

OSHA Training Toolbox Talk: Cold Stress – Recognition of Hypothermia and Frostbite

[Reference: (5)(a)(1) of OSH Act]

Whether you're on a construction site, loading boxes inside a refrigerated storage room, or working in an unheated building on a freezing day, cold stress is something that can affect anyone. Prolonged exposure to cold temperatures can lead to serious injuries, illnesses, or, in the worst cases, even death. Today, we're going to talk about the two most common cold-stress-related conditions: hypothermia and frostbite, and how to respond when they are detected.

Hypothermia happens when your body loses heat faster than it can produce it, causing your core temperature to drop below its normal 98.6 degrees Fahrenheit. If it falls below 95 degrees, it becomes very dangerous and can progress quickly, especially in cold, wet, and windy conditions. Early signs of hypothermia include shivering, feeling fatigued, having trouble using your hands, and slurred speech. If hypothermia gets worse, a person might become confused or forgetful, have trouble walking or moving, experience a slow or irregular heartbeat, and even show dilated pupils. In extreme cases, the shivering might stop altogether because the body no longer has the energy to try to stay warm. Without intervention, the person will eventually become unconscious, and could die.

If you or someone else shows any signs of hypothermia, it's important to act quickly. So do not ignore the problem. Instead, move the victim to a warm, dry area right away. Take off any wet clothes and wrap yourself or the other person in dry blankets, towels, or any other warm layers you can find, making sure to cover the body, head and neck. If the person is awake and alert, giving them a warm—but not hot—drink, like tea or lukewarm coffee, can help. And in severe cases of hypothermia, it's critical to get medical help immediately, as it can be life-threatening.

Now let's talk about **frostbite**. Frostbite occurs when skin and the tissue beneath it freeze. This typically affects your fingers, toes, nose, and ears because, as temperatures drop, your body's natural reaction is to redirect blood flow away from these extremities and towards your most vital organs. Early signs of frostbite include numbness or tingling, followed by pale or grayish skin, and hard or waxy texture to affected areas. If the frostbite is severe, blisters might form.

If you suspect frostbite, don't rub the area, as that can cause even more damage. Instead, gently warm the affected area with a blanket or towel, or soak the area in warm—but not hot—water, ideally between 100 degrees and 105 degrees Fahrenheit. Once the affected area is warmed, it's important to get medical attention as soon as possible.

Does anyone have a question about cold stress injuries and illnesses? Please sign the training certification form to ensure you get credit for attending today's OSHA training toolbox talk.