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Safety Agenda

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Cold Weather Hazards: Hypothermia and Slips, Trips and Falls

Winter weather heightens two safety concerns: **hypothermia** and **slip, trip and fall** injuries.

Hypothermia (an internal body temperature of 95F or lower) occurs when body heat is lost faster then it can be replaced. Ambient temperatures do not have to be below freezing for **hypothermia** to occur. Contact with water can cool the body 25 to 30 times faster than air. Perspiring heavily, or working in rain or snow will cool the body much faster than in dry conditions.

Those who work outside during winter months need to be alert to the dangers of **hypothermia**, and to be prepared.

Some are more susceptible than others because of related health problems. Anti-depressants, sedatives, tranquilizers of cardiovascular medicines prevent the user's body from regulating temperature normally. Workers who are in poor physical condition or have a poor diet are also at higher risk. Older workers are more vulnerable than younger ones.

Prolonged exposure to cold temperatures can result in frostbite and trench foot, as well as **hypothermia**. Uncontrolled shivering, slurred speech, clumsy movement, fatigue and confused behavior are danger signs and call for emergency help when observed. The victim should be removed from the cold environment, provided external heat, hot drink, and carbohydrates and proteins. No alcohol, caffeine, or nicotine.

Prevention of **hypothermia** starts with proper clothing for cold, wet and windy conditions, including layers so workers can adjust to changing conditions. OSHA's Cold Stress Card provides further recommendations, and can be downloaded from www.osha.gov.

Slip, Trip and Fall (STF) incidents are consistently first or second in the causes of workers' compensation claims. The majority of these losses occur on walks, staircases, ramps and parking lots. Slippery and/or uneven surfaces, debris, inadequate lighting, missing handrails on staircases and ramps, poor maintenance of surfaces and adverse weather conditions can all play a part.

Snow and ice exponentially increase and challenge operations on loading docks and in areas of high exposure such as parking lots, sidewalks, entrances, outdoor stairs and visitor reception areas. **STF incidents** and injuries are bound to increase, unless there is a comprehensive program of prevention in place.

STF prevention in outdoor areas begins with inspection and documentation of employee footwear. Non-slip soles are a must. The organization must have a clear footwear policy requiring that footwear is maintained according to the manufacturer's recommendation, and it must be enforced by consistent disciplinary action. Employees should be instructed on the types of hazards that cause foot injuries and prevention measures. They should know how to report temporary or permanent **STF** hazards, damaged footwear, wet surfaces, poor lighting and near misses.

The second step in **STF** prevention in outdoor areas is to create an inspection program for walks, staircases, ramps and parking lots – those areas that are historically the most frequent sites of **STF**

incidents. Walks must be smooth without being slippery, and they must be well maintained, including the removal of debris. They should be pitched to provide drainage, and walks leading to steps and building entrances should be properly illuminated. (Areas inside entrance doors should be covered with rubber mats during inclement weather months.)

About one million staircase **STF** incidents occur each year. Some are caused by human actions such as running, jumping, or horseplay. After careful review of claims data, erect warning signs in critical areas, warning users of the dangers of these actions.

Other **STF** on stairs are due to physical defects in the stairs. Key hazards to look for in your inspection program are:

- Irregular steps
- Lack of handrails
- Poor illumination
- Winding staircases
- Doors with direct access to stairways
- Lack of intermediate landings
- Poor maintenance
- Slippery steps
- Worn steps
- Lack of warning strips where the surface may be uneven or where there is an abrupt change in the direction of the staircase or ramp

Ramps can also be the sites of **STF** injuries. Consult building codes which establish the elevation, especially for handicapped users. Look for:

- A non-slip surface, using brushed concrete, lines cut across the concrete, installation of friction strips, or treatment of the surface with a non-slip agent.
- A handrail on at least one side of the ramp
- Curbs, walls, railings and projecting surfaces that prevent people from falling off the ramp.
- Design that prevents the accumulation of water or ice.

Parking lots are frequent sites of **STF** injuries. Typical elements that should be addressed in your inspection program are:

- Regular, smooth surfaces – lack of potholes, cracks, or abrupt changes in level
- Speed bumps that are properly designed
- Posted, safe pedestrian access routes to and from parking lots
- Adequate lighting
- Wheel stops (a frequent tripping hazard) are painted a bright yellow
- Speed bumps can be slippery if painted, especially when they are wet. Consider erecting warning signs. A three foot walking area should be provided at either end of speed bumps

Injuries from STF are among the most frequent and significant reductions in quality of life for workers, and increases in workers' compensation costs. Your comprehensive loss control program should include attention to conformance with local and state building codes, and an inspection/maintenance program for all areas that could foreseeably cause STF. Details of inspections, repairs, complaints and corrective action should be carefully recorded. A loss control checklist should be used.

The Theory of Expectation

"When the walking conditions encountered are contrary to that of our expectations, the probability for an accident is increased."

HAVE A SAFE AND HAPPY HOLIDAY SEASON!