



SAFETY INCENTIVE PROGRAM
950 Keynote Circle, Suite 10
Cleveland, Ohio 44131-1802
Telephone (216) 398-9860

January 2008

SIP TIP: PREVENTING COLD-RELATED DISORDERS



As the weather becomes "frightful" during winter months, workers who must brave the outdoor conditions face the occupational hazard of exposure to the cold. Prolonged exposure to freezing temperatures can result in health problems as serious as trench foot, frostbite, and hypothermia. Workers need to be especially mindful of the weather, its effects on the body, proper prevention techniques, and treatment of cold-related disorders.

Personal Protective Clothing

Perhaps the most important step in fighting the elements is providing adequate layers of insulation from them. Wear at least three layers of clothing:

- ④ An outer layer to break the wind and allow some ventilation (like Gore-Tex® or nylon);
- ④ A middle layer of wool or synthetic fabric to absorb sweat and retain insulation in a damp environment. Down is a useful lightweight insulator; however, it is ineffective once it becomes wet.
- ④ An inner layer of cotton or synthetic weave to allow ventilation.

Pay special attention to protecting feet, hands, face and head. Up to 40 percent of body heat can be lost when the head is exposed. Footgear should be insulated to protect against cold and dampness. Keep a change of clothing available in case work garments become wet.

Engineering Controls in the workplace through a variety of practices help reduce the risk of cold-related injuries.

- ④ Use an on-site source of heat, such as air jets, radiant heaters, or contact warm plates.
- ④ Shield work areas from drafty or windy conditions.
- ④ Provide a heated shelter for employees who experience prolonged exposure to equivalent wind-chill temperatures of 20°F (-6°C) or less.
- ④ Use thermal insulating material on equipment handles when temperatures drop below 30°F (-1°C).



Safe Work Practices, such as changes in work schedules and practices, are necessary to combat the effects of exceedingly cold weather.

- ④ Allow a period of adjustment to the cold before embarking on a full work schedule.
- ④ Always permit employees to set their own pace and take extra work breaks when needed.
- ④ Reduce, as much as possible, the number of activities performed outdoors. When employees must brave the cold, select the warmest hours of the day and minimize activities that reduce circulation.
- ④ Ensure that employees remain hydrated.
- ④ Establish a buddy system for working outdoors.
- ④ Educate employees to the symptoms of cold-related stresses -- heavy shivering, uncomfortable coldness, severe fatigue, drowsiness, or euphoria.

REMINDER: KNOWING THE FACTS ON COLD EXPOSURE CAN HELP ENSURE THAT THIS SEASON IS A SAFE AND HEALTHY ONE.