



Beat the Heat:

Controlling Heat Hazards in the Workplace

Safety Meeting Topic

1 888 730 7821 (Toll free Ontario)
workplacesafetynorth.ca



What is Heat Stress?

Total heat load on the body, including:

- Heat generated by the body
- Air temperature and humidity
- Radiant heat (sun, machines, warm rock surfaces)
- Clothing and PPE

How Serious is it?

Heat illnesses include:

- Heat rash
- Sunburn
- Heat cramps
- Fainting
- Heat exhaustion
- Heat stroke

Fatalities due to heat stress have occurred!

Heat Rash	
Cause	<ul style="list-style-type: none"> • Hot, humid environment • Plugged sweat glands
Symptoms	<ul style="list-style-type: none"> • Red, bumpy rash with severe itching
Treatment	<ul style="list-style-type: none"> • Leave the hot environment • Shower or rinse skin with cold water • Change into dry clothes
Sunburn	
Cause	<ul style="list-style-type: none"> • Over-exposure to sunshine • Effects the body's ability to sweat effectively
Symptoms	<ul style="list-style-type: none"> • Skin becomes red, painful, blistered, peeling
Treatment	<ul style="list-style-type: none"> • Leave the sunny environment • Get medical help for blisters • Apply lotion

Heat Cramps	
Cause	<ul style="list-style-type: none"> • Heavy sweating depletes body salt
Symptoms	<ul style="list-style-type: none"> • Painful cramps in arms, legs, stomach • May occur at work or later at home
Treatment	<ul style="list-style-type: none"> • Move to cool area • Loosen clothing • Drink cool water • Seek medical aid for severe cramps
Fainting	
Cause	<ul style="list-style-type: none"> • Reduced flow of blood to the brain
Symptoms	<ul style="list-style-type: none"> • Sudden fainting; weak pulse
Treatment	<ul style="list-style-type: none"> • Remove from hot location • Get medical aid; assess need for CPR • Give cool water if conscious

Heat Exhaustion	
Cause	<ul style="list-style-type: none"> • Body cooling system begins to break down due to excessive heat • Body's water and salt depleted
Symptoms	<ul style="list-style-type: none"> • Heavy sweating; cool moist skin • Body temperature above 38 C • Weak pulse, normal or low blood pressure • Feel tired, weak, clumsy, confused, thirsty • Rapid breathing • Blurred vision
Treatment	<ul style="list-style-type: none"> • Summon medical aid • Move to cool, shaded area • Loosen or remove excess clothing • Give cool water to drink • Fan and spray with cool water

Heat Stroke

Cause	All body's available water and salt used up – sweating stops, causing body temperature to rise
Symptoms	<ul style="list-style-type: none">• High body temperature (may be more than 41 C)• Feeling weak, confused, upset• Acting strangely• Hot, dry, red skin• Fast pulse• Headache or dizziness• May faint• May convulse
Treatment	<ul style="list-style-type: none">• Get medical aid immediately• Remove from heat or sun• Remove excess clothing• Fan and spray with cool water• If conscious give sips of water

What you can do to protect yourself:

- Stay fit
- When possible, avoid working in hot areas and in full sun
- Take frequent breaks
- Use sun block with at least 15 SPF and re-apply every two hours
- Cover up with long-sleeve shirt, hat
- Increase fluid intake
- Avoid alcohol and excessive caffeine
- Reduce activity when exposed to heat
- Use buddy system to watch for symptoms
- Increase salt intake (if doctor approves)

What employers can do to protect workers:

- Train workers in heat stress awareness and first aid
- Provide drinking water
- Provide rest breaks and air conditioned rest areas
- Encourage workers to stay fit; to drink water
- Indoors, provide fans for air movement
- Use machines to reduce physical demands of work
- Schedule most strenuous work to cooler times of the day
- Be aware of daily Humidex ratings

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