



Environment  
Canada

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Canada

## *Environment Canada's Meteorological Service:*

# YOUR EYE ON WEATHER

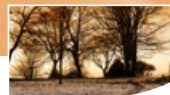
### **Come sleet or shine, Canadians love their weather!**

That's where Environment Canada's Meteorological Service of Canada comes in—providing Canadians with access to vital weather and environmental information and warnings 24 hours a day, seven days a week.

We maintain a Canada-wide observation network that monitors changes in weather, climate, water, ice and air. This network generates the data that are the foundation of weather and environmental prediction, and includes contributing data from organizations such as NAV CANADA, the Department of National Defence and the Canadian Coast Guard.

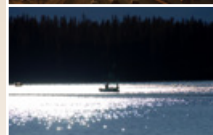
Our staff of expert meteorologists, scientists and technicians works around the clock to ensure that Canadians are always informed.

Environment Canada is your **official** source of weather warnings. We are also the principal scientific authority for standards, information and advice on the past, present and future state of the atmosphere (weather and climate), hydrosphere (lakes and rivers) and cryosphere (snow and ice).



## What we do...

- Provide weather forecasts and severe weather warnings
- Provide the UV index, Air Quality Health Index, humidex and wind chill forecasts
- Monitor the quantity of water in Canadian lakes and rivers
- Forecast ice and wave conditions on navigable oceans and inland waters



Canada



# HOW THE WEATHER GETS TO YOU

## **Weatheroffice: Your one-stop weather source on the Web**

Environment Canada's Weatheroffice connects directly with Canadians in order to give you the most accurate, up-to-date forecasts and weather information.

On the Weatheroffice website ([www.weatheroffice.gc.ca](http://www.weatheroffice.gc.ca)), you will find the following features:

- ▶ Weather Warnings and Special Weather Statements, radar and satellite images, lightning strike locations, and marine forecasts and warnings
- ▶ Your local weather page including a seven-day weather forecast, weather warnings in effect for your selected location, and current conditions that include temperature, humidity, air pressure, wind speed and direction
- ▶ The daily UV index and the local Air Quality Health Index forecasts for Canadian cities, and much more!

## **Weatheradio Canada: Broadcasting to you**

Weatheradio Canada broadcasts weather information and provides weather warning bulletins 24 hours a day in many areas across the country. It is also the only service that will wake you up when severe thunderstorm and tornado warnings are issued!

Special Weatheradio receivers can be purchased as a single unit, and can also be found in many walkie-talkies and two-way communications products sold in Canadian stores.



## **DID YOU KNOW?**

The Meteorological Service of Canada (MSC) has been serving Canadians since 1871, and more than 100 years of climate data (7 billion observations) are stored in the MSC archives!



## Weather info on the go: Weather information at your fingertips

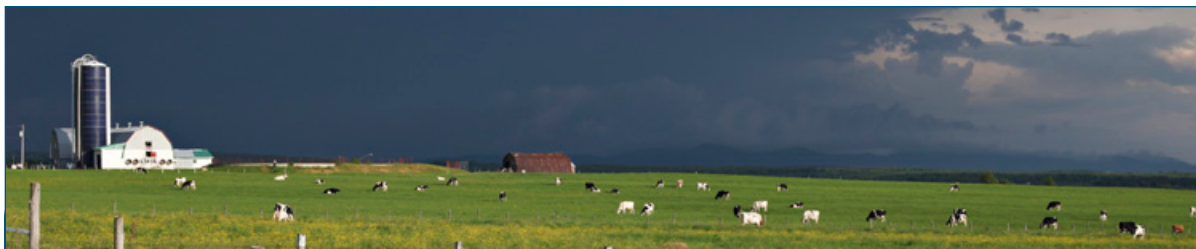
On the go and need weather info quickly? You can now receive updates on weather conditions and forecasts for your city by subscribing to Environment Canada's Weatheroffice RSS and Warning RSS feeds! To access, simply visit **[www.weatheroffice.gc.ca](http://www.weatheroffice.gc.ca)** and click on the RSS link at the bottom of your city page.



## SEVERE WEATHER: PREPARE YOURSELF

Helping Canadians protect themselves, their families and their property from the hazards of severe weather is an important part of Environment Canada's mandate.

The Department issues warnings, watches and special statements for severe weather. These are available through **[www.weatheroffice.gc.ca](http://www.weatheroffice.gc.ca)** and on Weatheradio, as well as through traditional broadcast media. These bulletins cover all severe weather conditions—hurricanes, tornadoes, severe thunderstorms, snowstorms, extreme cold and a variety of other occurrences.

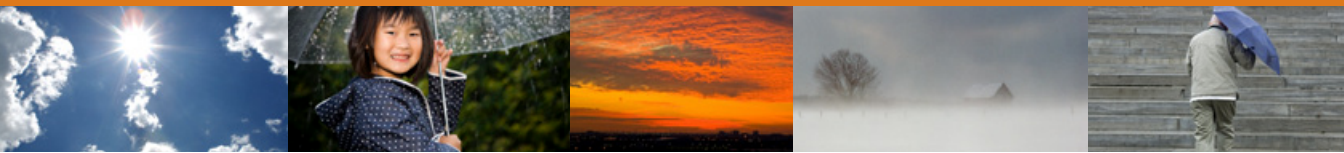


### Weather tips: Summer severe weather

During the summer, if severe weather approaches and you are swimming or boating, head to shore at the first sign of bad weather.

These are things you should do if you find yourself caught outside in a tornado:

- ▶ Lie flat in a ditch, ravine or other low-lying area and shield your head with your arms.
- ▶ Beware of flying debris.
- ▶ Use caution around post-storm hazards such as damaged or weakened structures and downed power lines.



## Lightning

The most important thing to remember about lightning is that if you can hear thunder, you are within striking distance of lightning. Take shelter immediately, preferably in a sturdy building such as a house or all-metal automobile (not a convertible). If caught outside far from a safe shelter, stay away from tall objects such as trees, poles, wires and fences and take shelter in a low-lying area.

There is no safe place to be outdoors during a thunderstorm. Once in a safe location, remain there for 30 minutes after the last rumble of thunder is heard before resuming your outdoor activities.

### DID YOU KNOW?

The UV index system, which informs the public about daily levels of ultraviolet radiation coming from the sun, was first developed by Environment Canada scientists and is now recognized and used all over the world.

## UV index

Overexposure to the sun can, if not taken seriously, cause health problems for you and your family (even during the winter!).

- ▶ Always protect your eyes with UVA- and UVB-rated sunglasses.
- ▶ Use a sunscreen lotion or cream of **sun protection factor (SPF 15) or more**, and apply it 20 minutes before going out.



## Air Quality Health Index

The Air Quality Health Index (AQHI) is a scale designed to help you understand what the air quality around you means to your health. Air pollutants can become dangerous to human health if concentrations become too high, especially for people who are sensitive, such as the elderly, individuals with respiratory illness, and young children. Protect yourself from prolonged exposure to air pollution by regularly checking [airhealth.ca](http://airhealth.ca) for the latest AQHI readings in your community, and use it to plan your day.





## Weather tips: Winter severe weather

Winter weather conditions in Canada can quickly become dangerous; winter storms and excessive cold claim over 100 lives each year in this country. This is why it is so important to know how to stay safe in all conditions.

### Wind chill

Wind chill is when the wind makes cold temperatures feel even colder. Pay particular attention to Environment Canada's **wind chill index**, which warns you of dangerously cold conditions. Be on alert for signs of frostbite by checking for numbness or white areas on your face and extremities (ears, nose, cheeks, hands and feet in particular).

If you must go outside during cold weather, make sure to dress properly. Wear multiple, thin layers of loose-fitting clothing to trap body heat and promote air circulation. Mittens are warmer than gloves, and because most body heat is lost through the head, always wear a hat when it is cold outside. If it is extremely cold, cover your mouth and exposed skin with a scarf, neck tube or face mask.

### Blizzards

A blizzard is severe winter weather characterized by strong winds, and heavy or blowing snow that causes low to zero visibility. In whiteout conditions associated with blizzards, people have become lost even when going only short distances.

Remember, these storms can cause loss of electricity, heat and telephone service, and can trap you in your home for a few days. It is important to have ample supplies on hand in your home and in your car if you get stuck outside during a storm.

For more information on how to protect and prepare yourself for all types of severe weather and hazards, visit the Government of Canada's 72-Hour Campaign at [www.getprepared.gc.ca](http://www.getprepared.gc.ca).



## Interesting weather facts

- ▶ Canadians are weather nuts! Nine in ten Canadians say they make a point of checking weather forecasts at least once a day.
- ▶ On average, Environment Canada issues 1.5 million public forecasts, 10 000 warnings and 500 000 aviation forecasts per year.
- ▶ We provide local forecasts, warnings and alerts to over 800 communities and cities across Canada!
- ▶ On average, three to four tropical storms or hurricanes threaten Canada or its territorial waters each year.
- ▶ In delivering its weather services, the Meteorological Service of Canada uses all kinds of tools and technologies. These range from traditional thermometers and rain gauges, to state-of-the-art supercomputers, Doppler radars (a specialized form of radar used in weather forecasting) and satellite receivers.

For more on Environment Canada's weather and meteorological services, please visit:

**[www.ec.gc.ca](http://www.ec.gc.ca)**

**[www.weatheroffice.gc.ca](http://www.weatheroffice.gc.ca)**

or call:

**1-800-668-6767**

**TTY: 819-994-0736**

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