What is Cold Stress?

Cold stress occurs when the skin temperature, and eventually the internal body temperature, decreases. If the body is unable to warm itself, serious cold-related illnesses and injuries, permanent tissue damage, and death may result. Four factors contribute to cold stress: cold temperatures, wind, dampness, and cold water.

How can Cold Stress be prevented?

- Drink plenty of liquids. Avoid caffeine and alcohol.
- Reduce physical demands with breaks (in a warm area if possible) and pacing. This may be especially important for those with predisposing health conditions such as high blood pressure, diabetes, and hypothyroidism.
- Perform cold jobs in the warmest part of the day or a warmer part of the year.
- Monitor yourself and coworkers for signs of cold stress (Red skin [may or may not also have white or gray patches], tingling, pain, swelling, leg cramps, numbness, blisters, hard/firm skin, shivering, confusion, slurred speech, slow heart rate or breathing, loss of consciousness, weakness, dilated pupils).
- Protective clothing – Wool is better than cotton for wet conditions. Keep extras on hand.
- Heaters. Space heaters must be approved by Facilities Management/Environmental Health & Safety.

What should you do if you or someone else is suffering from cold stress?

- Seek medical attention.
- For Immersion/Trench Foot:
  - Remove wet shoes/boots and socks, then dry the feet (but don’t massage them).
  - Avoid walking and elevate the feet.
- For Frostbite:
  - Protect the area with a loose wrap.
  - Do NOT massage or warm the area, break blisters, or apply water.
  - Seek medical attention if you have the following: heart problems, are on a low-sodium diet, or if the cramps do not subside within one hour.
- For Hypothermia:
  - Call 911.
  - Move to a warmer place.
  - Remove wet clothing, place dry clothing if available, cover with a blanket and anything else that will provide warmth (a tarp or a garbage bag). Do not cover the face.
  - If medical help is more than 30 minutes away:
    - Give/drink warm, sweet drinks if alert.
    - Apply hot packs to armpits, sides of chest, neck, and groin.