



Company Name: _____ Job Site Location: _____
 Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 452: Changing Weather Safety

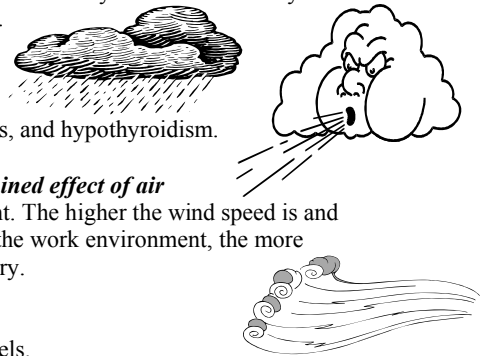
Introduction: With the arrival of winter, outdoor workers face an additional occupational hazard, exposure to the cold. Outdoor workers need to be especially mindful of the weather, and its effects on the body. There are four environmental conditions that cause cold-related hazards, low temperatures, high/cool winds, dampness, and cold water. Following are guidelines for dealing with changing weather on the job.

Personal Protective Clothing:

- **Dress appropriately.** Wear at least three layers, an outer layer to break the wind and allow some ventilation (like Gortex or nylon); a middle layer of wool, down, or synthetic pile to absorb sweat and retain insulating properties when wet; and an inner layer of cotton or synthetic weave to allow ventilation and escape of perspiration. The body tries to maintain an internal (core) temperature of 98.6 degrees, (37°C).
- **Layer clothing** to create air pockets that help retain body heat. Layering also makes adapting to changes in weather and level of physical exertion easier. Keep a dry change of clothing available if work garments become wet.
- **Workers gain** body heat from food and muscle activity, so eat right and stay physically fit.
- **Pay special attention** to protecting feet, hands, head, and face. Keep the head covered (much of our body heat is lost when the head is exposed). Fingers and hands lose their dexterity at temperatures below 59°F. Use insulated gloves to protect fingers from the cold.
- **Wear foot gear** that protects against cold and dampness. Footgear should be insulated and fit comfortably when socks are layered.
- **Avoid** wearing dirty or greasy clothing because such garments have poor insulating properties.

Major risk factors contributing to cold-related stress:

- **Inadequate** or wet clothing. Change clothing immediately after moisture penetration.
- **Drug use** or certain medications may inhibit the body's response to cold or impair judgment.
- **Increased risk to the cold** may include colds or other diseases such as diabetes, atherosclerosis, and hypothyroidism.
- **Susceptibility** increases with age.



The following signs may help to estimate wind speeds:

- **5 mph** light flag just moves
- **10 mph** light flag is fully extended by the wind
- **15 mph** raises a newspaper sheet off the ground
- **20 mph** wind capable of blowing snow



Wind chill involves the combined effect of air

temperature and air movement. The higher the wind speed is and the lower the temperature in the work environment, the more protective clothing is necessary.

Protection from flying debris in high winds:

- **Erect** toe boards, screens, or guardrail systems to prevent objects from falling from higher levels.
- **Erect** a canopy structure and keep potential fall objects far enough from the higher level so the objects cannot be blown over the edge. Secure all objects that high winds could displace. Guardrails must be installed at all open sides.
- **Barricade** the area where objects could fall, and prohibit employees from entering the barricaded area.

Portable heaters on the job site:

- **When heaters** are used in confined spaces, special care shall be taken to provide sufficient ventilation in order to ensure proper combustion, maintain the health and safety of workmen, and limit temperature rise in the area.
- **Heaters used in the vicinity** of combustible tarpaulins, canvas, or similar coverings shall be located away from the coverings. Securely fasten coverings in high winds. Always make sure a fire extinguisher is readily available on the work site.
- **Portable electric salamanders** are for use in areas where ceiling height is 15 feet or less. Solid fuel salamanders are prohibited in buildings and on scaffolds. Salamanders are clean, odor-free instant heat with no need for fueling or refueling, increasing the degree of safety for workers.
- **Do not** use in wide-open, high bay, or outdoor areas. Use where temporary localized enclosed heat is needed.
- **Inspect** controls of all portable heaters. Remove immediately if any damage has occurred.

Conclusion: Outdoor workers always need to be especially mindful of the weather. The hazards mentioned here are only a few of a long list of hazards that can be found on a construction site. A properly run construction site takes the effort of every person on the site to create a safe work environment. Remember that good, on-going hazard assessment, along with proper employee training, is the key to getting the job done safely. Wearing the proper clothing in cold weather, being aware of the changing wind patterns, and using portable heaters responsibly will reduce the adverse hazards associated with changing weather conditions.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____
 Personnel Safety Violations: _____

Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

Foreman/Supervisor's Signature: _____
 These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.