

Wireless Device Safety

Over the past decade, millions of Canadians have come to rely on wireless telecommunication technology, including cell phones, hand-held devices and wireless laptop computers.

All of these applications depend on the network of base stations set up across the country to transmit the radio signals necessary to operate these services. Base stations consist of electronic equipment and wireless antennas installed in buildings or on rooftops, towers and utility poles. A cell phone tower and a home computer's wireless router are both examples of base stations. Without such devices, what have become our everyday necessities and conveniences simply could not exist. As Canadians become increasingly connected electronically, it is also increasingly important that they remain confident in the safety of these systems.

Health Canada's Radiofrequency Energy Guidelines (Safety Code 6)

Health Canada is committed to protecting the health and safety of Canadians. That is why we have developed safety guidelines that set limits for safe human exposure to electromagnetic energy from radiofrequency (RF) devices, including cell phones and base stations. Industry Canada, the national telecommunications regulator, requires that levels of radiofrequency energy coming from cell phones and cell phone towers fall below Health Canada's RF exposure limits.





About Health Canada's RF Guidelines:

- Health Canada set limits after reviewing the results of hundreds of studies on the biological effects of RF energy. These limits are similar to those in other science-based international guidelines.
- The Code was evaluated by an Expert Panel of the Royal Society of Canada and was deemed to be an adequate representation of science currently available.
- The typical levels of RF energy that you find coming from base stations, including cell phone towers, are thousands of times below the limits for public exposure.
- The specified limits for public exposure apply to everyone including the elderly, individuals with health concerns, children and pregnant women—and allow for continuous, 24/7 exposure.
- Based on information to date and the weight of evidence from ongoing scientific literature reviewed by Health Canada scientists, the Department is confident that Canada's RF exposure limits remain current and valid.



Can people become ill from living near cell phone towers?

As long as exposures respect the limits set in Health Canada's guidelines, Health Canada has determined that there is no scientific reason to consider cell towers dangerous to the public.

What is Health Canada doing to ensure the guidelines remain valid?

The safety of wireless communication devices such as Wi-Fi equipment, cell phones and BlackBerrys and their infrastructures, including base stations, is an area of ongoing study throughout the world. Health Canada scientists continually review scientific studies in this area to ensure safety guidelines are sufficient for the protection of the health and safety of Canadians. Health Canada also continues to participate in international standards development and advisory bodies and undertakes its own focused research to support the development of its safety recommendations.

Further information on the safety limits can be found in a document entitled *Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3kHz to 300 GHz*, commonly referred to as *Safety Code 6*. This is the technical name of the Health Canada document that specifies the maximum recommended human exposure levels to RF energy from radiation-emitting devices.

This and other information can be found by visiting Health Canada's Web site: www.healthcanada.gc.ca/radiation

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