

Overview:

In this lesson, students will learn the impacts that climate change has on human health. By learning how health is impacted by climate change we can better understand how to protect ourselves immediately and in the long-term by taking steps and adapting our behaviours to reducing climate change.

Background:

We often think about climate change as something abstract or remote. We hear scientists talking about melting ice caps, see images of drought in faraway places, or browse through news coverage of exotic weather disasters. However, climate change is having effects right here and right now in Canada. And the risks aren't just theoretical or abstract. The effects of climate change are up close and personal, affecting the everyday lives and health of Canadians. For more information read our <u>Climate Change and Health</u> article and our guidebook on <u>Connecting Climate Change and Health</u>.

Student learning targets:

- Understand the link between our environment and our health.
- Identify the climate factors that affect health directly and indirectly through our environment.
- Discuss at-risk populations for climate impacts
- Describe ways to benefit our personal health by taking action on reducing climate change



Time	Activity	Notes
5 mins	Introduction	
2 mins	Video	Climate Change and Health animation
10 mins	Video Discussion	Draw concept maps of the health impacts the students come up with Infographic to help facilitate discussion
5 mins	Demonstration	Mental Health and Climate Change
10 mins	Article Reading	
10 mins	Article Worksheet	- Completed individually, in groups, or as a class (if one reading is used)
10-15 mins	Discussion/ Presentations	

Introduction

This lesson starts with a discussion about climate change and health. The goal of this discussion is to get students thinking about climate change beyond the environmental impacts. Suggested questions for the class include:

- What are some examples of ways we've seen climate change impact the country?
 Globally? (This could include devastating forest fires, record breaking heatwaves, flooding etc.)
- Can we think of ways these could impact our health? (Injury/death from extreme weather, smoke from wildfires, water contamination from flooding)

Watch

Climate Crisis? Health Crisis! -

How climate change affects the health of Canadians. (2 mins)



Video Discussion

This video should provide an understanding of the various ways that climate can impact our health and how we can better prepare. Elaborate and discuss the examples from this video. Example questions can include:

- What are some of the health impacts shown in this video? (see image above for reference)
- Have you, or anyone you know, experienced any of these health impacts? Which ones?



Activity

Materials: Device to access the internet (if reading articles online) or pdf downloads of the articles. This activity can be completed individually, in groups, or as a class.

- Printable PDFs and article links (Extreme Heat, Lyme Disease, and Air Quality)
- Printouts of the Climate Change and Health Worksheet

Instructions

Before explaining the activity, start with an example. Below is a flowchart on how climate change impacts mental health. This will help students to break down the connection climate change has on us, both mentally and physically. For more discussion points you can read the <u>Climate Change and Mental Health</u> article on the Climate Atlas.

1. Flowchart example: Climate Change and Mental Health

Climate Variables

Extreme weather events

- Flooding
- Drought
- Storms
- Wildfire

Environmental Change

Destruction of land (homes/buildings, farm fields, nature)

Displacement of people

Health Impact

Depression, PTSD, anxiety from deaths, severe injury, loss of home/livelihood, anticipation of future events

- Distribute the readings to the students. Reading can be distributed in a variety of ways:
 - Individuals can select the article they want to read
 - Instructor can assign the same reading to everyone, or distribute the 3 articles evenly.
 - Instructor can split the class in 3 groups, and assign each group a different reading.
- Provide up to 10 minutes for students to read their designated articles, instructing them to highlight information on climate variables, environmental changes from the variables, and the health impact involved.
- 4. Hand out the *Climate Change and Health Worksheet* and allow for students to complete individually or in groups. It can also be completed as a class if everyone has read the same reading.



Discussion

Discuss the findings from the article(s). Emphasis should be placed on making the connection from climate change to the health impact. **Re-create the flowchart** for each health impact article used with the class to discuss and solidify the understanding of the connection is has to climate change. See answer keys for each article for the associated flow-chart.

Time permitting, you can also discuss ways we can protect ourselves from these climate-related health impacts, and thinking more critically about the health impacts that may be of most concern in your region.

Example discussion question:

- What are ways that climate action can benefit our own health as well as contribute to reducing climate change? (See https://sandpit.bmj.com/graphics/2016/cobenefits-v40.png for examples)
- How can we protect the most vulnerable people in our community from these health
 impacts? (i.e. Public cooling centers during heat waves, calling to check on family/friends
 who may be at risk, inform and discuss with family/friends how to stay safe.)

Assessment

At the end of this lesson students should understand the link between climate change and the impacts is has on our health, this is demonstrated in the flow chart on the worksheet. Students should also show an understanding that their actions can minimize these health risk directly and indirectly by taking actions to reduce climate change.

Extensions:

Infographic - Discuss ways to cope with climate distress https://climateatlas.ca/sites/default/files/2021-10/Coping infographic2.jpg

Video - Overcoming Climate Anxiety (3:15) https://climateatlas.ca/video/overcoming-climate-anxiety

Video- Why Hope Matters (4:22) https://climateatlas.ca/video/why-hope-matters

