

## Heat-Related Illness

### How to Beat the Heat - How to Manage the Heat

Doing too much on a hot day, spending too much time in the sun or staying too long in an overheated place can cause heat-related illnesses.

People suffer most when the body's temperature control system is overloaded. The body normally cools itself by sweating. But under some conditions, sweating just isn't enough. In this case, a person's body temperature rises rapidly, and this situation may damage the brain or other vital organs, and in extreme conditions, may be life threatening.

#### What affects the body's ability to cool itself during extremely hot weather?

- if the humidity is high, a person's sweat will not evaporate as quickly, preventing the body from releasing heat quickly
- other conditions/situations that can limit the ability to regulate temperature:
  - certain medications
  - people who are overweight
  - poor circulation
  - elderly people and children
  - (0-4 years)
  - fever – body temperature is already elevated due to illness
  - sunburn
  - dehydration
  - drinking alcohol
  - heart disease or respiratory illness
  - exercising vigorously or working strenuously outdoors for prolonged times

#### WATCH FOR THE SYMPTOMS OF HEAT-RELATED ILLNESS

SYMPTOM	Heat Cramps	Heat Exhaustion	Heat Stroke
<b>Body Temperature</b>	Normal	May be above or below normal	Rising rapidly to 40°C (104°F) and as high as 44°C (111°F)
<b>Pulse</b>	Weak and regular	Weak and regular - thready	Rapid and strong, becoming weaker
<b>Respiration</b>	Normal	Rapid and shallow	Noisy
<b>Consciousness</b>	Conscious	Headache, blurred vision, dizziness and may lose consciousness	Throbbing headache, dizziness, restlessness, unconsciousness, coma
<b>Skin Appearance</b>	Excessive sweating (depletes salt & fluid)	Sweating heavily, pale, cold, clammy	Flushed, hot, dry
<b>Muscular Reaction</b>	Spasms in the extremities and abdomen	Spasms in the extremities and abdomen - may lead to fainting and vomiting	Convulsions, nausea and vomiting

## The Best Defense Is Prevention

**It is easier to prevent dehydration and high body temperatures, than to treat them!  
Remember to stay cool and use COMMON SENSE!**

- Drink plenty of fluids, slowly throughout the day, and more than usual, regardless of activity level. WATER is generally the best choice. If you are exercising, it is important to replace salt and minerals that the body loses through perspiring by choosing sport beverages and small amounts of juice
- Avoid drinks that contain alcohol or caffeine, or large amounts of sugar - they can cause you to lose more fluid
- Avoid very cold drinks - these may cause cramping in the abdomen &/or legs & arms
- Note: if your physician generally limits the amount of fluid you drink, or has you on "water pills", make sure to ask how much fluid you should drink in hot humid weather
- Note: if your physician has prescribed a "salt-restrictive diet", make sure to ask about increasing your salt intake, before using "high-salt" beverages, such as sport drinks
- Note: Some medications can increase the risk of heat-related illness. Certain medications can inhibit perspiration. Examples are Parkinson's Disease medication, tranquilizers, and other medications used for mental illness
- Stay indoors, if possible. An air-conditioned environment, such as a mall or library, even for a few hours each day helps your body to cool down, if your home is not air-conditioned
- Take frequent cool showers or baths. However, avoid extreme temperature changes. A cool shower immediately after coming in from high temperatures can result in hypothermia, particularly for the elderly and very young
- Check on the elderly, physically ill people, those who have heart disease or high blood pressure. These people are especially susceptible to heat-related illness
- Avoid too much sunshine. Sunburn slows the skin's ability to cool itself
- Wear light weight, loose fitting clothing that covers as much skin as possible to help maintain normal body temperature, while protecting the skin
- Wear a wide-brimmed hat (keeps head cooler), sunglasses and use sunscreen with SPF (Sun Protection Factor) of 15 or higher
- Slow down! Reduce, eliminate, or reschedule strenuous activity such as running, biking and lawn care work. Limit outdoor activities to early mornings or late evenings. Rest in shady areas
- Eat well-balanced, light meals. Foods that increase metabolic activity/body heat, such as high protein, increase a person's water loss
- NEVER leave anyone or a pet in a closed, parked vehicle. Even if car windows are open slightly, the temperature in a car can rise from 30° C degrees to 50° C degrees within 10 to 15 minutes. Pets may experience drastic and rapid increases in body temperature and die in this situation

**Plan to drink the recommended amounts spread out throughout the day!**

**For more information about preventing heat-related illness  
Call the Middlesex-London Health Unit at 519-663-5317 Ext 2330  
Or visit [www.healthunit.com](http://www.healthunit.com)**

## **How to Treat Symptoms of Heat-Related Illness:**

**If you, or someone you know is experiencing any of these symptoms, it is important to take action quickly!**

### **Heat Cramps:**

- stop all activity and move to a cool place
- slowly drink clear juice or sports beverage
- do not return to strenuous activity for a few hours after the cramps are gone because more exertion may lead to heat exhaustion or heat stroke
- seek medical attention if the cramps are not gone within 1 hour

### **Heat Exhaustion:**

- can develop after several days of high temperatures and inadequate fluid intake
- drink cool, non-alcoholic drinks, slowly (every 15-20 minutes) to avoid nausea and vomiting
- REST - get somewhere cool, and do not rush back to physical activity
- have a cool shower or bath, and wear lightweight clothing
- monitor body temperature until it decreases

### **Heat Stroke:**

- the most serious heat-related illness - the body is not able to control temperature
- temperature rises rapidly, sweating mechanism fails, body can't cool down
- body temperature may rise to 104° F - 110° F degrees (40° C degrees or more) within 10-15 minutes, potentially causing permanent disability or death, if not treated
- Call 911 for Emergency Medical Service (EMS) or take the person to the hospital emergency. If EMS is delayed, call the hospital for further instructions
- get person into shade/cool area and offer cool non-alcoholic fluids (unless vomiting)
- cool body rapidly - tub of cool water/cool shower/spray with garden hose

**For more information about preventing and/or treating heat-related illness please contact the Middlesex-London Health Unit at:**

**519-663-5317, ext. 2220**

**or visit [www.healthunit.com](http://www.healthunit.com)**