

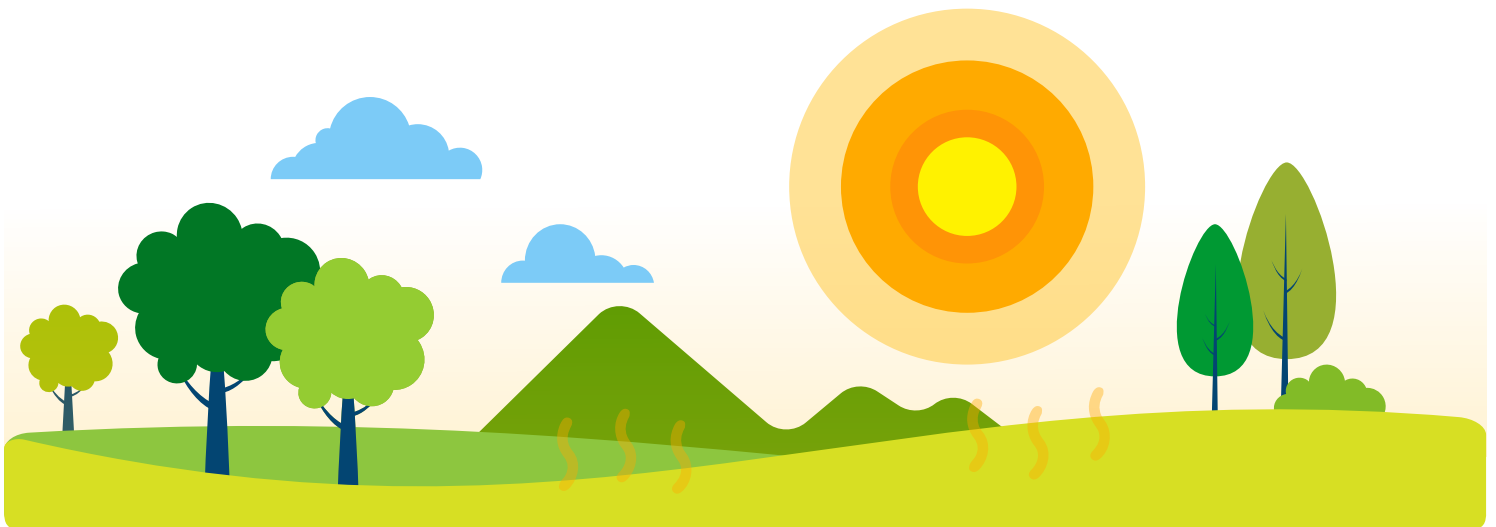


Climate Change

Protecting Against Extreme Heat

Climate change occurs when long-term weather patterns, such as temperature and rainfall, are changed due to increased levels of greenhouse gases in the atmosphere. Climate change is not only a threat to the environment but also to human health.

A changing climate can mean longer and more intense heat events, which can be dangerous for health. As temperatures rise, extreme heat events, often called “heat waves”, are becoming more commonplace across Canada. These high temperatures can increase the risk of various illnesses including heat stroke, heat exhaustion, and heat edema (swelling of the hands, feet, and ankles). Over the next 30 years, the number of hot days in a year is expected to more than double in Canada. By learning how to protect ourselves from extreme heat we can reduce the risks associated with heat-related illness.



For more information on extreme heat and your health:

- Keep children cool! Protect your child from extreme heat (Health Canada) - [English](#) / [French](#)
- You're active in the heat. You're at risk! Protect yourself from extreme heat (Health Canada) - [English](#) / [French](#)
- Climate change and health: Extreme heat (Health Canada) - [English](#) / [French](#)
- Extreme heat: heat waves (Health Canada) - [English](#) / [French](#)
- Video: Staying healthy in the heat (Health Canada) - [English](#) / [French](#)
- Infographic: Staying healthy in the heat (Health Canada) - [English](#) / [French](#)



Climate Change

Protecting Against Extreme Heat

The Facts: Extreme heat and health

Illnesses caused by heat are preventable. Knowing how to protect yourself, your friends, and your family will keep everyone safe and healthy during the heat season!

Who's most at risk? While extreme heat can put everyone at risk of illness, those most at-risk include:



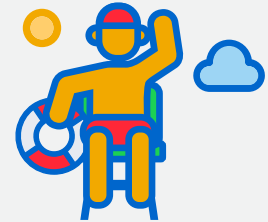
Older adults



Young children



Those with chronic illnesses
like asthma



Those who spend time
outdoors

Know the signs! Being aware of the signs and symptoms of heat-related illnesses can help you to act quickly to prevent extreme sickness and avoid the hospital.



Dizziness or fainting



Nausea or vomiting



Rapid breathing and
heartbeat



Muscle cramps



Heavy sweating



Extreme thirst



Skin rash



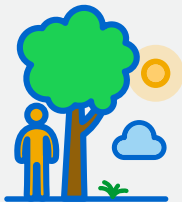
Headache



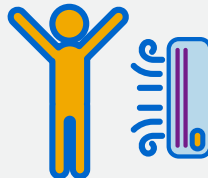
Dark urine and decreased
urination

! If you experience any of these symptoms, immediately move to a cool place and drink water.

Be prepared! Protect yourself from the summer heat by checking the forecast regularly to know when to take extra care by:



Keeping cool in the shade



Seeking cool locations



Drinking plenty of water



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Activities

Learning about climate change

Have students investigate the science of climate change and the relationship between extreme heat events and human health. Students can then come up with an extreme heat plan for home or school (e.g., carry a hat, water bottle, and sunscreen).

Subject Areas:

- Science
- Health & Physical Education

Before you begin:

Not all students have access to air-conditioners at home or ready access to green spaces (e.g., backyards, parks), which makes it more difficult for them and their families to protect themselves against the heat. Extreme heat increases the risk for vulnerable groups including marginalized groups, low-income populations, and those who experience homelessness. It is important to approach this topic with sensitivity and consideration for those who may be at greater risk.

Part 1: Understanding how heat affects our health

Extreme heat can increase the risk of various illnesses including heat stroke and heat exhaustion. By learning about how heat affects human health and how to protect ourselves from extreme heat, we can reduce the risks associated with heat related illness.

- 1 As a class, review how heat affects human health using the *Climate Change: Protecting Against Extreme Heat* information sheet (see pages 1-2).
- 2 Have students break-off into smaller groups to conduct research on the effects of heat on human health.
- 3 Based on their research, have students complete the *How Heat Affects Our Health Worksheet* (see page 4) and create an extreme heat plan.

Part 2: Extend the learning and raise awareness!

- 1 **Share your learning!** Share information on how heat affects our health with your whole-schools community including students, staff, parents/guardians, and the broader community through social media, newsletters, presentations, handouts, and displays.
- 2 **Bring information home!** Students can bring information on how heat affects our health home to their families.



Students can share the Health Canada brochure [Keep Children Cool!](#) with their families and discuss ways to prepare for the coming summer.



Climate Change

How Heat Affects Our Health Worksheet

1 Who is most at risk from suffering heat illness?

2 What are the four main signs and symptoms of heat stroke?

3 What are the nine main signs and symptoms of heat exhaustion?

4 What are some strategies to reduce the risk of heat illness?

5 **Create a plan!** On days when there is an extreme heat warning, it is important to be prepared. Create a plan on how you will prepare for school during a heat wave: