

Heat Stress

A Serious Hazard for Outdoor Workers

Signs and Symptoms

Heat illness is serious and gets worse quickly. Do not ignore warning signs and symptoms.

• Early Signs



HEAT RASH



MUSCLE SPASMS / CRAMPS



DEHYDRATION (THIRST)

! Having heat stress multiple times can lead to kidney disease, diabetes, metabolic syndrome, and obesity.

• Heat Exhaustion



HEADACHE



NAUSEA



DIZZINESS



ANGRY / IRRITABLE



EXCESSIVE SWEATING



WEAKNESS / EXHAUSTION



URINE COLOUR / OUTPUT (see below)

• Heat Stroke



HIGH BODY TEMPERATURE



HOT, DRY SKIN / SWEATING A LOT



CONFUSION / BEHAVIOUR CHANGES / SLURRED SPEECH



FAINING / PASSING OUT



CONVULSIONS / SEIZURES

Heat Stress Can Kill

Take Action before it's too late

Action

Always start *and* end your day by drinking water

Starting the day dehydrated (not enough water) increases the effects of heat stress and also cause electrolyte (mineral) problems.

If YOU or SOMEONE ELSE has symptoms of:

HEAT STRESS:



DRINK COOL WATER

One cup every 15 minutes or at least one litre/hour.



*REPLACE electrolytes with watered-down or home-made sports drink



FIND SHADE

in a building, or under a tree or umbrella



GET REST

Take a break and get some rest or even take a nap



CHANGE CLOTHES

to keep skin dry, if possible.

SEEK MEDICAL ATTENTION if your symptoms persist



HEAT EXHAUSTION:



MOVE WORKER

to a shaded/ cooler area



REMOVE

unnecessary clothing (respectfully)



DO NOT LEAVE THEM ALONE

ENCOURAGE small sips of water

CALL 911 if symptoms* last more than 1 hour or get worse *especially cramping



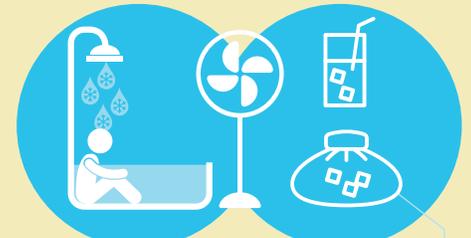
HEAT STROKE:



CALL 911 IMMEDIATELY



DO NOT LEAVE THEM ALONE



COOL THEM DOWN while waiting for emergency services to arrive

FOCUS on underarm and groin areas with ice packs / cold cloths



NOTIFY your employer / supervisor, co-workers / buddy about the situation

*two parts water to one part sports drink – or "suero", a home-made version (one litre water, 1/4 - 1/2 teaspoon salt, 1 tablespoon sugar).

Prevention

Wear:

- UV GLASSES (Tinted or Clear)**
- WIDE BRIM HAT**
- SUNSCREEN**
UVB and UVA, 15 - 50 SPF. Water-resistant, broad spectrum, cream with zinc oxide, avobenzone. Avoid powder/spray, oxybenzone, vitamin A, added insect repellent.
- LOOSE / LIGHT CLOTHING**

While Working:

- DRINK WATER**
At least 1 cup every 15 to 20 minutes or four per hour
- BUDDY UP***
Watch for signs of heat stress among co-workers
*Pair up for the season if possible. Support partners drinking water, taking breaks. Pay attention to partner looking ill, acting strangely.
- REST**
Take breaks in cool or shaded area
- AVOID alcohol and caffeine**
(they dehydrate or remove water from the body)
- EAT OFTEN**
including all regular meals and snacks

• Are you drinking enough water?

Check often

What colour is your urine?

- NOT GOOD (too much water)** - White droplet with an 'X' mark.
- VERY GOOD** - Light yellow droplet with a checkmark.
- GOOD** - Yellow droplet with a checkmark.
- NOT GREAT** - Bright yellow droplet with an 'X' mark. **DRINK WATER** label above it.
- BAD** - Dark yellow droplet with an 'X' mark.
- VERY BAD** - Brown droplet with an 'X' mark. **SEE A DOCTOR*** label above it.

*If brown + tired = see doctor

Employer Responsibilities

Employers should provide:



SHADE



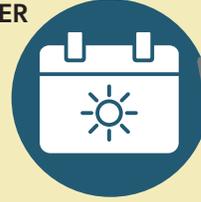
ADDITIONAL BREAKS



ADJUSTED WORK SCHEDULES



WATER



ACCLIMITIZATION PERIOD



INFORMATION and TRAINING

Review training in heat waves.
Provide 911 calling information.



HEAT STRESS/EMERGENCY RESPONSE PLAN



WEATHER MONITORING
Look for humidex (temperature with the humidity), UV Index, expected temperatures.



Employers are expected to protect workers' health and safety by taking all reasonable precautions.

This includes a process to **identify** and deal with the factors contributing to heat stress.
The process should:



INCLUDE

workers, health and safety representatives, and/or joint health and safety committee members.



PROVIDE

translation / interpretation as needed to allow everyone to contribute effectively.



BE SUPPORTED

by the employer so workers feel comfortable speaking up.

Additional Tools and Resources

[Humidex-based Heat Stress Calculator And Plan \[OHCOW\]](#)

[Humidex-based Heat Response Plan \[OHCOW\]](#)

[Calling 911 \[OHCOW\]](#)

[Stay Hydrated in the Heat \[OHCOW, et al\]](#)

[Hot Environment Fact Sheets \[CCOHS\]](#)

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OHCOW

Occupational Health Clinics
for Ontario Workers Inc.