Cold Stress: Not Just a Risk for Workers Who Work Outside



It's easy to think of cold stress as only a workplace safety hazard in the winter. But for certain workers, such as those who work in walk-in freezers or refrigerated warehouses, cold stress is a hazard they face every day. Employers in industries where workers are continually at risk of developing frostbite, hypothermia and other cold stress-related conditions must take appropriate steps to protect them.

A frozen food company in Wisconsin learned this lesson the hard way. It was issued multiple safety violations by OSHA because of its inadequate protection of workers who work in its -40øF tunnel freezer.

OSHA initiated an inspection in May 2014 after it received a complaint about alleged unsafe working conditions. This investigation found that the company expected workers to work in extreme temperatures without properly insulated PPE.

"OSHA's investigation uncovered that entry-level workers bought thermal protective equipment because Birds Eye Foods had not provided it. It was ridiculous that workers needed to spend money on protections their employer failed to provide," said Kim Stille, OSHA's area director in Madison.

As a result of the inspection, the frozen-food processing plant was issued one repeat and 12 serious safety violations, which carry proposed penalties of \$109,400.

According to the OSHA notification of the citations, workers were exposed to temperature extreme hazards as they were required to work alone inside a tunnel freezer at temperatures $-40 \, \text{øF}$, with an additional wind chill created by compressor fans, on slippery snow and ice covered surfaces, with no method of communication or rescue in the event of a fall and/or emergency.

OSHA recommended the following methods to correcting the violations:

- Establishing a buddy system, in which it was required for two employees to work together whenever entering the tunnel freezers;
- Ensuring that all employees entering the tunnel freezer wear freezer gear covering all extremities, taking special care to protect hand and face;
- Having a set time limit allowed to work inside tunnel freezers;
- Installing an interlock switch so that the compressor fans shut off while an employee's inside the freezer, reducing the wind chill; and
- Allowing time for the floor to dry after cleaning so the remaining water doesn't freeze on the floor, creating an ice-covered surface or installing a grated walkway so that water can drain away.

Here are resources from the OHS Insider that you can use to protect your workers from cold stress, including:

- Cold stress tips
- A frostbite risk and control chart
- A handout on cold stress
- Cold Work Warm-up Break Schedule.