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# SAFETY NEWSLETTER

## TOPIC: SURVIVING THE COLD WEATHER

Prolonged exposure to low temperatures, wind and/or moisture can result in a cold-related injury from frostbite and hypothermia. Here are some suggestions from the National Safety Council on how to keep warm and avoid frostbite and hypothermia.

### **Dress Properly**

Wear several layers of loose-fitting clothing to insulate your body by trapping warm, dry air inside. Loosely woven cotton and wool clothes best trap air and resist dampness.

The head and neck lose heat faster than any other part of the body. Your cheeks, ears and nose are the most prone to frostbite. Wear a hat, scarf and turtleneck sweater to protect these areas.

### **Frostbite: What to look for**

The extent of frostbite is difficult to judge until hours after thawing. There are two classifications of frostbite:

- Superficial frostbite is characterized by white, waxy or grayish-yellow patches on the affected areas. The skin feels cold and numb. The skin surface feels stiff and underlying tissue feels soft when depressed.
- Deep frostbite is characterized by waxy and pale skin. The affected parts feel cold, hard, and solid and cannot be depressed. Large blisters may appear after rewarming.

### **What to do: (Contact your doctor if you suspect that you have frostbite.)**

- Get the victim out of the cold and to a warm place immediately.
- Remove any constrictive clothing items that could impair circulation.
- If you notice signs of frostbite, seek medical attention immediately.
- Place dry, sterile gauze between toes and fingers to absorb moisture and to keep them from sticking together.
- Slightly elevate the affected part to reduce pain and swelling.
- If you are more than one hour from a medical facility and you have warm water, place the frostbitten part in the water (102 to 106 degrees Fahrenheit). If you do not have a thermometer, test the water first to see if it is warm, not hot. Rewarming usually takes 20 to 40 minutes or until tissues soften.

### **What not to do:**

- Do not use water hotter than 106 degrees Fahrenheit.
- Do not use water colder than 100 degrees Fahrenheit since it will not thaw frostbite quickly enough.

- Do not rub or massage the frostbite area.
- Do not rub with ice or snow.

### **Hypothermia**

Hypothermia occurs when the body loses more heat than it produces. Symptoms include change in mental status, uncontrollable shivering, cool abdomen and a low core body temperature. Severe hypothermia may cause rigid muscles, dark and puffy skin, irregular heartbeat and respiration, and unconsciousness.

Treat hypothermia by protecting the victim from further heat loss and seeking immediate medical attention. Get the victim out of the cold. Add insulation such as blankets, pillows, towels or newspapers beneath and around the victim. Be sure to cover the victim's head. Replace wet clothing with dry clothing. Handle the victim gently because rough handling can cause cardiac arrest. Keep the victim in a horizontal (flat) position.

### **Major Risk Factors for Cold-Related Stresses**

- Wearing inadequate or wet clothing increases the effects of cold on the body.
- Taking certain drugs or medications such as alcohol, nicotine, caffeine, and medication that inhibits the body's response to the cold or impairs judgment.
- Having a cold or certain diseases, such as diabetes, heart, vascular, and thyroid problems, may make a person more susceptible to the winter elements.
- Being a male increases a person's risk to cold-related stresses. Sad, but true, men experience far greater death rates due to cold exposure than women, perhaps due to inherent risk-taking activities, body-fat composition or other physiological differences.
- Becoming exhausted or immobilized, especially due to injury or entrapment, may speed up the effects of cold weather.
- Aging – the elderly are more vulnerable to the effects of harsh winter weather.

### **Winter Survival Kit for your Car**

During winter, keep the gas tank near full to help avoid ice in the tank and fuel lines. Equip your car with the recommended following items:

- Blankets
- First aid kit
- Windshield scraper
- Booster cables
- Road maps
- Mobile phone
- Compass
- Brightly colored cloth
- Canned compressed air with sealant (for emergency tire repair)
- Tool kit
- Paper towels
- Bag of sand or cat litter (to pour on ice or snow for added traction)
- Tow rope
- Tire chains (in areas of heavy snow)
- Collapsible shovel
- Container of water and high-calorie canned or dried foods and a can opener
- Flashlight and extra batteries

**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.

When working in exceedingly cold weather, try to remain hydrated, dress properly, use thermal insulating material on equipment handles when temperatures drop below 30 degrees Fahrenheit (-1°C), take a break from the cold, and become knowledgeable on the symptoms of cold-related stresses – heavy shivering, uncomfortable coldness, severe fatigue, drowsiness, or euphoria. Know the facts on cold exposure and know how to prevent cold related disorders.