

# Policy and Procedure Manual

<b>SECTION:</b> Joint Health & Safety		<b>GUIDELINE #:</b> JHS-018
<b>Date Approved:</b> October 3, 2019		<b>Heat Stress Prevention and Hot Weather</b>
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<b>Authority:</b> Joint Health & Safety Committee		

## PURPOSE

The Town of Hanover (the Town) has adopted this guideline to ensure the ongoing health and safety of staff members that are exposed to high levels of heat, and/or other climatic conditions that may cause adverse effects to health and safety in the performance of their regular job duties for the Town. This guideline is intended to include both indoor and outdoor work where temperature is a concern.

The Town will ensure that work sites are in compliance with health and safety regulations, and that the threshold values for heat stress and heat strain recommended by the Ontario Ministry of Labour are observed, and appropriate actions are taken in response to concerns where an un-acclimatized worker's core temperature is in danger of exceeding thirty-eight (38) degrees Celsius.

## RESPONSIBILITIES

### Managers and Supervisors

Department Heads and Supervisors will be responsible for the overall health and safety of staff members under their direction, including appropriate management of heat stress prevention guidelines and procedures. Department Heads and Supervisors will be required to ensure that hazard identification and risk assessments are performed, and that work is safe.

Where temperature is a concern, work to be performed will be evaluated to ensure that appropriate safeguards (such as first aid plans and materials) are in place, and ensure that relief measures (such as drinking water and scheduled rest periods) are available and implemented, and that staff are appropriately acclimatized to heat when performing work in areas where hot weather exists.

Department Heads and Supervisors will communicate information regarding the signs and symptoms of heat stress / disorders. As necessary, Department Heads and/or Supervisors will adjust and adapt work schedules to effectively reduce the risk of injury and/or illness due to heat stress.

### Employees

Employees of the Town are required to participate in health and safety training, and adhere to all health and safety policies and safe work procedures, including reporting hazards related to hot weather and/or working conditions, and following measures of prevention.

## CONSIDERATIONS

Department Heads and Supervisors will consider the following as indicators which may trigger the implementation of heat stress prevention techniques, especially during the period of May 1<sup>st</sup> to September 30<sup>th</sup> each year.

- Humidex reaching or exceeding 35 degrees Celsius
- Environment Canada Humidex advisory (air temperature exceeding 30 degrees Celsius and Humidex exceeding 40 degrees Celsius)
- Environment Canada weather reports
- Heat wave (three or more days of temperatures of 32 degrees or more)

## SIGNS AND SYMPTOMS OF HEAT STRESS OR STRAIN

The following disorders are commonly associated with exposure to excessive heat. In the event that any of the following are observed or experienced, the symptoms should be immediately communicated to the immediate supervisor, and appropriate first aid measures will be taken.

DISORDER	ROOT CAUSE	SIGNS AND SYMPTOMS	TREATMENT
Sunburn	<ul style="list-style-type: none"> <li>Unprotected overexposure to sunlight</li> </ul>	<ul style="list-style-type: none"> <li>Red skin that may be warm to the touch and/or painful to the touch</li> </ul>	<ul style="list-style-type: none"> <li>Avoid direct sunlight on the affected area</li> <li>Ensure proper use of sun block, hats, and covering exposed skin with light, loose layers</li> </ul>
Heat Rash	<ul style="list-style-type: none"> <li>Clogged or plugged sweat glands in hot, humid conditions</li> </ul>	<ul style="list-style-type: none"> <li>Red, itchy bumps on skin</li> </ul>	<ul style="list-style-type: none"> <li>Change into light, dry clothing</li> <li>Avoid direct sunlight on the affected area</li> <li>Move individual to a cooler area or under shade, if possible</li> <li>Wash skin with cool water</li> </ul>
Heat Cramps	<ul style="list-style-type: none"> <li>Dehydration due to excessive sweating</li> <li>Imbalance of internal pH due to the loss of salt and electrolytes through excessive sweating</li> </ul>	<ul style="list-style-type: none"> <li>Cramping</li> <li>Painful muscle spasms</li> <li>Excessive sweating</li> </ul>	<ul style="list-style-type: none"> <li>Drink lots of water</li> <li>Rest</li> <li>Move individual to a cooler area or under shade, if possible</li> <li>Massage cramps</li> </ul>
Heat Exhaustion	<ul style="list-style-type: none"> <li>Dehydration due to excessive sweating</li> <li>Shock due to a failure to properly acclimatize to conditions</li> </ul>	<ul style="list-style-type: none"> <li>Excessive sweating</li> <li>Increased level of thirst</li> <li>Increased heart rate / rapid pulse</li> <li>Dizziness</li> <li>Fatigue / weakness</li> <li>Loss of consciousness</li> </ul>	<ul style="list-style-type: none"> <li>Drink lots of water</li> <li>Rest by laying down with legs elevated</li> <li>Move individual to a cooler area or under shade, if possible</li> <li><b>Loss of consciousness is a critical injury that must be reported to the Ministry of Labour</b></li> </ul>
Heat Stroke	<ul style="list-style-type: none"> <li>Extended or over-exposure to excessive heat</li> </ul>	<ul style="list-style-type: none"> <li>Inability to regulate internal temperature</li> <li>Rising body temperature even with addition of water and removal from hot area</li> <li>Body temperature above 98.6 degrees</li> <li>Sweating ceases</li> <li>Skin appears red, dry and hot</li> <li>Increased heart rate and rapid pulse</li> <li>Laboured breathing</li> <li>Dizziness / disorientation</li> <li>Fatigue / weakness</li> <li>Loss of consciousness</li> </ul>	<p><b>HEAT STROKE IS A MEDICAL EMERGENCY REQUIRING IMMEDIATE ACTION</b></p> <ul style="list-style-type: none"> <li>Contact emergency services (call 911)</li> <li>Apply ice and cold water; or immerse in ice water if possible until emergency services arrive</li> <li><b>Loss of consciousness is a critical injury that must be reported to the Ministry of Labour</b></li> </ul>

## PREVENTION AND CONTROLS

The following guidelines should be followed to prevent heat-related disorders:

1. **Engineering Controls**

Where possible, venting and/or air-conditioning shall be applied. Alternate methods will include the use of fans, and opening of windows. For outdoor work, the Town shall work to ensure that a shaded area is available.

2. **Acclimatization**

In an effort to avoid shock associated with exposure to heat, Town employees will be required to use appropriate acclimatization procedures to adapt to new temperatures, if required. This shall be accomplished by scheduling the employee to work incrementally longer periods with exposure to heat over a period of five (5) to (10) days.

3. **Work Conditions**

Department Heads and/or Supervisors will regularly check the weather conditions that will affect work, and will adapt the schedule(s) and tasks as appropriate.

4. **Work/Rest Cycles**

Where possible, work requiring strenuous physical activity shall be scheduled for cool periods in the day (early morning or evening), and non-essential tasks will be re-scheduled until such time as the risk of injury or illness due to heat stress falls into an acceptable range. Scheduling of tasks will ensure that workers are rotated in a manner that allows for sufficient break periods in a cool and/or shaded area.

5. **Personal Protective Equipment**

Town employees required to perform work duties in hot environments will be directed to utilize appropriate light-weight / breathable garments that provide maximum protection against the sun, and potential health and safety hazards involved in both the work, and heat stress. Where work is performed outdoors, sun block will be recommended.

6. **Fluid Intake**

To minimize the danger of dehydration and other health risks associated with heat stress, the Town will ensure that workers are provided with access to water. Staff members who perform work in areas with excessive heat are advised that the recommended intake of fluid is 250ml (one cup) every twenty (20) minutes.