1. Research Activities

Health Canada

- Health Canada carries out its own in-house studies to assess the biological effects of power-frequency (60 Hz) fields and radiofrequency (RF) fields at 1.9 GHz (North American PCS frequency). Recent publications include:


- Continued collaboration with the Thai Ministry of Public Health (MOPH) in the measurements of ground level emissions near mobile phone base stations across Thailand using a low-cost RF field measurement system developed at Health Canada. Major cities in central, north and northeast Thailand have been covered. A report on these measurements should be available in 2008.

For more information, contact Dr. Art Thansandote at art_thansandote@hc-sc.gc.ca.
Canada

University of Ottawa
- University of Ottawa has been collaborating with the International Agency for Research on Cancer on the large-scale epidemiological study on mobile phones. For more information, please contact Dr. Daniel Krewski at <dkrewski@uottawa.ca>.

University of Western Ontario
- University of Western Ontario has carried out research in the area of non-thermal biological effects of electromagnetic fields and is establishing a centre for bioelectromagnetics research. For more information, please contact Dr. Frank Prato at <frank.prato@lawsonimaging.ca>.

2. Standards

No new national standard published over the past 12 months. The following guideline document, published by Industry Canada in October 2005, was not reported at the 11th IAC meeting:

GL-02 - Guidelines for the Protection of the General Public in Compliance with Safety Code 6

This document provides guidelines for protection of the general public including consideration of existing radiocommunication installations within the local radio environment and is available on the Industry Canada website at <http://strategis.ic.gc.ca/epic/site/smt-gst.nsf/en/sf05990e.html>.

3. Public Concerns
- Mobile phone base stations continue to be an issue of frequent public concerns. Various factors contribute to these concerns including media reports about scientific studies linking radiofrequency electromagnetic energy from mobile handsets (not base stations) to cancer. Recent safety concerns include the Wi-Fi system installed in downtown Toronto for high-speed Internet service. Public opposition to proposed installations of base stations was organized by concerned citizen groups in a number of cities. Opposition to such proposals may be influenced by factors other than health issues (e.g. aesthetics and property devaluation). One university has banned the installation of a wireless internet system on campus due to the administrator’s concern over the safety of students. Staff at another university was concerned about the safety of a base station on a university building after a senior professor was diagnosed with cancer. The federal Department of Industry which regulates radiocommunication devices has been asked to consider applying the precautionary principle to the installation of base stations. Based on the experience of Health Canada scientists, RF emissions from cellular base stations have been found to be hundreds to thousands of times lower than the exposure limits specified in Health Canada’s Safety Code 6 (www.hc-sc.gc.ca/ewh-smt/pubs/radiation/99ehd-dhm237/index_e.html).

- Power lines and ELF fields. Inquiries in this area are received by Health Canada all year round; the number is higher in the spring when more people consider purchasing new
Canada

homes/properties, some of which are near high voltage transmission lines. Besides worrying about the safety of EMF exposures, a number of home owners are also concerned about property devaluation. Recent plans by a few major electrical utilities to raise transmission line voltages have faced strong opposition by residents living near the corridor edge. Concerned citizens want alternate means of re-routing the high voltage transmission line. In this area, Health Canada’s position is that at present, there is no convincing scientific evidence of any harm caused by exposures at levels found in Canadian homes and schools, including those located just outside the boundaries of power line corridors.

4. Other

- Health Canada scientists have investigated the effects on the line voltage of the 60 Hz supply and load currents carried by the electrical supply when an electrical filter (called Stetzer filter) is plugged-in, alone and in conjunction with household appliances. The report on this investigation is available at: www.bccdc.org/content.php?item=196

Compiled by Art Thansandote
June 2007