



Cold Weather Safe Work

Working in Cold Weather Conditions

Why this topic?

Many of our industry's activities occur in areas where severe winter weather is present. Whether in the forest, or in a mill, cold weather can severely impact a person's ability to perform work. This directly impacts their safety.

Basic Elements

Although training is not required, our employees often work in harsh and cold conditions. Cold weather exposure affects human performance. You may have noticed that cold weather causes shivering, and after awhile, some confusion and possibly frostbite.

The condition caused by prolonged exposure to cold is called HYPOTHERMIA. It's a condition where a person's body temperature lowers and several things can happen.

- ▲ HYPOTHERMIA is a drop in core body temperature to less than 98.6 degrees Fahrenheit. This is actually the body's reaction, and its attempt to conserve heat.
- ▲ FROSTBITE is a condition where body tissues begin to freeze. Usually, this happens where blood circulation is poor, or where body parts are exposed, such as lips, ears, fingers, toes, and the end of your nose.

- ▲ Wind intensifies the effects because it effectively lowers temperature. Water immersion, then exposure to cold, makes things worse. Also, using alcohol makes the situation much worse!

Understand the 3-Stages of Hypothermia

Stage 1: You'll see mild to strong shivering in an attempt to generate heat. There will be difficulty performing complex tasks with the hands as they become numb. There will be quick and shallow breaths with "goose bumps." Finally, the person may feel sick and somewhat tired.

Stage 2: You're going to see more vigorous shivering and muscle movement may appear to be "uncoordinated." Movements will be slow, and stumbling. There will be mild to moderate confusion, and the lips, ears, fingers and toes will turn blue.

Stage 3: The SHIVERS STOP, but the body core temperature DROPS BELOW 89.6 degrees Fahrenheit or less! There's difficulty in speaking or thinking. A person may be incoherent, irrational and walking is difficult. Exposed skin is blue and puffy, and tissues are freezing. Breathing becomes decreased, and the heart rate is INCREASING to the point of failure!

If HYPOTHERMIA does develop, get the person medical attention.



Frostbite occurs when exposed skin begins to freeze. The extremities first feel cold as the circulation to the area is cut-off and then can become numb. Skin that is red and painful, or white and numb, is becoming frostbitten and must be protected and rewarmed.



The National Weather Service issues advisories, watches and warnings to keep the public informed about hazardous weather conditions. Pay particular attention to dangerous temperature and wind warnings and plan your work clothing accordingly.

Tips to Prevent the Effects of Working in the Cold

- ▲ For cold weather, dress in layers of clothing so you can adjust to increasing or decreasing temperature environments.
- ▲ Synthetic or wool materials are actually BETTER than cotton, because it does not retain water. That way, liquids can't freeze next to your skin.
- ▲ If possible, AVOID exposure to damp locations. Anything you can do, such as minimizing the time in these environments will help.

SAFETY TRAINING SIGN-IN SHEET

Company Name: _____ Date: _____

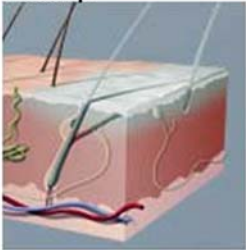
Subject: Cold Weather Safe Work

The following employees participated in this training. Sign and Print your name.

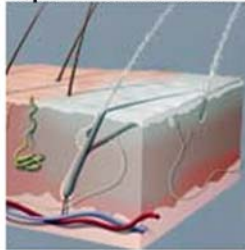
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FROSTBITE

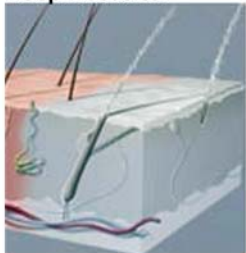
Frostnip



Superficial frostbite



Deep frostbite



Frostbite

- ▲ Is the freezing of deep layers of skin and tissue.
- ▲ Causes a pale, waxy-white skin color.
- ▲ Causes skin to become hard to the touch and numb.
- ▲ Usually affects fingers, hands, toes, feet, ears and/or nose.

Frostbite First Aid

- ▲ DON'T RUB the affected area. Frozen tissues will break apart, and it will be painful.
- ▲ Move the affected person to a WARM AREA.
- ▲ APPLY a loose gauze bandage. Then get the person to medical attention!

QUIZ

True or False

1. Hypothermia and Frostbite are the same thing. T or F
2. At the third stage of Hypothermia the body temperature drops to 89.6 degrees Fahrenheit or less. T or F
3. When you work in cold weather you should always wear heavy cotten to keep warm. T or F
4. In cold weather you should dress in layers so you can adjust to changing temperatures. T or F
5. Frozen tissue can crumble and break apart if treated roughly or rubbed. T or F

1.F, 2.T, 3.F, 4.T, 5.T

If you develop frostbite, you may not realize at first that anything is wrong, because the affected area may be numb. With prompt medical attention, most people recover fully from frostbite. However, if severe frostbite occurs, permanent damage is possible depending on how long and how deeply the tissue was frozen. In severe cases, blood flow to the area may stop, and blood vessels, muscles, nerves, tendons, and bones may be permanently damaged. If the frozen tissue dies, the affected area may need to be amputated.