



Winter Worksite Safety

Industries with outdoor workers include the construction, mining, transportation, warehousing, utilities, agriculture, forestry, surveying, and various service sectors. Outdoor workers are exposed to many types of hazards during the winter months. These hazards vary depending upon the specific line of work, geographic region, season, and duration of time spent outdoors. While on the surface winter hazards may appear obvious, employers should ensure their workers are properly trained on the dangers associated with working outdoors in winter, including recommendations for preventing and controlling their exposures. Some of the winter hazards faced by outdoor workers include hypothermia, frost bite, overexertion, dehydration, and slips and falls.

Engineering Controls – The first step in preventing and controlling exposures is the implementation of engineering controls. Begin with trying to shield the work area from windy or wet conditions. The site should contain a source of heat such as air jets, radiant heaters or contact warm plates. There should also be a heated shelter where employees can take breaks to warm-up. Equipment handles should be covered with thermal insulating material once temperatures drop below 30 degrees Fahrenheit.

Safe Work Practices – Implementing and adhering to safe work practices is critical with outdoor work sites. Examples would include allowing a period of adjustment by scheduling small interval exposure until workers become acclimated. Try to schedule work for the warmest time of the day if possible. Allow employees to set their own work pace to avoid fatigue or exhaustion. Avoid consuming caffeinated beverages as caffeine causes the body heat to be lost more rapidly. Plenty of water should be consumed to avoid the risk of dehydration. Never allow a worker to work alone. Ensure a cell phone or two-way radio is on hand so that someone can call for help if needed. Walkways should be shoveled and salted and shortcuts over snow piles or unplowed slopes should be avoided. Extra precautions should be used when entering or exiting vehicles or equipment. Never Jump from an elevated position onto a snowy or icy surface. Working surfaces such as ladders, scaffolds, roofs, bridges and similar surfaces become slick and accumulate ice well before ground surfaces. They are elevated, open and allow air to circulate around them. All working surfaces should be inspected for ice or snow accumulation. If no ice or snow is visible but weather conditions are conducive to ice formation, inspect the work surface periodically to ensure that ice hasn't begun to accumulate. If it does, either remove it, or remove the people from the hazard.

PPE - There is no specific standard for protection from cold working environments, however the provision requiring appropriate PPE whenever employees are exposed to hazardous cold working conditions does apply. Technological advances in cold weather gear have resulted in a new level of protection that combines protective clothing with a heat source for exposed workers. Heated winter liners, vests, head/ear bands, and neck warmers are now available from leading providers of PPE. The protective clothing contains heating "pockets" that accommodate heat packs that produce temperatures of 130(F) degrees to 140(F) degrees for up to 8 hours and beyond. The packs come in various sizes and can be used in standard clothing, gloves and boots in addition to the PPE specifically designed to use them. Having a personal source of heat allows workers to stay on the job longer and improves productivity. Footwear should provide adequate insulation, be water resistant and have a deep tread to provide secure footing. Composite or fiberglass may be a better option than steel toes due to the temperature transfer qualities. Because about 40% of the body's heat can be lost through the head, insulated hats are vital. When hard hats must be worn, quality winter liners designed specifically for the hard hat should be worn

under them. The liners should extend enough to cover the neck and the sides of the face. Working on roofs in inclement weather poses unique hazards. Personal fall restraint systems may be needed for each employee, depending on the roof configuration and existing fall protection already installed.

Working outdoors in winter exposes workers to many hazards but with the right training, good engineering controls, specific safe work practices and top quality PPE, outdoor, cold weather work sites can be safe and productive.

By: Dave Boozer, ECRM of Indiana

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