Worker Safety

Cold Stress: Avoiding Injuries And Illnesses When Welding In Winter Weather

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Extreme cold weather is a dangerous situation that can bring on health emergencies and welders working in cold environments are no exception to this. All workers who are exposed to extreme cold are at risk of cold stress, however, this blog will focus on how welders specifically can avoid injury and illness when working in winter conditions. What constitutes cold stress and its effects can vary across different areas of the country. In regions relatively unaccustomed to winter weather, near-freezing temperatures are considered factors for cold stress. Whenever temperatures drop decidedly below normal and as wind speed increases, heat can more rapidly leave your body. These weather-related conditions may lead to serious health problems which is why we've compiled 10 tips to help welders avoid cold stress-related injury and illness.

Follow these "Tips for Keeping Warm" when welding in colder weather to stay safe, warm, and productive this winter.

1. Dress in layers to help stay warm

- Base layers (underwear layer) wick sweat away from your skin
- Middle layers (insulating layer) retain body heat to protect you from the cold (Pro tip: A ***heated vest*** is a great middle layer option to retain body heat)
- Outer layers (shell layer) shield the wearer from wind, snow or rain. ***FR Jackets, FR Aprons and FR Jeans*** all help protect against getting burned when welding while providing warmth and protection from wind, snow or rain.
- Even if you don't wear all three layers at the outset, it's a good idea to take all layers on the job since you can remove layers if things heat up, but you can't put on layers that you didn't bring

along
- Ensure the proper fit of your garments – tight clothing reduces blood circulation and warm blood needs to be circulated to the extremities

2. Use a neck gaiter

- A ***neck gaiter*** helps protect your neck and face from getting cold and wind burned

3. Cover your head and ears with a winter liner or face hood

- ***Winter liners and face hoods*** reduce the amount of body heat that escapes from your head which is one of the primary areas where body heat escapes

4. Wear wool or fleece-lined insulated welding gloves

- Lined leather ***welding gloves*** provide protection against sparks but also provide warmth to help protect against the elements

5. Wear insulated and waterproof boots with wool socks to keep feet warm and dry

- When it's cold out, your feet will be toasty and warm in your wool socks. Wool can absorb a high amount of moisture, much more than cotton, and can hold a third of its weight in moisture before it even starts to feel "wet." Wool keeps its insulating properties while wet, which is perfect for sweaty feet. A waterproof work boot will keep you safe from getting your toes and feet wet, which will prevent you from dealing with any illnesses.

To stay warm on the job, it is imperative that you trap any heat loss from your feet and this is accomplished by wearing insulated work boots.

1. Do your best to stay dry

- Moisture or dampness from sweating can increase the rate of heat loss from the body
- Keep extra clothing on-hand in case you get wet and need to change

2. Stay hydrated

- Drink warm, sweetened fluids (it goes without saying that they should not include alcohol) throughout your shift and make sure you have a thermos of your hot beverage of choice readily available to warm you up

3. Fuel your body with something warm and eat plenty of calories

- Make sure to have a hearty hot meal at lunchtime or bring an extra thermos full of soup. Your body expends a lot of energy when working in the cold, so it’s important to keep it fueled up. Consider having an extra meal during the day or doubling up on portions on colder days.

4. Keep moving

- The body generates heat through movement which is why it’s important to keep moving when you're working outside in the cold. Of course, if your body movement starts generating too much

heat, it’s going to cause sweating which can be bad. Try to find a balance between enough clothes and enough movement to stay warm and dry.

5. Take breaks inside

- Move into warm locations during work breaks and limit the amount of time outside on extremely cold days

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