



Loss Control Insight

Layer Up – Winter Weather

Layering Up for Winter Weather

As the saying goes, “an ounce of prevention is worth a pound of cure.” Cold weather working conditions set the stage for countless safety hazards, many of which can lead to painful and debilitating bodily injuries, including fatality. Rather than responding to cold illnesses after they’ve already set in, prepare ahead and prevent them from happening to begin with.



SORRY, SON...THERE'S NO APP FOR THAT

When it comes to dressing properly for the cold, layering is by far the most effective technique. The greatest benefit of layering is its functionality and flexibility due to the fact that you’re wearing, well, layers. As working conditions change – fluctuations in atmospheric temperature throughout the day, as well as body temperature as work becomes more or less strenuous – you can add or remove layers as necessary in order to maximize comfort, as opposed to working with a single layer that doesn’t give you any control over temperature regulation. Being able to make these adjustments on the fly and respond to changes makes it easy to stay safe and compliant.

The basic, go-to layering system is comprised of three layers: an inner layer which manages moisture and perspiration, a middle layer for insulation and trapping heat, and an outer layer which acts as a protective barrier against the elements, such as snow and wind.

To be the most effective, each layer needs to work in synergy with the other, which means construction and material are important factors to consider during selection.

Layer 1:

Moisture is the primary enemy of warmth. Body heat is transferred to moisture at the skin’s surface, which is then carried away through convection by evaporation. This principle is most commonly connected to sweating, a mechanism the body uses to regulate its temperature and expel excess heat. Because you’ll both be trapping heat through layering, and increasing activity as you work, chances are you’ll break a sweat. To combat this and minimize moisture, your first layer of clothing should be made of a material that can soak up moisture while still maintaining its thermal properties. Wear inner garments made of wool, silk, or other animal fibers, or synthetic fabrics such as polypropylene (most known for Long John’s or thermal underwear).

Layer 2:

Your middle layer should be designed for insulation, trapping warm air close to your body. Animal fibers such as wool and silk, goose down, and synthetic fleece are all safe options.

Layer 3:

Another enemy of warmth is wind, which tends to work in tandem with moisture by carrying the natural heat which radiates from your skin away from your body. This forces your body to work to replace that heat, lowering your core temperature overall. Additionally, strong winds can rapidly lead to frostbite and other cold-weather injuries. With this in mind, when selecting your outer layer, choose fabrics which protect you from the elements. Windproof, water-resistant garments work best, but keep in mind it should still allow for some ventilation to prevent overheating.