

## HEALTH EFFECTS OF A COLD

Extreme cold can cause a number of health problems. Hypothermia and frostbite are just two of the health effects induced by cold weather.

**Hypothermia** occurs when a person’s core body temperature is lower than 95°F. The condition is considered mild if a person’s core temperature is between 90 and 95°F. Victims of mild hypothermia may show symptoms including uncontrollable shivering, loss of dexterity, pale and cool skin, and incoherence.

Severe hypothermia occurs when a person’s core body temperature falls below 90°F. At this temperature shivering stops and the victim’s blood pressure, heart rate and respiration begin dropping. Symptoms of severe hypothermia include slurred speech, confusion, shallow breathing, unusual behavior and a slow, irregular heartbeat. In extreme cases, the victim appears dead.

Treat mild hypothermia by moving the victim to a warm, dry environment. Prevent further heat loss by covering the victim’s head and neck. Provide extra clothes or blankets. Give the victim warm liquids (no caffeine or alcohol) and high-energy foods. Consult a physician as soon as possible. Severe hypothermia demands immediate medical attention. Apply mild heat (comfortable to the elbow) to

the victim’s head, neck, chest, armpits and groin. Attempt to keep the victim conscious. As much as possible, prevent them from moving. Movement circulates cold blood back to the heart and can cause further damage.

**Frostbite** is frozen and sometimes dead tissue caused by prolonged exposure to cold temperatures, usually below freezing. The extremities of the body (ears, nose, fingers, hands, toes, and feet) are most often affected because the body reduces blood flow to them in an effort to maintain its core temperature.

Frostbite usually causes the skin to look pale or blue. In extreme cases, the skin may turn black. The skin will generally feel cold and numb, and may be either stiff or rubbery. Severe cases of frostbite may form blisters. Contrary to common belief, one should NEVER rub areas affected with frostbite. Rubbing actually increases the tissue damage. Move the victim to a warm, dry area. Place the affected area into warm water (100 to 104°F) until it becomes red, not until feeling returns. Consult a physician as soon as possible.

## PROTECTION

If you must be outside in cold weather, dress in layers including a hat, gloves and insulated boots. The inner layer of clothing should transfer moisture away from the skin (e.g., polypro or similar material), the middle layer should provide insulation and warmth (e.g., polar fleece or wool) while the outer layer prevents wind, rain and snow from getting in (e.g., nylon or Gortex®). Air between the layers also will provide additional warmth. Keeping dry in cold weather is crucial to avoiding hypothermia. If a person does get wet, quickly move the individual to a warm, dry area. Remove the wet clothing and cover the individual with dry clothes or blankets.

Avoid smoking and stimulants, such as caffeine and alcohol. Smoking decreases circulation to the extremities. Caffeine stimulates the heart and may cause it to circulate cold blood. Although alcohol may make a person feel warm, it actually causes the body to lose heat. Nutrition is a critical part of combating hypothermia. Your body needs food to burn to sustain core temperature. Eat a well balanced diet rich in complex carbohydrates. The dry air in cold conditions also can cause dehydration. It is important to rehydrate regularly.

### Attendance Signatures

<i>(Sign)</i>	<i>(Date)</i>	<i>(Sign)</i>	<i>(Date)</i>

*Additional training and information can be found in the LDD Environmental Health & Safety policies.*

*Training Provided by (Signature) : \_\_\_\_\_*