



Extreme Weather Events

Why is our climate changing?

The atmosphere of the earth contains the air that we breathe, protects us from radiation and keeps our planet warm. Gases in our atmosphere, called "greenhouse gases", hold in the heat. About a hundred and fifty years ago, we began to burn large amounts of fossil fuels (oil, coal and natural gas) to create power and heat. These fuels release carbon dioxide and other greenhouse gases into our air. In fact, billions of tons of greenhouse gases are added to the atmosphere every year. This is like throwing an extra blanket on the bed - it traps in more heat and warms our planet, causing our climate to change. And this will, in turn, affect our weather.

Average temperatures in Canada are already rising. Scientists predict that, over the next century, Canada will be 1.5°C - 5°C warmer in the South and as much as 5°C - 7°C warmer in the North. Even a small increase in the average yearly temperature could have serious consequences that would affect our health, and especially that of our children.

What are extreme weather events?

Extreme weather events are the worst kinds of weather - blizzards and ice storms, tornadoes, hurricanes, severe thunderstorms, heavy rains, hail storms and droughts. Floods, devastation and fires are often the result. Over the past few years, Canada has seen an increasing number of these traumatic events like the Red River Flood in Manitoba in the spring of 1997, and the ice storm in Eastern Ontario and Western Quebec in 1998. The insurance industry paid out close to \$100 billion in weather-related claims during the 1990s, four times the amount paid out in the 1980s. While there is no direct proof that these severe weather events were a result of climate change, scientists tell us that as the climate warms over the next century, storms could become more frequent and severe.

What are the dangers?

Injury and death are immediate risks from extreme weather

Floods increase the chances of drowning. High winds can cause injury and death from flying debris and collapsed buildings. Lightening can injure, kill and ignite fires. The disruption of ambulance or fire services can prevent life-saving assistance from reaching people in need.

When really bad weather hits, **keep children with you at all times**. Listen for public advisories and follow all instructions carefully. Have bottled water, dried or canned food and flashlights ready in case of an emergency. In the event of hurricanes or tornadoes, take shelter in the basement or, if not possible, underneath a heavy table or desk away from windows. If caught in a vehicle during a hurricane or tornado, leave the vehicle and seek shelter in a ditch or other low-lying area. After heavy rains, keep children away from ditches, culverts and pools of standing water.

For more information on what to do check with Emergency Preparedness Canada at www.epc-pcc.gc.ca/publicinfo/ or call toll free 1-800-788-8282 for a free brochure.

Lives and communities can be uprooted and damaged by severe weather events

Floods and forest fires can lead to the evacuation of entire communities for extended periods. The fear, anxiety and stress caused by an extreme weather event can lead to an increase in family violence, depression, anxiety and other social and mental health problems. Children are especially susceptible because these conditions are very disruptive to their normal routines. Seek professional counseling and support from friends and family if the stress becomes overwhelming.

The water supply can become contaminated from storm water run-off or flooding

Toxic pesticides, fertilizers, residues of gasoline and oil or industrial chemicals can be swept into the water supply during very heavy rains and floods. The pools of water left by heavy rains and floods may become a breeding ground for insects and micro-organisms. Flooding and heavy rains can wash farm manure into the water supply leading to outbreaks of *E. coli* infection. In rural areas, human waste from septic tanks or outhouses can be washed into ground-water or wells. In urban areas sewage treatment facilities may not be able to cope with the water volume allowing untreated sewage to enter into lakes and rivers. Avoid swimming in these water bodies after heavy rains.

CHILDREN are at greatest risk!

Children are the least able to cope with the trauma and dangers of extreme weather events.

- Children have not yet developed the judgement to avoid danger or to react appropriately during the crisis.
- They are least able to cope, psychologically, with the stress and fear of extreme weather events.
- They are most often the victims of family violence and parental stress.
- They are the most physically vulnerable, both to injury and to the effects of a contaminated water supply.

What can YOU do to fight climate change?

All Canadians contribute to greenhouse gas emissions - every time we do anything that uses energy. In fact, the actions of individual Canadians account for 28 percent of Canada's total greenhouse gas emissions - that's almost 5 tons per person per year!

Cut back your use of energy

- Car pool, walk or cycle to reduce your car use.
- Buy a fuel-efficient car.
- Every year Canadians idling their cars produce almost 4,000 tons of carbon dioxide and other pollutants! Avoid idling your vehicle - ten seconds of idling uses more fuel than restarting your engine.
- Add extra insulation to your house and use weather stripping and caulking to seal windows and cracks where heat escapes from your home. This will reduce greenhouse gas emissions and could save up to 20 percent on your heating bill.
- Turn down the heat in cold weather and use fans on warm days. Be sure to drink plenty of fluids during all warm weather because of an increased risk of dehydration.
- Upgrade your windows to the energy efficient types.
- Plant a tree - a large tree can help keep your home cool, protect it from wind and trees absorb carbon dioxide - a greenhouse gas!

Get Active!

Take your concern about climate change to your Member of Parliament, MPP and local politicians. Tell your elected officials and utilities operators that you support efficient and environmentally friendly sources of energy. Use your consumer power to support new, green technologies.

Get Informed!

To learn more about the impacts of climate change on your children's health, visit the Canadian Institute of Child Health website at www.cich.ca. For more information about climate change and what you can do, visit the Government of Canada climate change website at www.climatechange.gc.ca or call 1-800-O-CANADA (1-800-622-6232).

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Ce feuillet d'information est également disponible en français



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