



EXTREME HEAT

Many regions of Canada are experiencing more frequent, more severe and /or longer extreme heat events (heat waves). A heat wave is a prolonged period of high temperatures and humidity which is made worse if you are in the sun or if there is little or no wind. Typically there is a lack of night-time cooling and air quality is often poor. Typically the prolonged period will last from several days to several weeks. The Meteorological Service of Canada may issue a humidex advisory.

High temperatures and high humidity makes it difficult for the human (and animal) body to cool itself. Heat can kill by pushing the body beyond its limit. Under normal conditions, the body's internal thermostat produces perspiration that evaporates and cools the body, however, in extreme heat and high humidity, evaporation is slowed and the body must work harder to maintain a normal temperature. Heat related illnesses will occur when excessive heat last for more than two days. The most vulnerable are infants, the elderly and the sick, especially for those without air conditioning.

A heat warning is automatically declared when Environment Canada forecasts a humidex of 40C or more for at least two consecutive days.

The smog and heat thresholds are:

- Smog Advisory (based on air quality index (AQI) of > 50)
- Heat Alert (the first one only) (humidex of 36 or more for a least two consecutive days)
- Heat Warning (humidex of 40 or more for at least two consecutive days)
- Heat Emergency (humidex of 45 or more or situational factors)

WHAT TO DO DURING EXTREME HEAT

- **Stay out of the sun**
- If you go outside, stay in the shade
- Drink lots of water; do not wait until you're thirsty; gage on how much you are sweating
- Keep house cooler than the outdoors
- Dress appropriately (wear loose-fitting, lightweight clothing; wide brimmed hat)
- If your house is not air conditioned, try to spend a few hours in an air-conditioned space (mall, friend/relative's house with air conditioning, etc.)
- Take a cool bath or shower
- Eat small meals more often
- At night if the outdoor temperature is cooler, open all windows. Use fans to bring the outside air in.
- Limit physical activity during the middle of the day
- Liquids that are high in sugar and/or alcohol should be avoided as they may increase the amount of water lost by the body.
- If you experience heat cramps, are advised by your doctor or have to work in the heat and are sweating a lot you may want to take in extra salt
- If you take medication, check with your doctor or pharmacist for possible side effects during extreme heat
- Conserve electricity not needed to keep you cool as many people will be putting a strain on the electrical system with high demand for electricity for running air conditioners, fans, etc.
- **NEVER** leave children, the elderly or pets unattended in a car, even with the windows rolled down



Pets and Livestock

You have a responsibility to ensure the well-being of animals under your care. With a bit of planning you can greatly increase the comfort and health of your animals during periods of hot weather. A good source of information is "Caring for Animals during Extreme Heat" on the Department of Primary Industries website: (<http://www.new.dpi.vic.gov.au/agriculture/farming-management/fire-flood-other-emergencies/bushfires-and-extreme-heat/caring-for-animals-during-extreme-heat>)



SIGNS OF HEAT EMERGENCIES

Watch for the following signs of heat cramps, heat exhaustion and heat stroke:

Heat Cramps

- Painful cramps in stomach, arms and legs
- May occur suddenly
- Cramps are a warning that more serious heat disorders may occur if stress continues

Heat Exhaustion

- Present like they're in shock
- Cool, moist, pale or flushed skin
- Heavy seating
- Headache
- Nausea or vomiting
- Dizziness and exhaustion
- Body temperature will be near normal
- May be upset, clumsy, confused, have blurred vision and panting

Heat Stroke

- Hot, dry, red skin
- Changes in consciousness
- Rapid, weak pulse
- Rapid shallow breathing
- Body temperature can be very high – as high as 40 C (105 F)
- May act strangely, be confused and dizzy



TREATMENT OF HEAT EMERGENCIES

If you find someone suffering from a heat related illness take the following actions:

Heat Cramps

- Move the person to a cooler place
- Have him/her rest in a comfortable position
- Lightly stretch the affected muscle and replenish fluids
- Give a half glass of cool water every 15 minutes
- Have them drink cool salted water (mix 1 teaspoon salt per gallon of water)
- DO NOT give liquids with alcohol or caffeine in them as they can make conditions worse
- If conditions do worsen call 911.

Heat Exhaustion

- Move the person to a cooler place
- Remove or loosen tight clothing
- Apply cool, wet cloths
- If the person is conscious, give cool water to drink, a half glass every 15 minutes
- Ensure that the person drinks slowly
- DO NOT give liquids that contain alcohol or caffeine
- Let the victim rest in a comfortable position and watch for changes in his/her condition
- If conditions worsen call 911

Heat Stroke

- Heat stroke is a life threatening situation
- Call 911 immediately
- Move the person to a cooler place
- Attempt to cool the person using cool wet cloths
- Watch for signs of breathing problems
- If the victim refuses water or is vomiting or there are changes in the level of consciousness do not give anything to eat or drink.

