



Weekly Safety Meeting

Working in Cold Environments: Preventing Cold Stress

What are the best ways to prevent cold stress injuries and illnesses, and what is the best clothing to wear in cold environments?

Cold stress isn't just a hazard for outdoor workers. Anyone working in a cold environment may be at risk for cold stress. This could include an indoor workplace like cold storage or an outdoor job in construction or agriculture. Prolonged exposure to cold and/or freezing temperatures while on the job may cause serious health problems such as trench foot, frostbite, and hypothermia. In extreme cases, exposure to cold temperatures can lead to death.

Although OSHA does not have a specific standard that covers working in cold environments, under the Occupational Safety and Health Act (OSH Act) of 1970, employers have a duty to protect workers from recognized hazards, including cold stress hazards, that cause, or are likely to cause death or serious physical harm in the workplace.

Risk Factors for Cold Stress Include:

- Overexposure to cold temperatures;
- Increased wind speed, and the wind chill effect;
- Wet clothing and/or wet skin;
- Dressing improperly for the weather;
- Exhaustion;
- Health conditions such as high blood pressure, diabetes, or asthma;
- Poor physical conditioning; and
- Inadequate training on how to work safely in cold temperatures.

Important Tips to Prevent Cold Stress:

- Wear proper clothing for cold, wet, and windy conditions;
- Take frequent short breaks in warm, dry shelters;
- Schedule work for the warmest part of the day;
- Avoid exhaustion or fatigue;
- Keep extra clothing handy in case clothes get wet;
- Drink warm, sweet beverages, and avoid drinks with caffeine or alcohol;
- Eat warm, high-calorie foods;
- Use the buddy-system - work in pairs so that one worker can recognize the danger signs; and

- Stay dry in the cold because moisture or dampness, even from sweating, can increase the rate of heat loss from the body.

Dressing properly is extremely important to preventing cold stress. Wear at least three layers of loose-fitting clothing. Layers provides better insulation.

- An inner layer of thermal wear, wool, silk or synthetic (polypropylene) to keep moisture away from the body;
- A middle layer of wool or synthetic to provide insulation even when wet; and
- An outer wind and rain protection layer that allows some ventilation to prevent overheating.

Tight clothing reduces blood circulation and warm blood needs to be circulated to the extremities.

Other important clothing that can help prevent cold stress:

- Insulated coat/jacket (water resistant if necessary);
- Knit mask to cover face and mouth (if needed);
- Hat that covers the ears;
- Insulated gloves (water resistant if necessary) to protect the hands; and
- Insulated and waterproof boots to protect the feet.

Remember:

Cold environmental conditions can affect your body. Be aware of the signs or symptoms caused by hypothermia or frostbite and take appropriate action to correct the situation. If you take action quickly, the effects of cold stress may be controlled and lessened.

ICE AND SNOW MEAN TAKE IT SLOW!!

