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*Your health and  
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# You're active in the heat. You're at risk!

**Protect Yourself from Extreme Heat**



Know your risks

How your body regulates its temperature

Get ready for extreme heat

Stay alert and pay attention

Stay cool and hydrated

Modify your activities

Canada

## Protect Yourself from Extreme Heat



### Know your risks

Being physically active provides many health benefits, but during extreme heat it can put you at risk even if you are healthy.

#### Your risk increases if you have:

- breathing difficulties;
- heart problems;
- a mental illness such as depression;
- hypertension; or
- kidney problems.

If you are taking medication or have a health condition, ask your doctor or pharmacist if it increases your health risk in the heat and follow their recommendations.

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## Heat Illness

Heat illnesses can lead to long-term health problems and even death. These illnesses include heat stroke, heat exhaustion, heat fainting, heat edema (swelling of hands, feet and ankles), heat rash and heat cramps (muscle cramps) and are mainly caused by over-exposure to extreme heat or over-exertion for a person's age and physical condition.



## How your body regulates its temperature

Your body produces heat, especially during physical activity. Hot air and exposure to direct sun rays or hot surfaces also heat your body. This heat is lost by contact with cool air and by sweat production which cools your body as it evaporates. Weather conditions play a big role in how your body regulates its temperature. For example, if it's windy, sweat evaporates faster, which helps to cool you. However, high humidity slows down this process, contributing to increased body temperature.

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## Protect Yourself from Extreme Heat



## Get ready for extreme heat

Your body is not used to (not acclimatized to) extreme heat at the beginning of the summer. You are also not acclimatized if you don't exercise regularly during hot weather.

- Know what the outdoor temperature is before you start so you can modify your physical activity as needed.
- Ask your sports organization or trainer if they have a plan for extreme heat.
- Ask your coach, trainer or a teammate to pay special attention to you during extreme heat if you are particularly at risk. If you suffer from asthma, make sure you carry your inhaler with you, and that those around you are aware of your condition.

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## Stay alert and pay close attention to how you – and those around you – feel

Protect your health – **watch for symptoms of heat illness**, which include:

- dizziness or fainting;
- nausea or vomiting;
- headache;
- unusually rapid breathing and heartbeat; and
- extreme thirst.

If you experience any of these symptoms during extreme heat, **immediately** move to a cool place and drink liquids. Water is best.



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**Heat stroke is a medical emergency! Call 911 or your local emergency number immediately** if you are caring for someone, such as a running partner, who has a high body temperature and is either unconscious or confused.

While waiting for help – **cool the person right away by:**

- moving them to a cool place, if you can;
- applying cold water to large areas of the skin or clothing; and
- fanning the person as much as possible.

**Never** leave people or pets in your care inside a parked vehicle or in direct sunlight.

- When the outside air temperature is 23°C/73°F, temperatures inside a vehicle can be extremely dangerous – more than 50°C/122°F.

Stay alert and pay attention

Stay cool and hydrated

Modify your activities

## Stay cool and hydrated

Drink plenty of cool liquids, especially water, **before you feel thirsty**. Thirst is not a good indicator of dehydration. By the time you feel thirsty, you are already dehydrated.



- Drink plenty of water before, during and after being physically active.



- Wear loose-fitting, light-coloured clothing made of breathable fabric.



- Increase your comfort by splashing yourself with cold water.

Stay cool and hydrated

Modify your activities

## Modify your activities

### Reschedule or find alternatives

If you can, reschedule strenuous outdoor activity to a cooler part of the day or another day. There are also many ways in which you can still be physically active while avoiding the heat, such as:

- exercising in an air-conditioned place; or
- choosing a cooler outdoor location, such as tree-shaded area away from high traffic to avoid higher levels of air pollution. These spots can be as much as 5°C/9°F cooler than the surrounding area.

Before heading out, check the Air Quality Health Index (AQHI) in your area, if available – air pollution tends to be higher during extreme heat. When active, you are more sensitive to air pollution because you breathe deeply and allow more air to enter your lungs.

If you are in an area where mosquitoes are active, protect yourself with insect repellent and follow the manufacturer's directions.

### Be realistic

Try not to expect the usual performance from yourself during extreme heat.

### Take extra water breaks

Move into the shade, drink water and remove gear such as a helmet or equipment to let your body cool off.

### Avoid sun exposure

Exposure to direct sun will heat your body and can result in sunburn. Sunburned skin loses its sweating efficiency, which impairs your body's ability to regulate its temperature.

- Shade yourself by wearing a wide-brimmed, breathable hat or using an umbrella.
- If you can't avoid the sun, use a sunscreen that is SPF 15 or higher and follow the manufacturer's directions.  
**Remember, sunscreen will protect you from the sun's ultraviolet (UV) rays but not from the heat.**
  - Sunscreen and insect repellents can be safely used together. Apply the sunscreen first, then the insect repellent.

### Recover

Allow your body to recover after heat exposure. Spend a few hours in a cooler tree-shaded area or somewhere that's air conditioned, such as your home, a shopping mall, grocery store, public building or public library.



## Additional Resources

**Health Canada’s “It’s Your Health – Insect Repellents”**

[www.hc-sc.gc.ca/hl-vs/iyh-vsv/life-vie/insect-eng.php](http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/life-vie/insect-eng.php)

**Health Canada’s “Sun Safety”**

[www.hc-sc.gc.ca/hl-vs/pubs/sun-sol/safety-prudence-eng.php](http://www.hc-sc.gc.ca/hl-vs/pubs/sun-sol/safety-prudence-eng.php)

**Public Health Agency of Canada’s “Canada’s Physical Activity Guide to Healthy Active Living”**

[www.phac-aspc.gc.ca/hp-ps/hl-mvs/pag-gap/pdf/handbook-eng.pdf](http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pag-gap/pdf/handbook-eng.pdf)

**Health Canada and Environment Canada’s “Air Quality Health Index”**

[www.airhealth.ca](http://www.airhealth.ca)

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