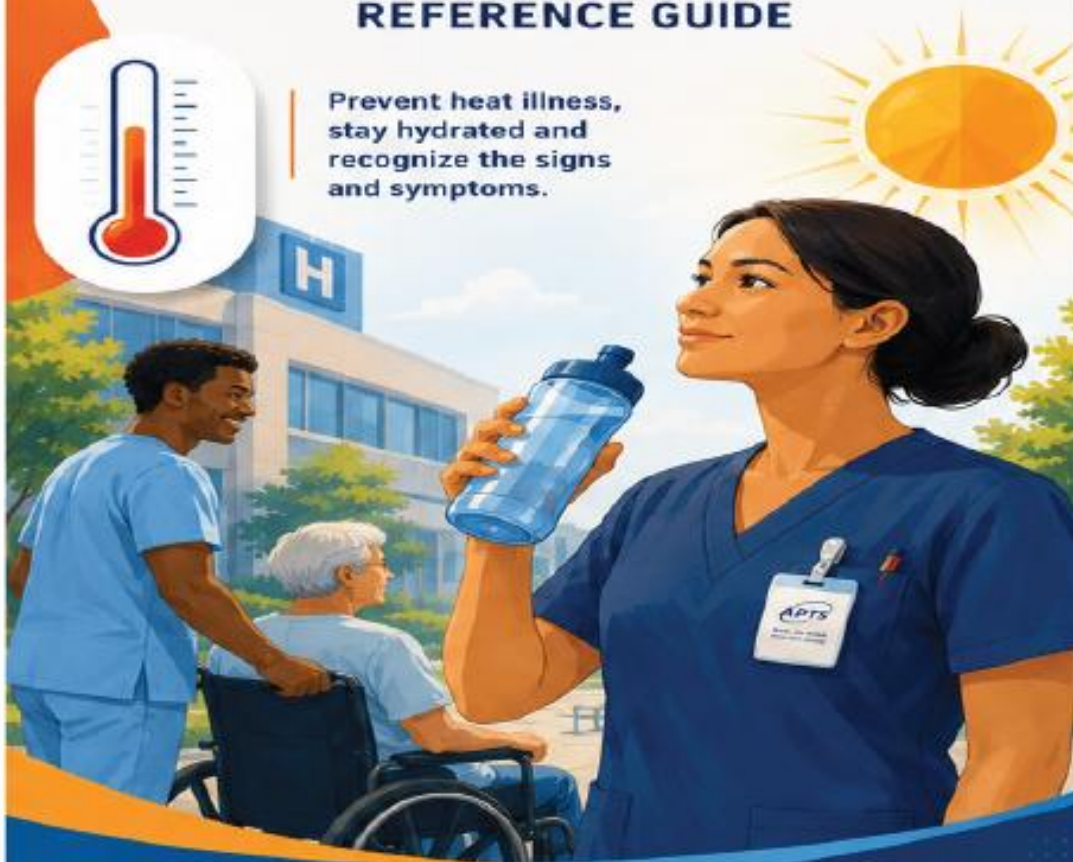


Thermal Kit

REFERENCE GUIDE



Prevent heat illness,
stay hydrated and
recognize the signs
and symptoms.



HYDRATE
Regularly and
sufficiently



PROTECT
Yourself from
heat and sun



ADAPT
To temperature
and humidity



MONITOR
Signs and
symptoms



Prevention is our best protection.
Together, let's stay alert in the heat.

Adjusted air temperature *	Light work (e.g., office work) 250 kcal	Moderate activity (e.g., moving a client, doing exercises with a client, etc.) 250–350 kcal	Water
30.4 °C or less			1 glass
31.0 °C			every hour
31.6 °C			
32.2 °C			
32.8 °C			
33.3 °C			
33.9 °C			
34.5 °C			
35.0 °C			
35.6 °C			
36.1 °C			
36.7 °C			
37.2 °C			
37.8 °C		Take a break every	
38.3 °C		hour, and the duration	
38.9 °C		increases, but may	
39.5 °C		decrease if you are in an	1 glass
40.0 °C		air-conditioned area	every
40.6 °C			15 minutes
41.1 °C	Take a break every		
41.7 °C	hour, and the duration		1 glass
42.2 °C	increases, but may		every
42.8 °C	decrease if you are in an		10 minutes
43.3 °C	air-conditioned area		
43.9 °C			

Source : <https://www.cnesst.gouv.qc.ca/fr/organisation/documentation/formulaires-publications/travailler-chaleur-mesures-preventives>

*To calculate the adjusted temperature, take the temperature of the room, in the shade, add the degree adjustment based on humidity (see table below), and then add 4.4 °C if you are wearing protective clothing (e.g., PPE, cotton coveralls, etc.). If you are working outdoors and exposed to direct sunlight, add 4.5°C. If you are working under a cloudy sky or in the shade, add 2°C instead.

Humidity index

20 %.... subtract 2 °C	60 %.... add 5 °C
25 %.... subtract 1 °C	65 %.... add 5.7 °C
30 %.... no adjustment	70 %.... add 6.4 °C
35 %.... add 0,9 °C	75 %.... add 7.1 °C
40 %.... add 1,8 °C	80 %.... add 7.7 °C
45 %.... add 2,7 °C	85 %.... add 8.3 °C
50 %.... add 3,5 °C	90 %.... add 8.9 °C
55 %.... add 4,3 °C	

Example: The temperature in the room in the shade is 28 °C. The humidity level in the room is 60%. The calculation is 28 °C + 5 °C = 33 °C. According to the recommendations, it is important to make sure to drink a glass of water every hour.

You can also use the IRSST calculator by following this link:

<https://prevenir-coup-chaleur-travail.irsst.qc.ca/calcul-tac.aspx>

Signs and Symptoms of Heatstroke



Image by Freepik

Heatstroke occurs when your **body overheats** and **can't cool down**. Heatstroke causes your body temperature to soar to dangerous levels, typically **above 40 deg C**. This usually happens because of **exposure to high temperatures** or **physical activity in high temperatures** for too long. Heatstroke is **life-threatening** and requires **immediate medical treatment**. The longer your body temperature remains high, the greater your **risk of complications (e.g. organ damage) or death**.

The following symptoms are generally observed:

- High internal body temperature.
- Change in mental state or behavior such as confusion, agitation, slurred speech, delirium.
- Hot, dry skin without sweating
- Nausea and vomiting.
- Fast, shallow breathing.
- Racing heart rate.
- Low blood pressure
- Fainting, weakness
- Headache
- Dizziness
- Skin changes (flushed/pale, clammy/dry)

CNESST:

1. Employees:

<https://www.cnesst.gouv.qc.ca/sites/default/files/publications/travailler-a-la-chaaleur.pdf>

2. Managers:

<https://www.cnesst.gouv.qc.ca/fr/organisation/documentation/formulaires-publications/travailler-cha...>

APTS Ambiance et contrainte thermique (document):

<https://aptsq.com/media/xwslcrth/sst-ambiance-contrainte-thermiques.pdf>