

SEVERE WINTER STORMS

Severe winter storms bring heavy snow, ice, strong winds and freezing rain. Winter storms can prevent employees and customers from reaching the facility, leading to a temporary shutdown until roads are cleared. Heavy snow and ice can also cause structural damage and power outages.

Planning Considerations

Following are considerations for preparing for winter storms:

- Listen to NOAA Weather Radio, local radio, television stations and check the local radar on a weather web site for weather information:
 - **Winter Storm Watch** -- Severe winter weather is possible.
 - **Winter Storm Warning** -- Severe winter weather is expected.
 - **Blizzard Warning** -- Severe winter weather with sustained winds of at least 35 mph is expected.
 - **Traveler's Advisory** -- Severe winter conditions may make driving difficult or dangerous.
- Establish procedures for facility shutdown and early release of employees.
- Store food, water, blankets, battery-powered radios with extra batteries and other emergency supplies for employees who become stranded at the facility.
- Provide a backup power source for critical operations.
- Arrange for snow and ice removal from parking lots, walkways, loading docks, etc.

Hypothermia

When exposed to cold temperatures, your body begins to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up your body's stored energy. The result is hypothermia, or abnormally low body temperature. Body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know it is happening and won't be able to do anything about it.

Hypothermia is most likely at very cold temperatures, but can occur even at cool temperatures (above 40 °F) if a person becomes chilled from rain, sweat, or submersion in cold water.

Victims of hypothermia are most often (1) elderly people with inadequate food, clothing, or heating; (2) babies sleeping in cold bedrooms; and (3) people who remain outdoors for long periods -- the homeless, hikers, hunters, etc.

Recognizing Hypothermia

Warnings signs of hypothermia:

- Adults
 - Shivering/exhaustion
 - Confusion/fumbling hands
 - Memory loss/slurred speech
 - drowsiness

- Infants
 - Bright red, cold skin
 - Very low energy

What to Do

- If you notice any of these signs, take the person's temperature. If it is below 95°, the situation is an emergency -- get medical attention immediately.
- If medical care is not available, begin warming the person, as follows:
 - Get the victim into a warm room or shelter.
 - If the victim has on any wet clothing, remove it.
 - Warm the center of the body first -- chest, neck, head, and groin -- using an electric blanket, if available. Or use skin-to-skin contact under loose, dry layers of blankets, clothing, towels, or sheets.
 - Warm beverages can help increase the body temperature, but do not give alcoholic beverages. Do not try to give beverages to an unconscious person.
 - After body temperature has increased, keep the person dry and wrapped in a warm blanket, including the head and neck.
 - Get medical attention as soon as possible.
- A person with severe hypothermia may be unconscious and may not seem to have a pulse or to be breathing. In this case, handle the victim gently, and get emergency assistance immediately. Even if the victim appears dead, CPR should be provided. CPR should continue while the victim is being warmed, until the victim responds or medical aid becomes available. In some cases, hypothermia victims who appear to be dead can be successfully resuscitated.

Outdoor Safety

When the weather is extremely cold, and especially if there are high winds, try to stay indoors. Make any trips outside as brief as possible, and remember these tips to protect your health and safety.

Dress Warmly and Stay Dry

- Adults and children should wear:
 - **a hat**
 - **a scarf or knit mask** to cover face and mouth
 - **sleeves** that are snug at the wrist
 - **mittens** (they are warmer than gloves)
 - **water-resistant coat and shoes**
 - **several layers of loose-fitting clothing**
- Be sure the outer layer of your clothing is tightly woven, preferably wind resistant, to reduce body-heat loss caused by wind. Wool, silk, or polypropylene inner layers of clothing will hold more body heat than cotton.
- **Stay dry** -- wet clothing chills the body rapidly. Excess perspiration will increase heat loss, so remove extra layers of clothing whenever you feel too warm. Also, avoid getting gasoline or alcohol on your skin while de-icing and fueling your car or using a snow blower. These materials in contact with the skin greatly increase heat loss from the body. Do not ignore shivering. It's an important first sign that the body is losing heat. Persistent shivering is a signal to return indoors.

Avoid Exertion

Cold weather puts an extra strain on the heart. If you have heart disease or high blood pressure, follow your doctor's advice about shoveling snow or performing other hard work in the cold. Otherwise, if you have to do heavy outdoor chores, dress warmly and work slowly. Remember, your body is already working hard just to stay warm, so don't overdo it.

Understand Wind Chill

As the speed of the wind increases, it can carry heat away from your body much more quickly. When there are high winds, serious weather-related health problems are more likely, even when temperatures are only cool.

Avoid Ice

Walking on ice is extremely dangerous. Many cold-weather injuries result from falls on ice-covered sidewalks, steps, driveways, and porches. Keep your steps and walkways as free of ice as possible using rock salt or another chemical de-icing compound. Sand may also be used on walkways to reduce the risk of slipping.

Be Safe During Recreation

If you are hiking, camping, or skiing during cold weather, avoid becoming overtired. Be prepared to take emergency shelter, and carry waterproof matches and paraffin fire starters with you. Carefully watch for signs of cold-weather health problems.

Be Cautious About Travel

- Listen for radio or television reports of travel advisories issued by the National Weather Service.
- Avoid traveling on ice-covered roads if at all possible.
- If you must travel by car, use tire chains.
- If you must travel, let someone know your destination and when you expect to arrive. Ask them to notify authorities if you are late.
- Check and restock the winter emergency supplies in your car before you leave.
- Never pour water on your windshield to remove ice or snow; shattering may occur.
- Don't rely on a car to provide sufficient heat; the car may break down.
- Always carry clothing appropriate for the winter conditions.

What to Do if You Get Stranded

- Staying in your vehicle when stranded is often the safest choice if winter storms create poor visibility or if roadways are ice covered. These steps will increase your safety when stranded:
 - Tie a brightly colored cloth to the antenna as a signal to rescuers.
 - Move anything you need from the trunk into the passenger area.
 - Wrap your entire body, including your head, in extra clothing, blankets, or newspapers.
 - Stay awake. You will be less vulnerable to cold-related health problems.

- Run the motor (and heater) for about 10 minutes per hour, opening one window slightly to let in air. Make sure that snow is not blocking the exhaust pipe -- this will reduce the risk of carbon monoxide poisoning.
- As you sit, keep moving your arms and legs to improve your circulation and stay warmer.
- Do not eat unmelted snow because it will lower your body temperature.
- Leaving your vehicle in poor visibility may cause disorientation and confusion in where you are going and increase your chances of being harmed by another moving vehicle.

Information gleaned from <http://www.workforce.com> and <http://www.cdc.gov>