wind (mph)	Calm	40	30	20	10	0	-10	-20	-30	-40
	10	34	21	9	-4	-16	-28	-41	-53	-66
	20	30	17	4	-9	-22	-35	-48	-61	-74
	30	28	15	1	-12	-26	-39	-53	-67	-80
	40	27	13	-1	-15	-29	-43	-57	-71	-84
	50	26	12	-3	-17	-31	-45	-60	-74	-88
	60	25	10	-4	-19	-33	-48	-62	-76	-91

Frostbite Times 30 min 10 min 5 min

FROSTBITE

Frostbite occurs when the body is injured by freezing, and most often affects the nose, ears, cheeks, chin, fingers or toes. Frostbite can lead to permanent damage, including amputation. Signs of frostbite include:

- numbness
- a white or grayish-yellow appearance to the affected area
- skin that feels unusually firm or waxy

If you believe someone is suffering from frostbite, seek medical attention. Immerse the affected area in warm, but not hot, water. You can also use body heat to warm the area, but don’t massage the affected area as it can cause further damage. Don’t use a heating pad, heat lamp, or the heat from a stove, fireplace or radiator to warm a frostbitten area as these may cause burns.

WINTER STORM WATCHES & WARNINGS

Winter Storm Watch – Severe weather conditions may affect your area. A winter storm watch is issued 12 to 36 hours before the possibility of severe weather.

Winter Storm Warning – Four or more inches of snow are expected in your area within the next 12 hours, 6 or more inches within 24 hours, or ¼ inch or more of ice accumulation.

Blizzard Warning – Winds blowing at 35 miles per hour or greater and large quantities of falling or blowing snow (severely reducing visibility), are predicted to last for three hours or more.



WINTER STORMS



Plan ahead and protect yourself and your family against winter storms.

BEFORE A WINTER STORM

Winterize Your Home

At the beginning of the winter season:

- Insulate exterior water lines to prevent freezing.
- Insulate walls and attics, caulk and weather-strip doors and windows. Install storm windows or cover windows with plastic covering.
- Secure an alternate heat source, such as a kerosene heater, fireplace or wood stove, in case there's a power outage.
- Know how to shut off water valves in case a pipe bursts.
- Have your chimney or flue inspected each year.
- Check that smoke alarms and carbon monoxide detectors are working properly.
- Clear rain gutters, remove branches that could fall during a storm, and repair roof leaks.
- Make sure everyone knows of the location of the fire extinguishers, and how to use them.

During the winter months, always stock your home with several days':

- Food that requires no cooking or refrigeration, including baby food or formula.
- Clean water (5 gallons per person), in case your pipes burst.
- Medicines that anyone in your family needs.

Winterize Your Car

Many dangerous wintertime situations can be avoided simply by performing proper maintenance on your car. Before winter begins:

- Check antifreeze levels.
- Replace windshield washer fluid with a special winter mixture.
- Make sure the heater and defroster work properly.
- Put on good winter tires (make sure they have adequate tread) and check tire pressure.
- Check oil level and weight. Lighter-weight oils perform better in cold temperatures.
- Ensure all lights work properly, including hazards.
- Keep a half a tank of gas in your car at all times to prevent ice from forming in the tank or fuel lines.
- Prepare your Winter Emergency Car Kit.



Winter Emergency Car Kit

- Shovel
- Windshield scraper
- Blankets
- Flashlight & extra batteries
- Water
- Canned or dried foods (and a can opener)
- First aid kit
- Any necessary medications
- Waterproof matches
- Booster cables
- Bag of sand or cat litter (for traction)
- Compass
- Mobile phone (and car charger)
- Extra socks, hats, and mittens
- Tire chains (in parts of the country with heavy snow)
- Tow rope
- Brightly colored cloth or distress flag

Winterize Yourself

If you have to go outdoors, dress appropriately for the temperature and stay dry.

- Wear a hat.
- Wear several layers of loose-fitting, lightweight, but warm clothing.
- Outwear should be water resistant and made of tightly woven fabric.
- Wear mittens instead of gloves (they're warmer).
- Cover your mouth with a scarf to protect your lungs.



DURING A WINTER STORM

If you are indoors, the best approach to staying safe is to stay inside.

- Keep space heaters three feet away from anything flammable. If you use a kerosene heater, ensure proper ventilation. Never place a space heater on top of furniture.
- If you lose power, use battery-powered flashlights and never leave burning candles unattended.
- Don't use a charcoal or gas grill indoors – the fumes can kill you.
- Close off unused rooms, set the thermostat lower than normal, block cracks under doors, and close draperies at night.
- Infants and the elderly are at the highest risk of hypothermia. Make sure they are properly clothed and in a sufficiently warm room.
- Eat well-balanced meals and drink warm, sweet drinks or broth to help maintain your body temperature. Avoid caffeine and alcohol.
- Allow faucets to drip. This will prevent pipes from freezing.

If you are driving, avoid travel if you can. If you must travel, listen to travel advisories and:

- Let someone know your destination and estimated time of arrival.
- Stay on main roads.
- Travel during the day, with another person.
- Take a mobile phone with you.

If you are stranded in your car...

- Stay in the vehicle. Rescuers are also more likely to find you in your vehicle.
- Turn on hazard lights and tie a distress flag or a brightly colored piece of cloth from the radio antenna.
- Run the engine and heater about 10 minutes every hour. Open one window slightly when the engine is running, and remove snow from the exhaust pipe to reduce your risk of carbon monoxide poisoning.
- Stay awake, or take turns sleeping.
- Stay hydrated, but do not eat unmelted snow, it will lower your body temperature.
- Use blankets and extra clothing to cover yourself.
- Huddle with other passengers.
- Move your arms and legs to stay warm and improve circulation, but don't overexert yourself.
- Turn on the inside light at night to make it easier for rescue workers to find you.

AFTER A WINTER STORM

Stay Informed and Use Caution

Listen to weather reports and emergency information for when it is safe to travel again and be aware of road closures. Check with family and neighbors to make sure everyone is safe. If you are moving around outdoors, be careful for ice. Also, be aware of and avoid downed power lines.

Shovel Snow Safely

Cold weather puts extra strain on your heart and shoveling snow requires a lot of energy, which can lead to exhaustion, injury or even worse. Researchers have found an increase in fatal heart attacks among those shoveling snow after a heavy snowfall. To avoid injury, warm up your muscles as you would before any physical activity. Make sure you are properly hydrated and avoid caffeine or nicotine. Your body is already working hard to stay warm, so dress warmly and work slowly if you have to shovel snow or do other outdoor chores after a storm.

Be Prepared

By planning ahead for winter storms and extreme cold, most injuries and deaths caused by these conditions can be avoided.

