



## WINTER SAFETY TIPS

### Working Outside

- Cold-related injuries can happen with even short exposure. This is especially true if you work in a greenhouse or other environment where your clothing gets wet.
- Your risk of a cold-related injury also increases with:
  - \* physical exhaustion
  - \* dehydration or a loss of body fluids
  - \* alcohol or tobacco use, which can lead to increased heat loss
  - \* diabetes, circulatory problems and certain other medical conditions

### Appropriate Attire

Be sure to wear the following clothes and bring extra in case yours get wet:

- Base layer of polyester or polypropylene to insulate and wick sweat away from the body.
- Intermediate layers of fleece, wool or down to insulate.
- Outer layer should be wind and waterproof, typically nylon coated with a film such as Gore-Tex.
- A warm hat that covers your ears.
- Gloves or mittens with the dexterity to complete tasks without having to remove.
- Dry socks, and dry shoes or boots.
- Scarf or ski mask.

### Treatment for Cold-Related Injuries

#### Frostbite:

Freezing of exposed body parts, including nose, cheeks, ears, toes and fingers. Like burns, severity of frostbite ranges from first to fourth degree and results in destruction of body tissue.

- Prevention: Dress warmly and move indoors once fingers or toes feel cold. Always keep hands and feet dry and ears covered.
- Treatment: Do not thaw the extremity if there is risk of refreezing. Refreezing leads to more damage.
  1. Fill a shallow container with water (98-105 degrees) to cover the frostbitten body part.
  2. Refresh water as it cools to keep temperature consistent. It should take about a half hour to thaw the frostbitten tissue. Do NOT warm extremity with fire or heater, or rub with snow.
  3. If pain persists after thawing, use acetaminophen (Tylenol or others), aspirin, naproxen (Aleve or others) or ibuprofen (Advil or others). If stronger pain measures are needed, contact a physician.

#### Hypothermia:

Life-threatening loss of body heat. Body temperature is 98.6 degrees normally and less than 95 degrees with hypothermia. Risk increases with wet clothing, alcohol and drug use, mental status, very young people and the elderly.

- Signs and Symptoms: Body slows as the temperature drops. Mental function is most affected. Hypothermia develops gradually and may go unnoticed as it affects thinking and reasoning. Initial hunger and nausea will give way to apathy as body temperature drops, followed by confusion, lethargy, slurred speech, loss of consciousness and coma. Often the affected person will lie down fall asleep and die. In some cases, the person will paradoxically remove clothes just before this occurs.

## Winter Safety Tips, Cont'd

- Treatment:

1. Move person to warm shelter. Remove wet clothing and cover with dry garments.
2. Call 911 if available as soon as possible. Monitor breathing and initiate CPR if it slows or stops.
3. Rewarming should be started by applying warm compresses to the chest, neck and groin. Hot water should not be used. Because there may be associated frostbite, direct heat should not be applied. Instead, use warm blankets and body-to-body contact.

### **Prepare for Outages at Home**

Remember three essentials: warmth and comfort; cooking and water; sanitation and health. Prepare an emergency kit (batteries, flashlight, foods, waters, bedding, candles, etc.) for at least 72 hours without power. Familiarize yourself with your home plumbing and heating systems in advance so you can quickly take action.

### **Home Heating Options**

- Common alternative sources are fireplaces, space heaters, wood-burning stoves and kerosene heaters. Some of these will not function without electricity, so have ample supply of wood, pellets, propane, etc.
- Do not use charcoal grills, unvented heaters, gas and electric oven and stove, or gas clothes dryer.

### **Emergency Cooking**

- An outdoor camp stove or gas/charcoal grill or indoor fireplace provides options
- Keep canned foods such as stews, soups, meats, beans or spaghetti to supplement powered milk, cereal, bread, dried meats and cheeses. Don't forget the can opener.

### **Water**

- Conserve the water in the toilet by turning off the supply at the base or disconnecting the handle.
- If you rely on a well, make sure you have plenty of stored water for cooking, drinking and hygiene.

### **Home Generators**

- Have generator installed by a qualified electrician.
- When selecting, pay attention to how much wattage it can accommodate to prevent overload.
- Never use a portable generator indoors. Place outdoors with the exhaust away from vents, windows and doors to prevent carbon monoxide from entering the house.
- Never try to power the house by plugging the generator into a wall outlet. For portable generators it is best to plug appliances directly in the generator using a heavy-duty, outdoor rated extension cord.

### **References**

- Working Outdoors in Cold Weather. Gemplers. Tailgate Training Tip Sheet-No. 49 Copywrite 2009. [gemplers.com/docs/tailgate-training-tips-sheets/49-cold-weather-en.pdf](http://gemplers.com/docs/tailgate-training-tips-sheets/49-cold-weather-en.pdf)
- How To Treat Frostbite. By Rod rouhard, About.com Guide. Updated March 25, 2011 [http://firstaid.about.com/od/heatcoldexposur1/ht/06\\_Frostbite.htm](http://firstaid.about.com/od/heatcoldexposur1/ht/06_Frostbite.htm)
- Benjamin Wedro, MD, FACEP, FAAEM, Hypothermia. [www.onhealth.com/hypothermia/article.html](http://www.onhealth.com/hypothermia/article.html)
- Winter Power Outage: Are You Prepared? Montana Extension Disaster Education Network. [montanahelp.org/Winter\\_Power\\_Outage\\_Are\\_You\\_Prepared.pdf](http://montanahelp.org/Winter_Power_Outage_Are_You_Prepared.pdf)

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