

The UV Index

Environment Canada developed the UV Index to inform Canadians about the strength of the sun's UV (ultraviolet) rays. UV rays can cause sunburns, eye cataracts, skin aging and skin cancer. The higher the UV Index number, the stronger the sun's rays, and the greater the need to take precautions. The table below outlines the sun protection actions recommended at different levels of the UV Index.

Environment Canada's UV Index

UV Index	Description	Sun Protection Actions
0 - 2	Low	<ul style="list-style-type: none"> Minimal sun protection required for normal activity Wear sunglasses on bright days. If outside for more than one hour, cover up and use sunscreen Reflection off snow can nearly double UV strength. Wear sunglasses and apply sunscreen
3 - 5	Moderate	<ul style="list-style-type: none"> Take precautions – cover up, wear a hat, sunglasses and sunscreen - especially if you will be outside for 30 minutes or more Look for shade near midday when the sun is strongest
6 - 7	High	<ul style="list-style-type: none"> Protection required – UV damages the skin and can cause sunburn Reduce time in the sun between 11 a.m. and 4 p.m. and take full precautions – seek shade, cover up, wear a hat, sunglasses and sunscreen
8 - 10	Very High	<ul style="list-style-type: none"> Extra precautions required – unprotected skin will be damaged and can burn quickly Avoid the sun between 11 a.m. and 4 p.m. and take full precautions – seek shade, cover up, wear a hat, sunglasses and sunscreen
11 +	Extreme	<ul style="list-style-type: none"> Values of 11 or more are very rare in Canada. However, the UV Index can reach 14 or more in the tropics and southern U.S. Take full precautions. Unprotected skin will be damaged and can burn in minutes. Avoid the sun between 11 a.m. and 4 p.m., cover up, wear a hat, sunglasses and sunscreen White sand and other bright surfaces reflect UV and increase UV exposure

Sun Safety Tips

- The amount of UV you receive depends on both the strength of the sun's rays (measured by the UV Index) and the amount of time you spend in the sun. Reduce your time in the sun – seek shade, particularly between 11:00 a.m. and 4:00 p.m. from April to September.
- Cover up! Wear a broad-brimmed hat, a shirt with long sleeves and wrap-around sunglasses or ones with side shields
- Use sunscreen with a sun protection factor (SPF) of 15 or higher, with both UVA and UVB protection. Apply generously before going outside, and reapply often, especially after swimming or exercise
- Listen for Environment Canada's UV Index – it's included in your local weather forecast whenever it is forecast to reach 3 (moderate) or more that day.

Environment Canada, May 2004

Interesting Facts

The UV index was created by Environment Canada scientists in 1992. The index has been adopted around the world.

The highest UV index level in Canada to date, was 10.1. This was recorded in Toronto on July 07, 1993.

As the ozone layer gets thinner, not only human health is affected, but animals, marine organisms and plant life are impacted.

The closer you are to the equator, the higher the UV radiation levels. Winter UV index levels in the tropics can be extremely high.

Different surfaces reflect or scatter UV radiation in different amounts. For example, sand can reflect as much as 15% of UV radiation and snow up to 80%.

At higher altitudes, the atmosphere becomes thinner and absorbs less UV radiation. For each kilometre rise in altitude, the UV radiation level will increase approximately 9%.

For more information on the UV index, take a look at the following websites

UV Information: www.msc.ec.gc.ca/topics/uv

Weather forecasts: weatheroffice.ec.gc.ca

**For additional information on Sun Safety, call
York Region *Health Connection* at 1-800-361-5653**