Layer Up for Warmth

Safety Talk

What’s at Stake?

Working in cold weather can have a chilling effect on your body. You are at risk for impaired motor function, impaired judgment and cold stress injuries and illness.

What’s the Danger?

In a cold environment, most of the body’s energy is used to keep the internal core temperature warm. Over time, the body will begin to shift blood flow from the extremities and outer skin to the core (chest and abdomen). This shift allows the exposed skin and the extremities to cool rapidly and increases the risk of frostbite and hypothermia. Combine this scenario with exposure to a wet environment, and trench foot may also be a problem.

Some of the risk factors that contribute to cold stress are:

- Wetness/dampness, dressing improperly, and exhaustion.
- Predisposing health conditions such as hypertension, hypothyroidism, and diabetes; and
- Poor physical conditioning.

How to Protect Yourself

Dressing properly is extremely important to preventing cold stress. The type of fabric worn also makes a difference. Cotton loses its insulation value when it becomes wet. Wool, silk and most synthetics, on the other hand, retain their insulation even when wet.

The following are recommendations for working in cold environments:

- Wear at least three layers of loose fitting clothing. Layering provides better insulation. Do not wear tight

fitting clothing.
    - An inner layer of wool, silk or synthetic to keep moisture away from the body.
    - A middle layer of wool or synthetic to provide insulation even when wet.
    - An outer wind and rain protection layer that allows some ventilation to prevent overheating.
- Wear a hat or hood to help keep your whole body warmer. Hats reduce the amount of body heat that escapes from your head.
- Use a knit mask to cover the face and mouth (if needed).
- Use insulated gloves to protect the hands (water resistant if necessary).
- Wear insulated and waterproof boots (or other footwear).

Final Word

Keep warm and stay safe this winter. Dress in layers and wear clothing that is insulated and ventilated to protect against cold weather hazards.