Protecting Workers from the Effects of Heat

This fact sheet provides employers with measures they should take to prevent worker illnesses and death caused by heat stress. The IBT Safety and Health Department actively participates in regulatory and nonregulatory efforts to prevent heat-related injuries and illnesses both on the federal and state levels.

Workers have the right to working conditions that do not pose a risk of serious harm, to receive information and training about workplace hazards and how to prevent them, and to file a complaint with OSHA to inspect their workplace without fear of retaliation.

At times, workers may be required to work in hot environments for long periods, both indoors and outdoors. When the human body is unable to maintain a normal temperature, heat illnesses can occur and may result in death.

Occupational Factors that May Contribute to Heat Illness:

- High temperature and humidity
- Low fluid consumption
- Direct sun exposure (with no shade) or extreme heat
- Limited air movement (no breeze or wind)
- Physical exertion
- Use of bulky protective clothing and equipment

Key Elements of a Heat Illness Prevention Program:

- A person designated to oversee the eat Illness Prevention Program
- Hazard identification
- Water, rest, shade message
- Acclimatization
- Modified work schedules
- Training
- Monitoring for signs and symptoms
- Emergency planning and response

Acclimatization

Acclimatization is a physical change that allows the body to build a tolerance to working in the heat. It occurs by gradually increasing workloads and exposure and taking frequent breaks for

water and rest in the shade. Complete acclimatization may take up to 14 days or longer depending on factors relating to the individual, such as the increased risk of heat illness due to certain medications or medical conditions or the environment.

New workers and those returning from a prolonged absence should begin with 20% of the workload on the first day, increasing incrementally by no more than 20% each subsequent day.

During a rapid change leading to excessively hot weather or conditions such as a heatwave, even experienced workers should begin on the first day of work in excessive heat with 50% of the normal workload and time spent in the hot environment, 60% on the second day, 80% on day three, and 100% on the fourth day.

Engineering Controls Specific to Indoor Workplaces

Indoor workplaces may be cooled using air conditioning or increased ventilation, assuming that cooler air is available outside. Other methods to reduce indoor temperature include providing reflective shields to redirect radiant heat, hot insulating surfaces, and decreasing water vapor pressure, e.g., by sealing steam leaks and keeping floors dry. The use of fans to increase the airspeed over the worker will improve heat exchange between the skin surface and the air unless the air temperature is higher than the skin temperature. However, increasing airspeeds above 300 ft. per min. may have a warming effect. Industrial hygiene personnel can assess the degree of heat stress caused by the work environment and make recommendations for reducing heat exposure. Please take our survey on Occupational Heat Injury and Illness Exposure by clicking on the link here: https://airtable.com/shrTuPU8INufiiKhf

For concerns, questions, and information, contact the
IBT Safety and Health Department at
(202) 624-6960 or ibtsafety@teamster.org or visit: https://teamstersafety.org