

MAFES Dawg Tracks

January 31, 2011



Cold Weather Stress
Protection

Winter time is here. There is a saying that in Mississippi if you don't like the weather now, just wait for 8 hours and it will change. This is partially true for some seasons, but winter time is normally consistently cold. As we know, the last few winters have been fairly dry with not too much of the white stuff, but sufficient amounts of cold weather.

Employees that are exposed to the cold and cold environments are also candidates for cold weather stress.

There are several types of cold weather stress that can affect one with cold exposure. We want to discuss these and how to handle them:

HYPOTHERMIA –

When we are exposed to cold temperatures, whether it is while working or playing, our bodies begin losing heat faster than we can produce it. With prolonged exposure, eventually our bodies use up all the stored energy. This is when hypothermia sets in, which is characterized by extremely low body temperatures. The low body temperature affects the brain, making the victim unable to think clearly or even move. This is what makes it so dangerous - a person may not know what is happening and will not be able to do anything about it.

Early Symptoms of Hypothermia-

- Shivering
- Fatigue
- Loss of Coordination
- Confusion and disorientation

Late Symptoms of Hypothermia-

- No Shivering
- Blue Skin
- Dilated pupils
- Slowed pulse and breathing
- Loss of consciousness

First Aid Treatment of Hypothermia-

- Alert supervision/request medical assistance
- Move the victim into a warm room or shelter
- Remove the wet clothing
- Warm the center of the body first - check chest, neck, head and groin and warm using an electric blanket or hot blankets, if available; if not, use sheets, clothing or towels.
- Give the victim some warm beverages, but not alcohol. Do not try to give beverages to an unconscious person.
- After the body temperature has increased, keep warm blankets wrapped around them
- If victim has no pulse, begin CPR.

FROSTBITE -

This often affects the nose, ears, cheeks, chin, fingers, or toes. It can permanently damage body tissue and in severe cases can lead to amputation.

Symptoms-

- Reduced blood flow to hands and feet (fingers or toes can freeze).
- Numbness
- Tingling or stinging
- Aching
- Bluish or pail, waxy skin

First Aid-

- Get into a warm room as soon as possible
- Unless absolutely necessary, do not walk on frostbitten feet or toes - this increases their damage.
- Immerse the affected area in warm - not hot water (the temperature should be comfortable to the touch for unaffected parts of the body).
- Warm the affected area using body heat; for example the heat of an armpit can be used to warm frostbitten fingers.
- Do not rub or massage the frostbitten area; doing so may cause more damage.
- Do not use heating pad, heat lamp, or the heat of a stove, fireplace, or radiator for warming. Affected areas are numb and can be easily burned.

TRENCH FOOT –

Trench foot, also known as immersion foot, is caused from a prolonged period of the feet being exposed for extended periods in cold or wet conditions. This can happen in water up to 60 degrees F., if the feet are constantly wet. Injury occurs because wet feet lose heat 25 times faster than dry feet. To prevent heat loss, the body constricts blood vessels to shut down circulation in the feet. Skin tissue begins to die because of lack of oxygen and nutrients and due to the buildup of toxic products.

Symptoms-

- Reddening of the skin
- Numbness and swelling
- Leg cramps
- Tingling pain
- Blisters or ulcers
- Bleeding under the skin
- Gangrene (the foot may turn dark purple, blue, or gray)

First Aid-

- Remove the shoes/boots and wet socks and dry their feet
- Avoid walking on feet, as this may cause tissue damage.

In the South, we seldom have the weather that can cause these injuries, but they can happen if we don't dress right and respect the periods of cold weather that we do have at times. If we use good judgment in dealing with the cold, we can remain healthy and avoid these typical cold weather problems

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Excerpts: www.cdc.gov/niosh

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