



## Cold Weather Stress

By Zach Nicoludis, agronomist, Central Region | January 19, 2018



*Learn the warning signs of health risks associated with exposure to cold, wet weather.*

To some, being outdoors is a perk of working at a golf course. However, exposure to the elements can be risky, especially during weather extremes. Unfortunately, we tend to understand and respect the dangers of working in extreme heat far more than the dangers of working in extreme cold. Cold weather stress can be just as dangerous as heat stress. Golf course employees need to be aware of the different types of cold weather stress. They should also recognize the early symptoms of hypothermia, frostbite and trench foot.

**Hypothermia:** As someone's body temperature drops below 95 degrees Fahrenheit, hypothermia develops. This type of cold weather stress does not only occur at low temperatures. Hypothermia can also develop when temperatures are above freezing if someone becomes chilled from moisture exposure. The [United States Department of Labor \(USDOL\)](#) describes the signs of hypothermia as uncontrollable shivering, confusion, loss of coordination, slurred speech and slowed heart rate or breathing.

**Frostbite:** Cold temperatures can cause skin and tissue to freeze. According to the [USDOL](#), signs of frostbite include reddened skin with gray or white patches, tingling, aching and loss of feeling. Severe frostbite may require amputation.

**Trench Foot:** Trench foot can develop if feet experience prolonged exposure to cool, wet conditions. Since body heat is rapidly lost through wet feet, the body reduces circulation to the feet and skin tissue begins to die. The [National Institute for Occupational Safety and Health](#) describes the signs of trench foot as reddening skin, tingling, pain, swelling, leg cramps, numbness and blisters.

Whether it's winter tree maintenance, removing snow from putting greens or shoveling sidewalks near the clubhouse, there are plenty of opportunities for employees to be exposed to extreme cold. Remember this information to keep you and your employees safe this winter.

### **Central Region Agronomists:**

Bob Vavrek, regional director - [bvavrek@usga.org](mailto:bvavrek@usga.org)

John Daniels, agronomist - [jdaniels@usga.org](mailto:jdaniels@usga.org)

Zach Nicoludis, agronomist - [znicoludis@usga.org](mailto:znicoludis@usga.org)

[Information on the USGA's Course Consulting Service](#)

[Contact the Green Section Staff](#)