



In The Hot Seat?

Protecting Workers from Heat Stress

August 18, 2023

With

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- ❑ **Natasha Luckhardt**, Ontario Federation of Labour

Hosts: André Gauvin, Dorothy Wigmore

For outdoor workers

What are the hazards? Check out OHCOW's infographics



OHCOW
Occupational Health Clinics
for Ontario Workers Inc.
Centres de santé des
travailleurs (ses) de l'Ontario Inc.
Clínicas de Salud Ocupacional
para Trabajadores de Ontario Inc.
Mga Pangkalusugang Klinika sa Trabaho
Para sa Mga Manggagawa sa Ontario, Ink.

For greenhouse workers

Heat stress can kill!

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

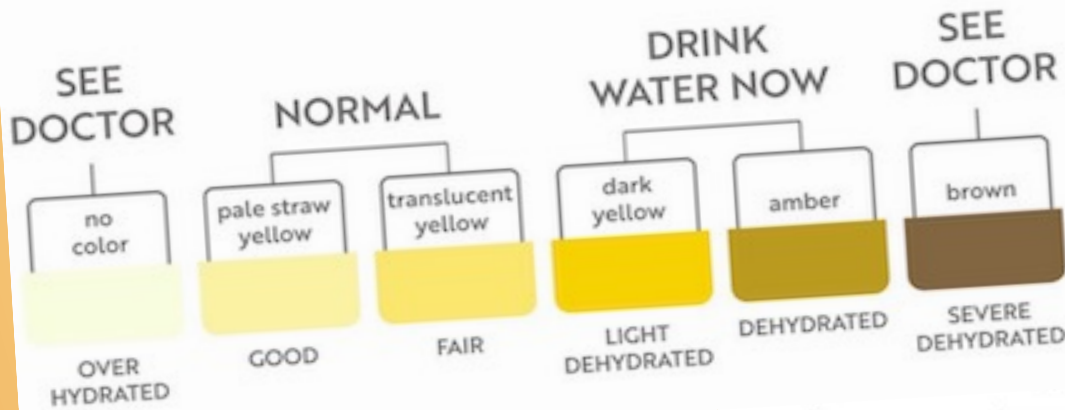


WEAKNESS /
EXHAUSTION



URINE COLOUR /
OUTPUT

URINE COLOR CHART



de Colores de Orina



TALAAN NG KULAY NG IHI



• Heat Stroke



HIGH BODY
TEMPERATURE



HOT, DRY SKIN /
SWEATING A LOT



CONFUSION /
BEHAVIOUR CHANGES /
SLURRED SPEECH



FAINING / PASSING
OUT



CONVULSIONS/
SEIZURES

The same, only different

- physical fitness
- obesity
- age
- pregnancy
- medical conditions/treatments
(e.g., heart problems, low-sodium
diets, diabetes)
- illness, sleep deprivation
- chronic skin problems
- meds/drugs/alcohol
- previous heat stroke
- LACK OF ACCLIMATISATION**



ANDI, the world's "[first ever 'breathing, sweating, shivering' robot.](#)" a "thermal mannequin", designed to "to help better understand the health impacts of extreme temperatures on the human body." .. yet another example of how men are still, in the year of our Lord twenty twenty three, seen as representative of the entire human race?

Caroline Criado Perez

Invisible Women, the Newsletter, July 27, 2023

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**
SPF 30 and UP, 15 - 30 SPF.
Water-resistant, broad spectrum, cream with zinc oxide, avobenzone, avobenzone, vitamin E, retinol, niacinamide.
- 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) VERY GOOD GOOD NOT GREAT DRINK WATER BAD SEE A DOCTOR*

**If brown + blood = 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

Additional Tools and Resources

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

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

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

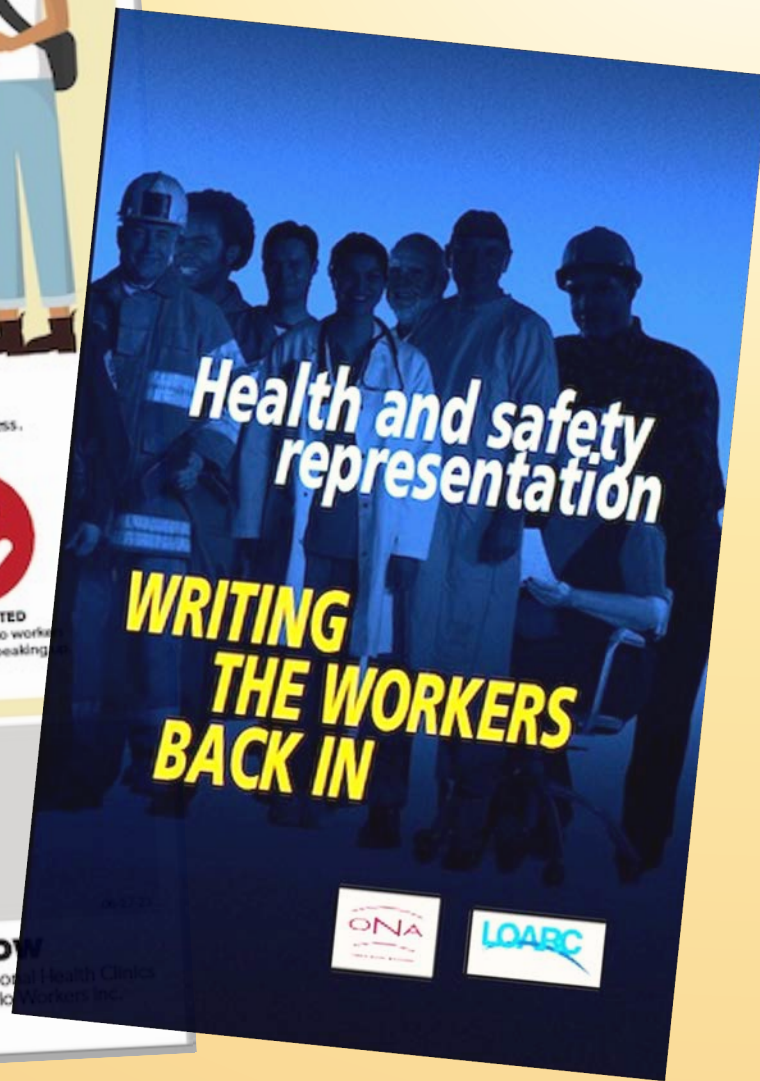
[Stay Hydrated in the Heat \[OHCOW, et al\]](#)

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



Health and safety representation

WRITING THE WORKERS BACK IN



Stay Hydrated in the Heat

When you work outside in the heat, your body loses water, salt and other important minerals called electrolytes. If your body loses too much water and electrolytes, you may start to feel sick. To avoid this, you can do the following:

Drink water throughout the day

- Drink 1 bottle of water (16 ounces or 0.5 liters) about 2 hours before you leave for work.
- Drink 1-2 bottles of water (0.5 liter to 1 liter) **every hour** while you work in the heat.
- Drink water after you get home from work to continue to replace what you lost through sweating at work.

Drink healthy, low-sugar beverages

- You can drink coconut water, electrolyte drinks (such as sport drinks), and "aguas frescas" (made from fresh fruits or vegetables). It is best if these drinks are low in sugar.
- Many sports and energy drinks have too much sugar. If you drink sports drinks, add water to them so that they are about 2/3 water and 1/3 sports drink. Avoid energy drinks. (Home-made "suero": 1/4 - 1/2 teaspoon salt, 1 tablespoon sugar, stir in one litre water.)
- Alcohol dehydrates. Avoid drinking alcohol on days you work.

Eat these foods during the day

- Dairy: fresh cheese, yogurt
- Protein: Beans, lentils, chicken, fish
- Seeds and nuts: sunflower seeds, almonds, cashews
- Fruits: watermelon, banana, oranges, cucumber, avocado
- Vegetables: spinach, broccoli

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 Text, WhatsApp or call 1-289-684-2821
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Manténgase hidratado en el calor

Cuando trabaja afuera en el calor, su cuerpo pierde agua, sal y otros minerales importantes llamados electrolitos. Si su cuerpo pierde demasiada agua y electrolitos, puede comenzar a sentirse enfermo. Para evitar esto, puede hacer lo siguiente:

• Tome agua durante el día

- Tome 1 botella de agua (16 onzas o 0.5 litros) unas 2 horas antes de salir al trabajo.
- Tome 1-2 botellas de agua (0.5 litros hasta 1 litro) **cada hora** mientras trabaja.
- Tome agua después de llegar a casa del trabajo para continuar reemplazando lo que perdió a través del sudor en el trabajo.

• Tome bebidas saludables y bajas en azúcar

Puede tomar agua de coco, bebidas electrolíticas (como suero) y aguas frescas (hechas de frutas o verduras frescas). Es mejor que estas bebidas sean bajas en azúcar.

Muchas bebidas deportivas y energéticas tienen demasiada azúcar. Si toma bebidas deportivas, agréguelas agua para que sea aproximadamente 2/3 de agua y 1/3 de bebida deportiva. Evite tomar bebidas energéticas. (Suero casero: Mezclar 1/4 - 1/2 cucharadita de sal, 1 cucharada de azúcar en un litro de agua.)

Evite el alcohol deshidrata. Evite tomar alcohol los días que trabaje.

• Tome estos alimentos durante el día

- Lácteos: Queso fresco, yogur
- Proteínas: Frijoles, lentejas, pollo, pescado
- Semillas y frutos secos: semillas de girasol, almendras, maní/avellanas
- Frutas: sandía, plátano, naranjas, pepino, aguacate
- Verduras: Espinacas, brécoli



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Manatiling Hydrated sa Kainitan

Kapag ikaw ay nagtrabaho sa labas sa kasagsagan ng init, ang iyong katawan ay naglilimas ng tubig, asin, at iba pang mga importanteng mineral na tinatawag na electrolytes. Kung ang iyong katawan ay nabawasan ng sobrang daming tubig at electrolytes, maaari mong magsimulang makaramdam ng sakit. Upang ito ay hindi mangyari, maaari mong gawin ang mga sumusunod:

• Inumin ng tubig sa maghapon

- Inumin ng tubig sa maghapon (16 onsa o 0.5 litro) mga 2 oras bago magtrabaho.
- Inumin ng tubig (0.5 litro hanggang 1 litro) **kada oras** habang magtrabaho sa kainitan.
- Inumin ng tubig galing sa trabaho upang patuloy na mapalitan ang tubig na nawasap sa maghapon. Magitan ng pagpapawis habang nagtatrabaho.

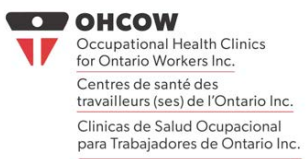
• Inumin ng mga sustansya't mababang asukal na mga

- Inumin ng sabaw ng buko, electrolyte drinks (tulad ng sport drinks), at "aguas frescas" (galing sa sarawang mga prutas at gulay). It is best if these drinks are low in sugar.
- Maraming mga sports at energy drinks ay may maraming asukal. Kung ikaw ay inumin ng sports drinks, dagdagan ito ng tubig upang ito ay maging mas mababang asukal.
- Maraming mga energy drinks ay may maraming asukal. Kung ikaw ay inumin ng sports drinks, dagdagan ito ng tubig upang ito ay maging mas mababang asukal.
- Inumin ng ibe. Iwasang uminom ng energy drinks.
- Inumin ng ibe. Iwasang uminom ng alak sa mga araw na ikaw ay magtatrabaho.

• Inumin ng mga pagkain na maghapon

- Inumin ng yogurt
- Inumin ng lenti, manok, isda
- Inumin ng inflower, almond, kasuy
- Inumin ng kahel, pipino, abokado
- Inumin ng broccoli

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(Home-made "suero": 1/4 - 1/2 teaspoon salt, 1 tablespoon sugar, stir in one litre water.)

<https://www.ohcow.on.ca/posts/stay-hydrated-in-the-heat/>

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