



EXTREME HEAT/HUMIDEX ADVISORY FACT SHEET

While it is important to enjoy the outdoors during Canadian summers, it is also essential to keep in mind that periods of extreme heat and humidex events may cause potential serious health effects which should be avoided.

Populations at increased risk from extreme heat:

- Older adults over 65 years of age
- Infants and young children
- Those with chronic heart or lung disease
- Those with chronic physical or mental disabilities
- People taking certain medications (consult your doctor or pharmacist)
- People who exercise vigorously outdoors (play sports, cyclists, gardeners)
- Outdoor workers (depending upon length of time and exertion levels)
- Other risk factors include:
 - obesity
 - dehydration
 - fever or infection
 - sunburn
 - alcohol use
- Parents, coaches and others supervising children should be aware of the health risks during extreme heat conditions.

Symptoms of extreme heat exposure:

Exposure to extreme heat can result in several conditions depending on severity:

- Heat cramps
- Heat exhaustion
- Heat stroke

Heat cramps:

- Often occurs in those exercising or working outdoors during extreme heat
- Signs and symptoms include thirst, muscle cramps sweating and increased heart rate

Heat exhaustion:

- Body temperature is elevated to 37°C to 40°C
- Dizziness, headache, irritability, anxiety, confusion
- Nausea/vomiting, fatigue, lack of appetite
- Muscle aches and pains, weakness, uncoordination

Heat stroke is a Medical Emergency:

- The body temperature is above 40°C
- May have all of the symptoms above plus;
- Skin is red, hot and dry
- Rapid heart rate and breathing
- Delirium/seizures/convulsions/coma

How to avoid a heat related illness:

For the individual:

- Stay out of the hot sun or heat.
- Stay inside if your home is cooler than outside
- If you do go outside, stay in the shade
- Limit activity to morning/evening.
- Avoid strenuous outdoor physical activity.
- Reschedule sports practices and jogging times.
- Exercise/workout indoors in an air conditioned area.
- Where possible, go to air conditioned sites (e.g. malls, community centres, libraries).
- Take a cool bath or shower periodically or cool down with wet towels.
- Drink lots of water and natural fruit juices.
- Avoid drinks that are high in sugar, caffeine and/or alcohol, as they can increase the amount of water lost by the body.
- Wear loose-fitting clothing that allows for evaporation of sweat.
- Wear a hat and use sunscreen (of at least SPF 15).
- Control your pet's exposure to sun – limit time and provide water and shade.
- Call or visit friends/neighbours who are at risk, check on them 2-3 times daily.
- If you take medication consult your doctor or pharmacist about any side effects during extreme heat.
- Plan ahead – ask for policies to reschedule sports events during heat alerts.
- Never leave children or pets unattended in a car.

For your home:

- If you don't have air conditioning, keep shades drawn and blinds closed.
- Fans keep you cool by evaporating sweat. Use fans in or next to your window. But remember that fans alone may not provide enough cooling.
- Keep electric lights off or turned down low.
- If you have a two-storey house, keep the upper-level windows slightly open, to draw excess heat up and out.
- At night, if the outdoor temperature is cooler, open all your windows. If you have fan units that fit into the windows, use them to bring down the temperature faster.
- Avoid using your oven.

Caregivers of children:

- Schedule outdoor activities early in the day before temperatures rise.
- Dress children in loose-fitting, light-coloured clothing.
- Ensure that children wear a wide brim hat and use sunscreen with an SPF of 15 or higher.
- Keep children out of the sun between the hours of 11:00 a.m. and 4:00 p.m.
- Reduce outdoor activity levels by choosing less vigorous activities.
- Provide rest breaks and a wide variety of quiet activities, including water-play, in shaded areas.
- Provide plenty of drinking water for both children and staff.
- Monitor children's comfort regularly. If children experience symptoms such as rapid breathing, weakness, headache or nausea, move them into a cool space and seek medical attention if needed.
- Never leave a child unattended in a car.

How to Help Someone with Heat Illness

- Call for medical help
- Remove excess clothing
- Move the individual to a cooler location
- Cool the person by sponging with cool water
- Give the individual sips of cool water, not ice cold water if awake
- If icepacks are available wrap in a cloth and place on neck, and in armpits

Additional Web Links:

It's Your Health. *Extreme Heat Events:*

<http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/heat-chaleur-eng.php>

Humidity:

http://www.msc-smc.ec.gc.ca/cd/brochures/humidity_e.cfm

Fact Sheet - *Summer Severe Weather Warnings:*

http://www.on.ec.gc.ca/severe-weather/summerwx_factsheet_e.html

Environment Canada Weather: K-W Region:

http://www.weatheroffice.gc.ca/city/pages/on-82_metric_e.html

http://www.weatheroffice.gc.ca/canada_e.html

Ontario Smog Alert Network:

<http://www.airqualityontario.com/alerts/signup.cfm>

FAQ's For Health Professionals:

[http://chd.region.waterloo.on.ca/web/health.nsf/4f4813c75e78d71385256e5a0057f5e1/62F7DE0D34D34D3885256BCD006355E3/\\$file/FAQ%20for%20health%20professionals.pdf?openelement](http://chd.region.waterloo.on.ca/web/health.nsf/4f4813c75e78d71385256e5a0057f5e1/62F7DE0D34D34D3885256BCD006355E3/$file/FAQ%20for%20health%20professionals.pdf?openelement)

AIR QUALITY ADVISORY FACT SHEET

Smog is the grayish brown haze that sometimes accompanies hot, humid summer days. Poor air quality can pose serious health risks and worsen existing health problems, especially amongst those already suffering from respiratory and cardiopulmonary illness.

Smog Advisories - DOs and DON'Ts

Elevated smog levels can be a significant public health threat. Individuals with existing heart or respiratory problems, children and seniors are at increased risk during an air quality (smog) advisory. Other individuals may also experience adverse health effects from prolonged and/or frequent exposure outdoors during periods of elevated air pollution. People may experience breathing problems as well as eye, nose and throat irritations from exposure to poor air quality.

Residents with respiratory problems, asthma, and heart disease can reduce their risk by:

- Remaining indoors in a cool environment
- Refraining from strenuous outdoor activity
- Seeking immediate medical attention if the symptoms get worse

People who exercise or work outdoors:

Physical activity is an important part of a healthy lifestyle. However, during an air quality (smog) advisory, strenuous outdoor activities should be reduced, substituted with more moderate activities or, avoided until air quality improves.

If engaging in physical activity outdoors during an air quality (smog) advisory is unavoidable, take additional rest breaks, drink more water, and avoid high traffic areas.

If you're going to be active outdoors:

- drink plenty of fluids (e.g. water) before, during and after activity (during activity, drink fluids every 15 - 20 minutes)
- wear loose-fitting clothes
- wear a wide brimmed hat
- use sunscreen with SPF 15 or higher
- take lots of rest breaks in the shade or an air conditioned area
- exercise or play sports in shaded areas
- if jogging or cycling, avoid busy streets, especially during rush hour
- reduce activity level if you begin to cough, wheeze, feel chest tightness and/or have trouble breathing
- try not to spend long periods of time outdoors between 11 a.m. - 6 p.m.
- parents, coaches and others taking care of children should also be aware of the health risks during an air quality (smog) or humidex advisory

When you exercise or do hard physical work, you breathe harder than normal, inhaling dirty air deeper into your lungs. You also breathe mostly through your mouth, instead of using the filter action of the

nose. If you are active when it is very hot, your body temperature can get very high and has to work extra hard to keep cool. When working or being active outdoors during an air quality advisory, even healthy people may:

- cough and/or wheeze
- feel scratchy in their throat
- have trouble breathing
- damage lung cells (short and long term)
- reduce the body's ability to fight off lung infections
- have difficulty performing their best (the lungs can't work at their normal levels)
- affect their long-term health

Smog & Children:

Children are more likely to experience negative respiratory effects from smog and poor air quality. Coughing, wheezing and shortness of breath are potential indicators of distress. You can help protect children during an air quality (smog) event by doing the following:

- Reduce children's outdoor work, play or exercise
- Children with asthma and allergies should avoid being outside
- Plan activities that can be done indoors in a cool, well ventilated place
- If children must be outside, try to schedule activities for early morning when pollution levels are often lowest
- Avoid outdoor activities during peak rush hour times
- Avoid mid-day outdoor activities if possible

Region of Waterloo encourages the public to be sensible during smog and/or humidex advisories by staying cool, avoiding strenuous exercise, drinking lots of water and taking precautions to avoid unnecessary exposure.