It’s Not Just Extreme Cold That’s a Safety Hazard for Workers



If your workers work outside, you probably know you must take steps to protect them when it’s very cold, especially if it’s also windy and snowing. And if your workers work inside freezers, you likely take appropriate steps to protect them from cold stress. But even moderately cold conditions can also pose a safety hazard for workers.

In fact, many indoor workers can be negatively affected by moderately cold work environments. For example, workers in food preparation and processing, the cold storage industry, supermarkets or transportation may spend most of their shifts in moderately cold conditions. And of course, workers who work outside can be exposed to both moderate and extreme cold.

The National Institute for Occupational Safety and Health (NIOSH) issued an evaluation report that contains recommendations to improve the thermal comfort of workers who work in moderately cold environments, such as food preparation workers who may spend eight hours or more in refrigerated rooms. The case study, which looked at an airline catering facility, was published in the Journal of Environmental Health.

In the NIOSH study, researchers found several sources of worker discomfort including air drafts, insufficient use of

gloves for tasks requiring manual dexterity, and a lack of knowledge about how to work safely in a cold room.

Following the evaluation, NIOSH recommended that the employer take the following steps to improve the thermal comfort of employees working in moderately cold rooms (Although these recommendations were specific to the airline catering facility evaluated, some apply to other workplaces where workers spend most of their work shift in moderately cold temperatures):

- Install equipment to reduce drafts and condensation
- Encourage workers to change out of wet clothes
- Consider having workers wear thinner, fingertip-less liner gloves underneath required plastic gloves
- Implement a replacement schedule for gloves and other PPE
- Rotate workers between warmer and colder areas throughout the workday
- Provide hand warmers outside of the cold rooms
- Minimize work requiring fine manual dexterity in the cold rooms when feasible
- Educate workers on the symptoms of cold stress.

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
- Spot the Safety Violation: Dress Properly to Avoid Cold Stress
- A handout on cold stress
- A model cold exposure plan
- Model Cold Stress Policy
- Cold Stress Checklist
- Cold Work Warm-up Break Schedule.