Cold Stress

Cold Stress Safety Talk

How Cold is Too Cold?

As the weather becomes frigid during the winter months, workers who must brave the outdoor environment face the hazards associated with cold weather. Prolonged exposure to freezing temperatures can result in health problems such as frostbite and hypothermia.

There are three environmental factors that can contribute to cold stress:

- Low temperatures;
- High or cold winds; and
- Wetness.

Hypothermia and frostbite can strike even when temperatures are above freezing if high enough levels of moisture and wind are present.

Treating Cold Stress

Frostbite

Get to a warm, dry place and remove any wet or restrictive clothing that may inhibit blood flow.

Do not rub the skin – this can damage tissue.

Gently submerge the affected area in warm water (100 – 106°F) for 25 – 40 minutes. Hot water may damage tissue.

When normal skin color, feeling, and movement have returned, dry and wrap the area to keep it warm.

Hypothermia

Immediately call 9-1-1 and avoid leaving the victim alone.

Get the person to a warm, dry area, remove any wet clothing, and wrap the victim in warm blankets or clothing.

Have the person move his or her legs to generate heat in the muscles and, if possible, place hot packs in the armpits, neck, head, and groin area.

Do not place the person in a warm bath or rub the skin, as this may cause the heart to stop.

How Your Body Reacts to Cold Conditions

Hypothermia

Slurred Speech
Loss of Coordination
Memory Loss
Erratic Behavior

Frostbite

Tingling
Numbness
Blistering in Severe Cases
Skin color turns red, then purple, then white or very pale

Employees experiencing cold-stress related illness should seek medical attention immediately.

Preventing Cold Stress

Monitor yourself and your coworkers for signs of cold stress.

Work in pairs when working in cold conditions.

Wear several layers of loose clothing with a base layer made of a wicking material to keep moisture away from the skin.

Pay special attention to protecting feet, hands, face, and head. Up to 40% of body heat can be lost when the head is exposed.

Footgear should be insulated to protect against cold and dampness.

Go indoors to a warm, dry area for frequent short breaks to warm up and avoid fatigue.

Stay hydrated with beverages such as sports drinks; avoid caffeine and alcohol.