## Cold Weather Safety

1. **Purpose**

The purpose of this procedure is to ensure that employees are protected and precautions are taken from the hazards associated with cold weather injury and illness. An assessment will be conducted to identify the types of jobs or employees who are at risk for cold exposure.

1. **Responsibility**

The Supervisor shall:

* Ensure affected employees are knowledgeable in the signs and symptoms of cold stress.
* Ensure a warm area is accessible for employees to take frequent breaks while working in cold environments.

The Employee shall:

* Use proper engineering controls, safe work practices, and personal protective equipment (PPE) provided by your employer to prevent cold stress.

1. **Prevention**

* Employees will be continuously observed by a supervisor or designee for signs of cold stress.
* On larger worksites, the buddy system will be implemented so that the employees who are paired up stay in contact, observe one another and immediately report any signs or symptoms of cold stress.
* Employees should drink plenty of liquids to stay hydrated and warm sweetened liquids to help them stay warm, avoiding caffeine and alcohol.
* When possible, schedule heavy work during the warmer parts of the day.
* Employees will be allowed frequent breaks in warm areas. Radiant heaters may be used in outdoor security stations.
* If possible, shield work areas from drafts or wind to reduce wind chill.
* New employees and those returning after time away from work, should be acclimated by gradually increasing their workload, and allowing more frequent breaks in warm areas, as they build up a tolerance for working in the cold environment.
* Regularly used walkways and travelways shall be sanded, salted, or cleared of snow and ice as soon as practicable.
* Regular inspections on cold weather supplies (e.g. hand warmers, jackets, shovels, etc.) should be carried out to ensure that supplies are always in stock.

1. **Protective Clothing**

Proper cold weather protection must be worn when working in cold, wet and windy conditions.

* Wear at least three layers of loose fitting clothing.
  + An inner layer of wool, silk or synthetic to wick moisture away from the body.
  + A middle layer of wool or synthetic to provide insulation even when wet.
  + An outer wind and rain protection layer that allows some ventilation to prevent overheating.
* Wear a hat or hood to help keep your whole body warmer. Hats reduce the amount of body heat that escapes from your head.
* Use a knit mask to cover the face and mouth (if needed).
* Use insulated gloves to protect the hands (water resistant if necessary).
* Wear insulated and waterproof boots.
* Keep a change of dry clothing available in case work clothes become wet.

1. **Signs and Symptoms**

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| **Illness** | **Symptom** | **Treatment** |
| **Hypothermia** -occurs when body heat is lost faster than it can be replaced. When the core body temperature drops below the normal 98.6° F to around 95° F, the onset of symptoms normally begins. | The person may begin to shiver and stomp their feet to generate heat. Employees may lose coordination, have slurred speech, and fumble with items in the hand. The skin will likely be pale and cold. | Call for immediate medical assistance.  Move the person to a warm, dry area.  Remove wet clothes and replace with dry clothes, cover the body (including the head and neck) with layers of blankets; and with a vapor barrier (e.g. tarp, garbage bag). Do **not** cover the face. |
| **Frostbite** - is an injury to the body that is caused by freezing of the skin and underlying tissues. While frostbite usually occurs when the temperatures are 30° F or lower, wind chill factors can allow frostbite to occur in above freezing temperatures. | The affected body part will be cold, tingling, stinging or aching followed by numbness.  Skin color turns red, then purple, then white, and is cold to the touch.  Feels firm or hard.  Blisters may occur in the affected part, in severe cases. | Call for immediate medical assistance.  Loosely cover and protect the area from contact.  Do not try to rewarm the frostbitten area before getting medical help.  Do not rub the affected area.  Do not break blisters. |
| **Trench Foot or Immersion Foot** - caused by prolonged exposure to wet and cold temperatures. It can occur at temperatures as high as 60°F if the feet are constantly wet. | Symptoms usually consist of redness, swelling, numbness, tingling, itching or burning sensation. Blisters may also be present. | Call for immediate medical assistance.  Remove the shoes, or boots, and wet socks.  Dry the feet. |

1. **Training**

Effective initial and annual training in the following topics shall be provided to each supervisory and non-supervisory employee, before the employee begins work that should reasonably be anticipated to result in exposure to cold weather:

* How to prevent and recognize cold stress illnesses and injuries
* How to administer first aid treatment on cold induced illnesses and injuries.
* Appropriate engineering controls, personal protective equipment and work practices to reduce the risk of cold stress.
* Health effects of cold exposure.
* Proper use of warming shelters.
* The buddy system.
* Vehicle breakdown procedures.
* Proper eating and drinking habits for working in the cold.
* The dangers and destructive potential caused by unstable snow buildup, sharp icicles, and ice dams and know how to prevent accidents caused by them.