

Avoiding Heat Stress

Toolbox Talks

Discuss with crews on _____

The sun and warm weather of summer can also bring special hazards for those working outdoors. The combination of heat, humidity and physical labor can lead to illness. The two most serious forms of heat-related illnesses are heat exhaustion (primarily from dehydration) and heatstroke. Signs of heat exhaustion or heatstroke require immediate attention. Recognizing those warning signs and taking quick action can make a difference in preventing heat illnesses.

The following are guidelines all employees should follow during the warm weather months:

Understand what heat stress is and be able to recognize the symptoms. It's when the body cannot get rid of excess heat, and you have trouble maintaining a temperature range. The heart pumps faster, blood is diverted from internal organs to the skin, breathing rate increases, sweating increases, all to transfer more heat to the outside air and cool the skin by evaporation of sweat. If the body can't keep up then the person suffers effects ranging from heat cramps to heat exhaustion, and finally to heatstroke.



Heat Exhaustion: include headaches, dizziness, lightheadedness, or fainting; weakness and moist skin; mood changes such as irritability or confusion; upset stomach or vomiting.

Heat Stroke: include dry, hot skin with no sweating; mental confusion or loss of consciousness; seizures or convulsions. Seek professional assistance immediately.

Dry clothes and skin do not mean that you are not sweating. In dry climates, you might not feel wet or sticky, but you are still sweating. On a very warm day, you can lose as much as two liters of fluid.

Beat the Heat. Help Prevent the ill effects of heat stress by:

- ✓ Drinking water frequently and moderately (about eight ounces every 15 minutes.)
- ✓ If possible, avoid direct sunlight or other heat sources.

- ✓ Try to plan your day to tackle more strenuous jobs during the cooler morning hours.
- ✓ Utilizing the ventilation or fans in enclosed areas.
- ✓ Rest frequently in cool, shaded areas.
- ✓ Avoid alcoholic or caffeinated beverages and eat lightly.
- ✓ Remember that it takes about one to two weeks for the body to adjust to the heat; this adaptation to heat is quickly lost — so your body will need time to adjust after a vacation or extended absence.
- ✓ Wearing lightweight, light-colored, and loose-fitting clothes.
- ✓ Wear wide brimmed hard hats, neck protectors (Chill-Its) and sunscreen.

Be prepared to act. In the event you recognize these symptoms in yourself or a co-worker, immediately notify your supervisor and contact emergency professionals. While waiting for First Aid or Medical Aid, you should:

- ✓ Move the worker to a cool shaded area.
- ✓ Loosen or remove heavy clothing.
- ✓ Provide small sips of cool drinking water.
- ✓ Fan and mist the person with water.

Factors that may increase the chance of a worker developing heat stress include poor physical fitness, obesity, increased age, pre-existing medical conditions, short term illnesses (e.g. flu), chronic skin disorders, use of medication, alcohol and drug use or a previous heat stroke. Early signs include:

1. Feeling not well, headaches or nausea.
2. Decreased efficiency, coordination, and alertness.
3. Increased irritability.
4. Light-headedness or dizziness.
5. Fainting.

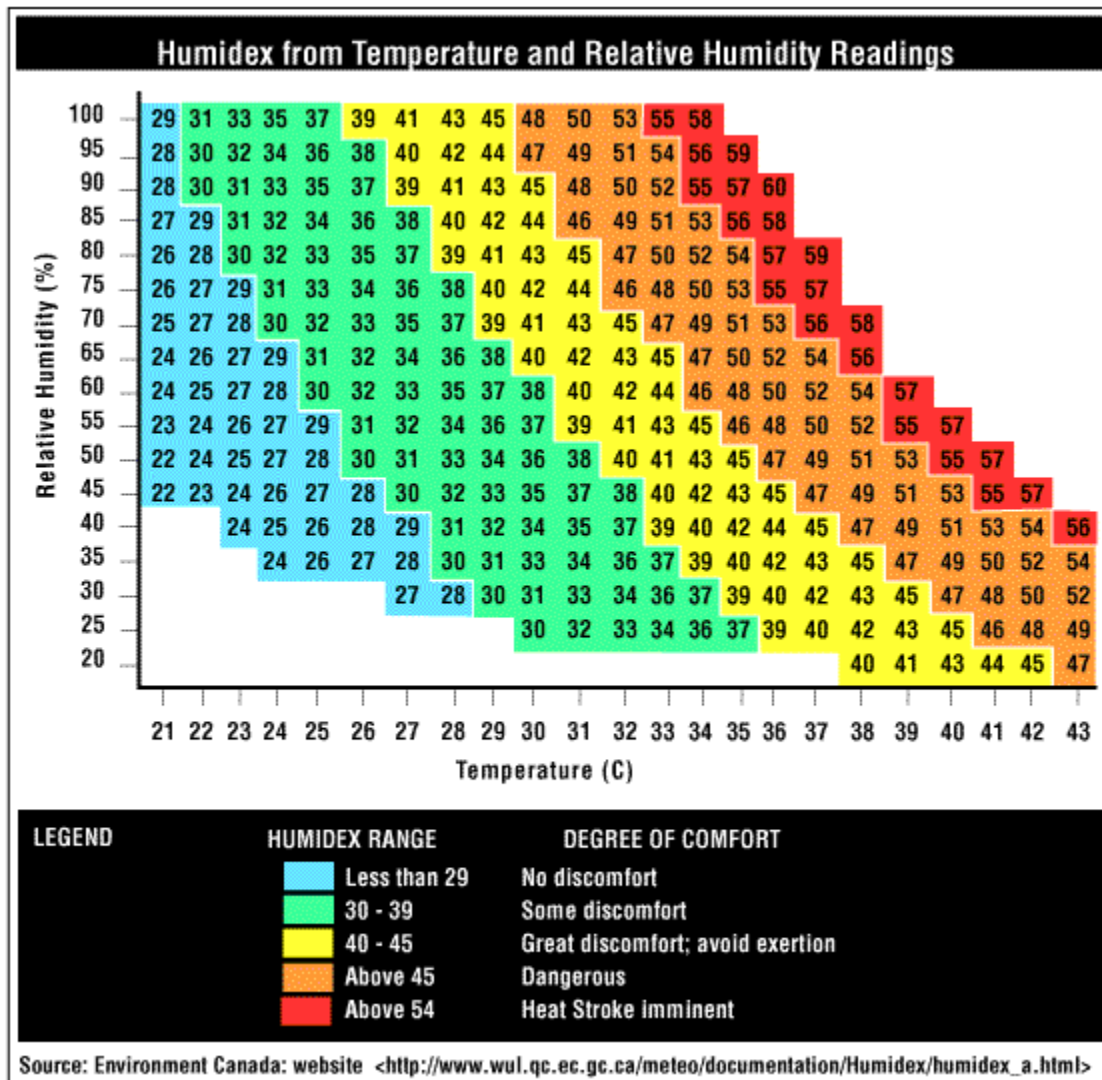
What is humidex?

Humidex is a measure of how hot we feel. It is a parameter intended for the general public to express how the combined effects of warm temperatures and humidity are perceived. It provides a number that describes how hot people feel, much in the same way the equivalent chill temperature, or "wind chill factor," describes how cold people feel.

Environment Canada uses humidex ratings to inform the general public when conditions of heat and humidity are potentially uncomfortable.

Table 1	
Humidex Range	Degree of Comfort
20-29	Little discomfort
30-39	Some discomfort
40-45	Great discomfort; avoid exertion
46 and over	Dangerous; heat stroke possible

Source: [Warm season weather hazards](#). Government of Canada



Question to Generate Discussion

-For your job's practices, what are common and practical controls to prevent heat illnesses?