



Safety

Winter Safety Hazards in Manufacturing: 5 Ways to Stay Safe at Work

Roland Jones | Dec 24, 2020

In addition to the existing hazards in manufacturing facilities, winter brings its own set of challenges: snow and ice, cold stress and seasonal affective disorder to name but a few. Here are five winter safety dangers and ways to handle them.

Winter is here, but that doesn't mean the work stops. For those who work outdoors, the hazards of colder weather are numerous, ranging from hypothermia and dehydration to the increased chance of slips and falls.

Last year there were **2.8 million nonfatal workplace injuries and illnesses** reported across all industries, according to the U.S. Bureau of Labor Statistics.

Happily, there are measures you can take to reduce the likelihood of an injury or increase your comfort while on the job.

As winter arrives, manufacturers should take steps to prevent workplace injuries that are commonly associated with worsening weather conditions such as snow, ice and sleet.

"Whenever temperatures drop below normal and wind speed increases, heat can leave your body more rapidly."

OSHA

Now is also a good time to ensure that your facility has a well-developed safety plan that not only contributes to a strong safety culture, but also promotes an open dialogue between workers and management that means that safety measures are regularly improved and updated. Doing so can improve worker safety and minimize the possibility of **costly serious, nonfatal workplace injuries**.

Here are five common winter safety hazards and ways you can prevent them.

No. 1: Slips, Trips and Falls



Wetter weather means an increased possibility of slips, trips and falls at work.

A leading safety hazard during the winter, when temperatures plummet, is the impact of snow, sleet and ice. Wetter weather means wet streets, walkways and surfaces, which means an increased possibility of slips, trips and falls at work.

These injuries are the second most costly causes of disabling workplace injuries in the U.S., **costing businesses \$10.84 billion annually in medical and lost-wage expenses**. As such, they not only lead to serious injuries and citations, but also have a detrimental impact on the efficiency and productivity of your facility.

The causes are deceptively simple. A worker who enters a facility from the outside may track in ice, snow or water, making floors dangerously slippery. Ensuring you have absorbent mats at the entrance to the facility can help mitigate this risk. Pools of water from melting snow can also be an electrical shock hazard for any tools and devices used by workers. You can avoid this by educating workers about the dangers of electricity and water and by using wire and cable that is rated for damp conditions.

Anyone operating vehicles in or around your facility should be wary of the dangers of water, snow and ice. Make sure company vehicles have snow tires with suitable tread and functioning windshield wipers. Check fluids such as windshield washer regularly. It's worth scheduling a tuneup service for your vehicles before the start of winter to make sure they are fully functional. And keep your driveways and walkways clear of dangerous ice with salt or ice melt.

Read more: 10 Steps to Prevent Slips, Trips and Falls in the Workplace

No. 2: Temperature Checks for COVID-19



Always follow the manufacturer's guidelines for using a thermometer.

The policy of checking workers' temperatures has become standard practice among businesses to ensure that workers do not have symptoms of the coronavirus when they arrive for work.

Most companies use non-contact infrared thermometers (NCITs) for this task. However, their use is made more challenging in the winter, where people coming in from the cold might throw off standard thermometer readings.

The benefits to using a non-contact infrared thermometer are clear: the reduction of the risk of spreading the virus, given that there is no contact between the person and the device, and the speed at which the temperature may be taken. However, these devices are imperfect because the temperature of the environment, the person's exposed skin or the person's clothing can distort the reading.

To ensure the best possible reading, always follow the manufacturer's guidelines for using a thermometer. NCITs are typically held perpendicular to the person's forehead and at a distance (first ensure the environment is free from drafts and not in direct sunlight or near other heat sources). The individual screened should have a clean, dry forehead and should not be wearing headwear that could increase the temperature reading.

The U.S. Centers for Disease Control and Prevention (CDC) considers a person to have a fever if their temperature *is equal to or higher than 100.4°F*. For more information, see the U.S. Food and Drug Administration's *best practices for using NCITs*.

During the COVID-19 pandemic, the CDC recommends building operators protect staff by *ensuring that ventilation systems are operating properly* and allowing for as much circulation of outdoor air as possible.

Read more: Coronavirus and Workplace Safety: How to Manage Employees During a Pandemic

No. 3: Mental Health



Seasonal affective disorder, or SAD, affects about 6 percent of Americans.

Given the ongoing COVID-19 pandemic, the challenges of coping with existing mental health issues are likely to be intensified this year. For example, seasonal affective disorder, or SAD, is a winter-linked form of major depression that **affects about 6 percent of Americans**, according to the American Psychological Association.

SAD is linked to a biochemical imbalance in the brain that is prompted by shorter days and limited amounts of sunlight. People with SAD can be lethargic and therefore prone to accidents in the workplace.

Employers can mitigate the potential impact of SAD on workers by providing as much natural light as possible in workplaces, particularly in common areas such as break rooms or cafeterias.

The World Health Organization in Europe **recently warned** that it expects to see an increase in people struggling with “severe mental health challenges” over the next few months due to the ongoing COVID-19 pandemic in the region.

Read more: How to Manage Employee Anxiety in the Workplace During the COVID-19 Pandemic

No. 4: Cold Stress



Cold stress occurs by driving down skin temperature and eventually the internal body temperature.

Just as intense amounts of heat can lead to heatstroke, exhaustion or burns to manufacturing workers, cold stress also poses a danger to those exposed to extreme cold for prolonged periods. The most common cold-induced injuries are conditions such as hypothermia, frostbite or trench foot.

The International Safety Equipment Association (ISEA) has released a revised standard—**ANSI/ISEA 201-2019**—for cold weather protection. It notes that “clothing ensembles worn in cold temperature environments must meet a number of requirements in order to minimize injuries and illnesses.” The clothing “must provide the required level of insulation for the comfort and protection of the wearer in the exposure environment.”

The Occupational Safety and Health Administration (OSHA) does not have a specific standard that covers working in cold environments, but instead places the responsibility to protect workers on employers themselves. OSHA’s **Cold Stress Guide** notes that the risk factors that contribute to cold stress include:

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

When it comes to defining “extreme cold,” OSHA notes that this can be interpreted differently across the country. In regions that are not used to winter weather, near-freezing temperatures are considered “extreme.” But in colder climates, the temperatures may be more tolerable for workers.

“Whenever temperatures drop below normal and wind speed increases, heat can leave your body more

rapidly," OSHA says, noting that cold stress occurs by driving down skin temperature and eventually the internal body temperature (core temperature). "This may lead to serious health problems, and may cause tissue damage, and possibly death."

To keep workers safe, OSHA recommends employers:

- Ensure workers know the symptoms of cold stress and dress properly for cold weather.
- Monitor their physical condition and that of their co-workers.
- Keep workers dry in the cold because moisture or dampness (from sweating, for example) can increase the rate of heat loss from the body.
- Keep extra clothing (including underwear) handy in case workers get wet and need to change.
- Provide warm sweetened fluids (no alcohol).
- Use proper engineering controls, safe work practices and the appropriate personal protective equipment (PPE).

Read more: Cold Stress Protection: Tips for Cold Weather and Winter PPE Selection

No. 5: Cold Weather Attire



Cold weather PPE tends to be bulkier than regular clothing and can make it harder for workers to operate equipment.

Cold weather workwear and personal protective equipment (PPE) are vital lines of defense against injury and illness.

PPE for cold weather may include:

- A water-repellent outer barrier that repels moisture.

- Thermal undergarments that trap heat generated by the body inside the garment to reduce heat loss.
- Insulated headgear and footwear.
- Garment closures that retain warmth, especially around openings at the wrist or neck.
- Storm flaps that protect zippers (ensuring no water leaks inside) and reduce heat loss.

It's also worth noting that cold weather PPE tends to be bulkier than regular clothing, and so it can be harder for workers to operate equipment. The garments can also easily catch on handles or levers, so it's important to ensure you have adequate safety guards on your machinery.

For more innovative solutions to protect your team from the cold, check out MSC Direct's winter protection page.

What strategies or technologies are you using to minimize winter-related injuries and illnesses in your facility? Share your thoughts in the comments below.

www.mscdirect.com/betterMRO

Copyright ©2024 MSC Industrial Supply Co.