

C4ST FACT SHEET

1.1 HEALTH CANADA'S SAFETY CODE 6 IS AMONG THE COUNTRIES WITH THE WORST GUIDELINES IN THE WORLD.

No country's guidelines provide less protection than Canada.

China, Russia, Italy and Switzerland have wireless radiation safety limits 100 times safer than Canada.

http://buildingbiology.ca/media/pdf/rf_exposure_limits_cell_antennas.pdf

40% of the world's population lives in countries with codes safer than Canada.

1.2 CANADA HAS FALLEN BEHIND COUNTRIES SUCH AS FRANCE, TAIWAN AND BELGIUM IN PROTECTING CANADIANS FROM THE UNSAFE USE OF WIRELESS DEVICES.

January 29, 2015 France passed the following articles into law:

- A ban on the use of Wi-Fi in day care centres and nurseries for children under three years of age
- Wi-Fi must be deactivated when not in active use for digital educational activities in primary schools with Wi-Fi already in place,
- For primary schools without Wi-Fi, a consultation process must be followed. (Primary schools include pre-school, (ages 2 to 6) and elementary school, (ages 6 to 11))
- All advertisements promoting cell phones must demonstrate a device to limit the exposure of the head to radiofrequencies emitted by the cellular phones. (eg. ear buds or speaker mode)
- A campaign of "*awareness and information on the responsible and rational use of mobile devices*" will be conducted.

<http://www.complianceandrisk.com/france-publishes-law-on-electromagnetic-waves/>

February 15, 2015. Taiwanese lawmakers passed new legislation in which:

- Parents face fines if they allow children under the age of two to use tablets and smartphones
- Youth under 18 years of age are allowed devices for a 'reasonable length of time'

<http://www.dailymail.co.uk/news/article-2929530/Does-toddler-play-iPad-Taiwan-makes-ILLEGAL-parents-let-children-two-use-electronic-gadgets-18s-limit-use-reasonable-lengths.html>

March, 2014. It is illegal to market cell phones to children less than seven years of age in Belgium.

expatica.com/be/news/belgian-news/TMag-Mobile-phones-to-be-banned-for-children_259994.html.

1.3 SAFETY CODE 6 DOES NOT PROVIDE THE EXTRA PROTECTION NEEDED FOR CHILDREN AND PREGNANT WOMEN.

Children are not little adults; their skulls are thinner and the tissues of a child's head, including the bone marrow and brain absorb significantly more energy than those in an adult head. A peer reviewed study by Gandhi et. al., published in 2012, showed that radiation from a cell phone which penetrated 10% of an adult head, would affect 70% of the brain of a five year old.

<http://www.ncbi.nlm.nih.gov/pubmed/21999884>

Safety Code 6 guidelines are based on computer models for heating, not specific human measurements of biochemical changes.

See: "Exposure limits: the underestimation of absorbed cell phone radiation, especially in children."

<http://www.ncbi.nlm.nih.gov/pubmed/21999884>

1.4 HEALTH CANADA ADMITS STUDIES SHOW HARM AT LEVELS BELOW SAFETY CODE 6

Mr. Andrew Adams, Health Canada: (remarks at HESA March 24th 2015 hearing) *"Health Canada did consider all studies that were considered to be both in scope and of sufficient quality for inclusion in our risk assessment. While it is true that some of these studies report biological or adverse health effects of RF fields at levels below the limits in Safety Code 6, I want to emphasize that these studies are in the minority and they do not represent the prevailing line of scientific evidence in this area."*

Quote from Health Canada document titled "Analysis of 140 studies submitted by C4ST during the Public Comment Period on Safety Code 6" determined that 36 studies were of "sufficient quality for inclusion in the Risk Assessment" in the following categories:

- Cancer is linked in 6 studies,
- Brain/nervous system impacts in 13,
- Biochemical disruption in 16 and
- Development and/or learning behaviour impacts in 7.

http://www.c4st.org/images/documents/hesa/Health_Canada_Response_to_C4ST_References_of_140_Missing_Studies.pdf

Dr. Prato, member of Royal Society of Canada expert panel: [remarks at HESA March 24th hearing] *"So this is clear, non-thermal effects of RF within the range of Safety Code 6 safety. So, now we are getting more and more literature which suggests that very weak fields below the limits set by Safety Code 6 can have biological effects"*

1.5 HEALTH CANADA’S FAILURE TO IMPLEMENT A PROPER WEIGHT OF EVIDENCE APPROACH LEADS TO HARMFUL LEVELS FOR SAFETY CODE 6

Two factors contribute to Health Canada claiming that only heating is an “established, adverse” health effect:

1. Failure to execute a rigorous systematic review of specific questions (e.g. cancer from cell phone use, DNA and sperm damage with exposure to wireless radiation, etc.)
2. Consideration of only research with precise exposure data.

Some researchers use specially designed devices to expose animals or cells to specific radiofrequencies. Other researchers concerned that phone signals may invoke unique responses, take a pragmatic approach and use phones as the source of exposure. As well, all epidemiology is of course with phone exposures. The alleged inability to say precisely how much a phone emits leads Health Canada to discard this vast body of evidence. This research shows that the status quo – phones – are linked to diverse adverse effects, including damage to child development, sperm and DNA, biochemical abnormalities, as well as cancer.

We also know that multiple exposures from multiple sources increase risk. Exposing Canadians to increasing levels of radiation from multiple sources without understanding all the consequences is inappropriate and dangerous. The appropriate action is to invest more time and resources to understand the causal relationships, not ignore the research.

1.6 HEALTH CANADA’S RECENT REVIEW OF SAFETY CODE 6 FAILS ALL MAJOR CRITERIA FOR THE EVALUATION OF SCIENTIFIC EVIDENCE BASED ON INTERNATIONAL BEST PRACTICES, TO:

1. Establish research questions, with stakeholder input
2. Disclose the purpose, objectives, background, assumptions, scope, protocol and explicit research questions for the review, prior to conducting the review
3. Disclose comprehensive literature search and screening results
4. List the studies included and excluded [with reasons],
5. Provide evidence tables, grading of study quality and evidence synthesis, including “weighing” according to a pre-defined protocol
6. Seek public input along each major step in the above process to ensure a “rigorous, transparent” review
7. For the weight of evidence, adapt and adopt a framework such as that proposed by the US National Toxicology Program with complete transparency on assumptions, interpretations and decisions
8. Review the original research publications, not just “authoritative reviews” that are equally poorly executed.
9. Ensure the panel has the mandate, capability and resources to validate and further update the literature searches and reviews
10. For the first time, publish a monograph supporting the SC6 update.

See: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4080517/>

1.7 HEALTH CANADA WASTED OVER \$100,000 OF TAXPAYERS' MONEY. THE ROYAL SOCIETY OF CANADA REPORT IS NOT AN INDEPENDENT REVIEW.

The RSC Expert Panel was conflicted; half of the panel members have strong financial ties to industry. Here is the C4ST letter to the RSC president outlining the conflicts.

<http://www.c4st.org/images/documents/safety-code-6/C4ST-letter-to-RSC-with-links.pdf>

The original panel chair resigned only after the CMAJ reported an undisclosed conflict of interest.

<http://www.c4st.org/images/documents/rsc/march-review/CMAJ-Panel-Chair-Krewski-Steps-Down.pdf>

In a 2012 memo to the Minister of Health, Health Canada appears to have tried to influence the panel in terms of panel members and level of investigation. <http://www.c4st.org/sc6>

The RSC invited Dr. Anthony Miller and Dr. Martin Blank as peer reviewers of the report. Their input challenging the report results was ignored. <http://www.c4st.org/break-silence>