

PROTECT YOUR EMPLOYEES FROM EXTREME COLD WEATHER



Cold temperatures can impact employees' abilities to do their work safely. The construction, transportation, manufacturing, agriculture, and sanitation industries are just some lines of work where workers are at risk for cold stress.

Though OSHA doesn't have a specific standard for employers to follow that covers working in cold environments, providing a place of employment that's free from recognized hazards, including cold stress, can help reduce serious physical harm. Knowing the types of cold stress, weather risks, and cold weather safety tips can help you prevent accidents this winter, and any time it gets cold.

Cold Stress Factors

What constitutes extreme cold can vary greatly across the country, though there are three conditions to assess that cause cold-related stress: air temperature, wind speed, and humidity. OSHA estimates that water (yes, this includes sweat), can displace heat 25 times faster than dry air. Though most people might assume that cold stress can only happen in below freezing temperatures, it can also happen in 50°F if it's windy or raining. This is why it's important to look at wind chill when temperatures begin to drop. Wind chill is the temperature the body feels when we combine air temperature and wind speed.

Types of Cold Stress

When it's cold, most of the body's energy is used to keep its internal core temperature warm. With time, blood flow will shift from extremities and outer skin to the chest and abdomen. When temperatures drop below "normal," and your body releases heat faster, this can cause physical stress. Cold stress happens when the body is unable to keep itself warm, and this may lead to illness or injuries.

Because average temperatures can vary greatly by geographic area, in regions that don't regularly see winter weather (Los Angeles and Tampa, as examples), near freezing temperatures would be considered factors for cold stress, while that might not necessarily be the case in consistently colder areas (for example, Chicago and Detroit).



ADDITIONAL RISK FACTORS THAT CONTRIBUTE TO COLD STRESS:

- Wetness/dampness
- Fatigue
- Improper attire
- Diabetes, hyperthyroidism, hypertension
- Poor physical conditioning

Cold Weather Safety Tips for Employees

Though extreme cold can be a serious risk for employee safety, certain jobs require workers to be outside and brave the elements. Fortunately, there are many proactive measures you and your workers can take to stay safe.



Encourage employees to do the following:

WEAR THE RIGHT CLOTHING

Wearing several layers of loose clothing provides insulation. Wool insulates better than cotton. Wear at least three layers of clothing: an inner layer, a middle layer, and an outer layer. The inner layer should be a synthetic weave, the middle layer should be down or wool, and the outer layer should be waterproof. Avoid tight clothing if possible, as it reduces blood circulation to extremities.

PROTECT HANDS, FEET, EARS, AND FACE

Wear a hat and insulated gloves. Also be sure to wear insulated, waterproof boots.

TRY TO STAY DRY

Wet or damp clothing can cause body temperature to drop, quickly. This puts people at greater risk of illness and injury.

HAVE EXTRA CLOTHES ON HAND

Have a change of dry clothing on hand to change into in case your clothes become wet or damp. If this happens, you should change out of wet clothes as soon as you can.

MONITOR PHYSICAL CONDITION

Know the symptoms of cold stress and listen to your body for signs that you might be experiencing it so you can take care of yourself sooner rather than later.

TAKE BREAKS AS NEEDED

Scheduling frequent breaks in warm, dry areas can help prevent cold stress.

AVOID SKIN CONTACT WITH COLD METAL SURFACES

Touching cold metal surfaces can cause frostbite, and your skin can freeze to the metal. When you try to remove yourself from the surface, it might rip your skin.

DRINK WARM SWEET BEVERAGES

It's just as important to stay hydrated in cold weather as when it's hot. Warm, sweet drinks or beverages with electrolytes help nourish your body as it uses energy to keep itself warm. Avoid drinking alcohol, and if possible, don't drink caffeine as these substances cause your body to lose heat at a faster rate.

LOOK OUT FOR ONE ANOTHER

Try working in pairs so that you and your coworkers can monitor each other for symptoms of cold stress and get help if needed.

As an employer, you can help foster a safe working environment in cold conditions by doing the following:

TRAIN WORKERS

Provide training about how to recognize and prevent cold stress, as well as how to administer first aid. Also train employees about which work practices and personal protective equipment can help them avoid cold stress.

ENGINEERING CONTROLS

Consider installing radiant heaters, and if possible, shield areas of work from wind to reduce wind chill.

PROVIDE WARM BEVERAGES:

Try to provide warm beverages to that workers stay hydrated and warm.

EQUIP VEHICLES WITH EMERGENCY KITS

Keep winter safety kits in company vehicles in case of an emergency.

CLEAR WALKING PATHS

Avoid slips and falls by keeping walking paths clear of snow. Spread salt on paved surfaces.

SCHEDULE WORK, INTELLIGENTLY

If possible, schedule heavy work during warmer hours of the day and allow workers to take breaks to warm up as needed. Try to assign workers in pairs so they can monitor each other for signs of cold stress.

Contact us for more tips and information about how to stay safe during extreme weather events and natural disasters.

