

# Section 5C: Workplace Health and Environmental Practices

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**Policy # 5:** Cold Stress Prevention Plan  
**Effective Date:** December 15, 2016  
**Last Revision Date:** Original Policy

## I. Purpose

Employees who are exposed to extreme cold or work in cold environments may be at risk of cold stress. Extreme cold weather is a dangerous situation that can bring on health emergencies in susceptible people, such as outdoor workers, and those who work in an area that is poorly insulated or without heat. This program provides the basic information for protection against cold stress. The Town of Mooresville will identify, evaluate, and control potential exposure of our employees to extreme temperature, wind, wet, and other cold-related factors. This policy does not provide rationale for employees to stop performing their required work duties. It does however provide some preventive and remedial measures to better protect town employees.

## II. Scope

This plan applies to all regular, temporary, and intermittent employees whose primary job assignment involves outdoor work and may be exposed to environmental risk factors that could place the individual at risk of cold-related illness.

## III. Definitions

**Acclimatization or acclimate:** The physiological (i.e., physical, mechanical, and biochemical) change that allows the human body to adapt or get used to the effects of a new physical environment or climate. After a period of acclimatization, the same physical activity will produce fewer cardiovascular demands.

**Chilblains:** are caused by the repeated exposure of skin to temperatures just above freezing to as high as 60°F. The cold exposure causes damage to the capillary beds (groups of small blood vessels) in the skin. This damage is permanent and the redness and itching will return with additional exposure. The redness and itching typically occur on cheeks, ears, fingers, and toes.

**Frostbite:** Occurs when the skin actually freezes and loses water. Frostbite usually affects the extremities. The affected body part will be cold, tingling, stinging, or aching, followed by numbness. The skin turns red in color, then purple, then white, and is cold to the touch. In severe cases, there may be blisters. In severe cases, amputation of the frostbitten area may be required.

**Hypothermia:** Occurs when body heat is lost faster than it can be replaced. When the core body temperature drops from the normal 98.6°F to around 95°F, symptoms generally begin. The employee may begin to shiver and stomp the feet in order to generate heat. Workers may lose coordination, experience