

Toolbox Talks 2

084: Unsafe Conditions: Cold Weather

Discussion leader duties for this session:

Review company policies related to cold weather. Try to think of a few unsafe cold weather conditions you have seen. Be prepared to use them as examples.

What this Safety Talk covers:

This Safety Talk addresses unsafe conditions that arise during cold weather.

Discussion notes:

Background

Cold weather is itself an unsafe condition. The hats, gloves, and coats we wear to protect us from it are really a form of PPE. But cold weather brings with it other unsafe conditions, and those can lead to injury even if you've managed to keep warm.

Slick conditions

Slick conditions create falling hazards. We're going to talk about slick conditions separately, because there are several things you can do to protect yourself.

- Walk around ice, not on it. This seems obvious, but many people don't do it.
- Remember that you can't always see ice. When it's rainy, icy, or snowy outside, assume a slipping hazard is present.
- When walking on a surface you that may be slippery, adopt the martial artist's walk. Most people walk with their center of gravity forward of their feet. They lean forward and fall onto their feet as they walk. This means if one foot goes out from under you, down you go. The martial artist walks with the center of gravity over his or her feet. Your center of gravity is in your hips; keep them over your feet.
- Limit what you carry. Make it easier for you to see and keep your balance, by not carrying bulky or heavy things in your arms when it's slick. But making two trips doubles your exposure, so what should you do? It's safer to make two trips with 30% chance of falling, than one with 90%. Consider using a sled or cart, too.

Other unsafe conditions in cold weather

- Vehicular visibility problems. Windows tend to fog in cold weather. Combine this problem with slick roadways and crosswalks, and things can get dicey fast.
- Inadequate ventilation for fuel heaters. The fumes from these heaters are toxic. If you provide enough ventilation to get rid of the toxic fumes, there isn't much heat left. For enclosed spaces, find a different heat source.
- Unapproved heaters being used. Don't use makeshift heating rigs, consumer-grade portable heaters brought from home, or heating devices not approved for use in your particular location. Report any such items to your foreman.
- Combustibles near heaters. Flame and fumes are the two main dangers. Keep combustibles at least two feet from the sides and rear of a heater. The distance in front of the heater depends on how much heat it puts out, but twenty feet is a good rule of thumb for the typical 120V portable heater. More is better.
- Work area insulated with unapproved materials. Flammable materials create a fire hazard. Materials that aren't flammable may create problems with escape or rescue.

Review and discussion

1. What's an obvious, but often disregarded, protective measure for slick conditions?
2. Can you always see ice? What does this mean you should do if it's snowing?
3. What's the martial artist's way of walking, and how can this prevent you from falling when walking on slick surfaces? Might this also be helpful when carrying things in nonslick conditions?
4. If you need to carry tools and equipment across a slick surface, how can you reduce the falling hazard?
5. In what way are vehicles more dangerous during cold weather?
6. What's the main thing you need plenty of when using fuel-based heaters instead of electric?
7. What's an unapproved heater, and why is it a problem? *[Note to Presenter: Heaters not approved by the company may be perfectly safe to use on the job. Then again, they might not be. Policy on approving such items varies with the company. Often, this is left to the discretion of the foreman. It also varies with the situation. For example, a company may not allow personal heaters onsite. Find out what personal heater policy exists on the job you're working, and also follow the rules for temporary power and portable cords if those are needed for such heaters.]*
8. How far do combustibles need to be from heaters? *[Note to Presenter: The farther, the better. The minimum distance from a given heater depends on the heater construction and its output. Each heater manufacturer has guidelines. These may be stated on the heater, or you can find them on the manufacturer's Website.]*
9. Can you use just any materials to insulate a work area? Why or why not?
10. Winter gear is, in fact, cold weather PPE. But, it's not necessarily designed for industrial use. Certain brands of outerwear are designed for construction work, and we all recognize those brands of jackets or boots at a glance. What are some features you will find in proper winter gear suitable for electrical work, and what features make that gear completely unacceptable? *[Note to Presenter: The number one question to ask is, "Does this contain polyester, rayon, microfibers, or other artificial fibers?" If so, don't wear it. Many clothing items have polyester linings, microfiber shells, or a rayon layer. These materials will melt down into the skin, making an otherwise minor arc flash burn intensely damaging. They magnify the effects of any burn event. You also need to look for quality construction. For example, inexpensive "winter boots" that look warm but lack proper foot support will lead to chronic foot and back problems and daily fatigue. Before buying an item of cold weather gear to wear on the job, think about how its features, construction, materials, and general design will affect your safety, comfort, and ability to work efficiently.]*

Participant's Signature and Date
