

What can I do as a manager to prevent heat stress?

Breaks. Give workers frequent breaks in cool areas in conjunction with the work to rest ratio.

Training. Make heat stress your next safety talk and remind workers about it throughout the summer.

Flexibility. Permit less physically demanding activities during peak temperature periods, when possible. Rest periods in a cooler area can easily prevent or reduce heat-related illness.

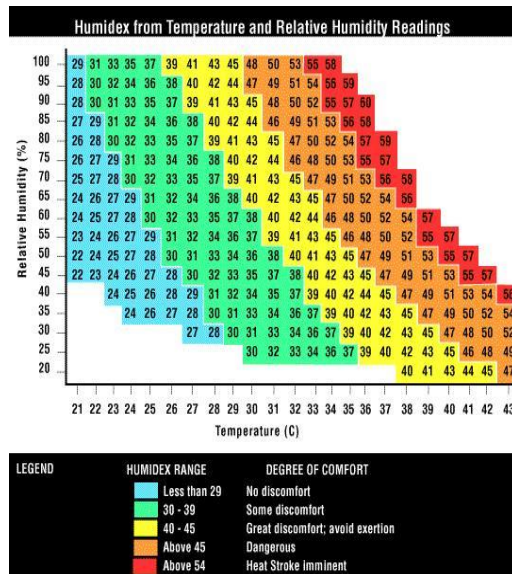
Clothing. Allow staff to remove any tight or unnecessary clothing.

Equipment. Use fans to move air. Turn off unnecessary lighting, and use window coverings to provide shade.

How do I calculate the Humidex?

- 1) Note the room temperature and humidity level
- 2) Then determine the humidex from chart. For example:
Temperature 26.3C and Humidity level 67% = Humidex level between 32 and 33C

Humidex Chart



Other

See Brochure – “Dealing with Hot Weather” – available from Occupational Health Safety & Wellness

Contact Information:
Occupational Health Safety & Wellness

Heat Stress Management Program

Occupational Health Safety & Wellness

Introduction

In promoting a healthy workplace and complying with legislation, Nova Scotia Health Authority recognizes the need for a Heat Stress Management Program to provide guidance and direction to managers and staff for the management of heat stress.

In addition to meeting the requirements of the NS Occupational Health Regulations, a Humidex based response plan will be followed to allow a more rapid reaction to staff concerns.

What is Heat Stress?

The overall net heat load to which a worker may be exposed is referred to as **heat stress**. Several factors can influence this including: metabolic heat (work load), environmental factors (temperature, humidity, air movement, radiant heat), and clothing requirements (personal protective equipment).

The body's physiological response to these conditions is known as **heat strain** and is a mechanism for the body to dissipate excess heat. This can result in a number of adverse health effects ranging from discomfort to serious illnesses or medical emergencies, such as heat stroke.

Heat rash – sometimes called 'prickly heat', this is a skin irritation caused by excessive sweating. It can occur at any age, but is most common in young children. It looks like a red cluster of pimples or small blisters. It is most likely to occur on the neck and upper chest, in the groin, under the breasts, and in the elbow creases.

Heat cramps – these include muscle pains or spasms, usually in the abdomen, arms or legs. They may occur after strenuous activity in a hot environment, when the body gets depleted of salt and water. They may also be a symptom of heat exhaustion.

Dizziness and fainting – heat-related dizziness and fainting results from reduced blood flow to the brain. Heat causes an increase in blood flow to the skin and pooling of blood in the legs, which can lead to a sudden drop in blood pressure. There can be a feeling of light-headedness before fainting occurs.

Heat exhaustion – this is a serious condition that can develop into heat stroke. It occurs when excessive sweating in a hot environment reduces the blood volume. Warning signs may include paleness and sweating, rapid heart rate, muscle cramps (usually in the abdomen, arms or legs), headache, nausea, and vomiting, dizziness or fainting

Heat stroke – this is a medical emergency and requires urgent attention. Heat stroke occurs when the core body temperature rises above 40.5C and the body's internal systems start to shut down. Many organs in the body suffer damage, and the body temperature must be reduced quickly. Most people will have profound central nervous system changes such as delirium, coma, and seizures. The person may stagger, appear confused, have a fit or collapse, and become unconscious. As well as effects on the nervous system, there can be liver, kidney, muscle, and heart damage.

What can you do as a worker to prevent heat stress?

Be aware of the symptoms. Watch out for heat stress symptoms in yourself and your co-workers.

Drink water. You need to drink one cup of cool water every 20 mins; even if you are not thirsty.

Avoid caffeinated drinks. Caffeinated drinks such as coffee, tea, and cola are diuretics and will cause dehydration.

Know your personal risk factors. Any of the following conditions could increase your risk for heat-related illness: excessive weight, poor physical condition, previous heat-related illness, older age, heart disease, high blood pressure, recent illness, and certain medications.

What are some potential symptoms to watch for?

*Confusion
Dizziness
Fatigue
Muscle Cramps
Pale Skin
Rapid Heartbeat
Heat Rash*

*Dark colored urine (sign of dehydration)
Fainting
Headache
Nausea
Profuse Sweating*