

What You Can Do to Prevent Cold Stress Injuries

Winter weather is just around the corner, but did you know cold stress, or "hypothermia," can occur any time of year? In fact, most cases of cold stress develop in air temperatures between 30 and 50 degrees Fahrenheit. People who are exposed to lower temperatures are at risk for injuries ranging from frostbite to serious loss of body heat which could result in brain damage or death. This month's **Safety Topic** discusses what you can do to protect yourself from cold stress injuries.

Dress warmly, in layers. Preserving an air space between the body and the outer layer of clothing will help retain body heat. Choose fabrics such as cotton or wool which insulate but also allow sweat to evaporate. It is especially important to protect the feet, hands, head, and face. These parts of the body are farthest from the heart and are the hardest to keep warm. Almost half your body heat can be lost through the head, so cover it up as well.

Keep dry. Wetness greatly increases the chance of cold stress. Always have extra clothing available if there's a chance you could get wet. Keep your feet dry, they are very susceptible to frostbite.

Take a break. You may think it's wise to keep on working in cold temperatures. After all, working makes you break a sweat and you feel warmer. But if you become fatigued during physical activity, your body loses its ability to properly retain heat. This causes rapid cooling which can quickly lead to cold stress. When you take a break, be sure to replace lost fluids and calories by drinking warm, sweet, caffeine-free nonalcoholic drinks and soup.

Eat right. A proper diet provides your body with the nutrients it needs to withstand cold stress. A restrictive diet may deprive your body the ability to work well in cold temperatures.

Don't work alone. In cold-stress prone environments, a buddy system should be used. Look out for one another and be alert for the symptoms of cold stress.

Learn what to look out for. The effects of cold stress may not be apparent to its victim. The first symptoms of hypothermia are uncontrollable shivering and the sensation of cold. The heartbeat slows and may become irregular, and the pulse weakens. As the condition worsens, severe shaking or rigid muscles may be evident. The victim may also have slurred speech, memory lapses, and drowsiness. Cool skin, slow, irregular breathing, and exhaustion occur as the body temperature drops even lower. This is a serious condition requiring immediate medical attention.

Frostbite can occur without accompanying hypothermia. Frostbite occurs when the fluids around the body's tissues freeze. The most vulnerable parts of the body are the nose, cheeks, ears, fingers, and toes. Symptoms of frostbite include coldness and tingling in the affected part, followed by numbness; changes in skin color to white or grayish-yellow, initial pain which subsides as the condition worsens, and possibly blisters. Frostbite can cause irreversible tissue damage and requires immediate medical attention.

If you work in lower-temperature environments, always be alert for the possibility of cold stress. Follow these guidelines to help protect yourself from injury. Remember, it doesn't have to be freezing for cold stress to occur. Take steps to protect yourself.