

1 December 2016

Ms Deborah Schulte, M.P.
Chair, Standing Committee on Environment and Sustainable Development
House of Commons
Ottawa, ON K1A 0A6
By Email: ENVI@parl.gc.ca

Dear Ms Schulte,

Re: EHA-MB input - Canadian Environmental Protection Act (CEPA) Review

I have just learned that you are considering input for revisions to the CEPA (1999) and hope that you will include the points raised in this brief.

The Environmental Health Association of Manitoba (EHA-MB) recommends in the updated Canadian Environmental Protection Act (CEPA):

- **Electromagnetic radiation (EMR) be added as an environmental pollutant**
- **Acknowledgement that in Canada there are vulnerable individuals who need extra protection from EMR.**

Electromagnetic radiation (EMR) is emitted from many sources: baby monitors, cell phones, Wi-Fi routers, cell tower antennae, satellites, high tension lines, household wiring, everyday appliances, to name a few examples. It is very difficult to avoid exposures as EMR is ubiquitous. The numbers of people reporting adverse symptoms is increasing as the sources and consequential increase of EMR increases, with no end in sight.

Recently, over 200 international experts from 41 countries called for more protective EMR standards.

The International EMF Scientist Appeal calls upon the United Nations, the World Health Organization, United Nations Environmental Programme and the United Nations Member States to:

- *address the emerging public health crisis related to cell phones, wireless devices, wireless utility meters and wireless infrastructure in neighborhoods; and urge that the United Nations Environmental Programme (UNEP) initiate an assessment of alternatives to current exposure standards and practices that could substantially lower human exposures to non-ionizing radiation.*¹

In July 2014, international scientists and Canadian medical doctors wrote to the federal Minister of Health (when Health Canada was seeking input to Safety Code 6) to ask for more protective guidelines for radiofrequency/microwave radiation for Canadians. The doctors also asked for more resources to "assist Canadian physicians in assessing and managing health problems related to microwave radiation." (attached). No meaningful response was forthcoming.

¹ <https://www.emfscientist.org/>

Instead, Health Canada maintains that its Safety Code 6, which sets out safe limits for human exposures in the radiofrequency/microwave EMR range, is protective of all Canadians. However, Safety Code 6 only considers heating (thermal) effects. Health Canada's statements that it considers all studies of all effects in the "design" are misleading. Health Canada really is just dismissing all of the science (which number in the hundreds and perhaps thousands of studies, showing non-thermal effects) - and not providing any detailed rationale on why these studies are dismissed.

As you may be aware Health Canada recently chose to ignore the evidence presented to the Standing Committee on Health (HESA) in the 41st Parliament that Canada has a vulnerable population adversely affected by EMR. We were hopeful that significant progress would be made if the four of the 12 recommendations made by the 2015 HESA committee on electrosensitivity were fully implemented. It was with great disappointment that we read the response from Health Minister Philpott. In the response it states that "*the scientific evidence provides strong support that these health effects are not associated with EMF exposure*" and goes on to say that the European Commission (2015), the Swedish Radiation Safety Authority (2015), Public Health England (2012) and the Australian Radiation Protection and Nuclear Safety Agency" have come to similar conclusion. The response also says that in Canada, the Royal Society of Canada which reviewed the last revision of Safety Code 6, is of the same view.

However, it must be noted that review of the science and current standards and reports of the above agencies is rife with controversy and riddled with conflict of interest issues. One example: Dr. Sonya Starkey, in a recent paper published in the journal **Reviews of Environmental Health**² outlines what she calls "*the incorrect and misleading statements*" as well as conflict of interest issues in the Public Health England report. "*When the group charged with assessing whether there is evidence of health effects occurring below ICNIRP [International Commission on Non-ionizing Radiation] values have members who are responsible for setting the guidelines, it introduces a conflict of interest. How can AGNIR [Advisory Group on Non-ionizing Radiation] report that the scientific literature contains evidence of harmful effects when several of them are responsible for those guidelines?*"

The views of the Royal Society of Canada's expert panel are also questionable and controversial.³ The first chair, Dr. Daniel Krewski resigned amidst conflict of interest claims and two other members resigned shortly after (reasons not given)⁴. There were also questions about the remaining panel members.⁵ The final report by the panel omitted at least 140 relevant studies⁶. Those studies include highly relevant evidence of potential harm and were sent directly to the panel by brain cancer epidemiologist Dr. Lennart Hardell (whose work was used in the World Health Organization - International Agency on Research on Cancer to reach a class 2B *possible* carcinogen determination) and by Dr. Ollie Johansson, an international expert on electrosensitivity. Health Canada also provided no public rationale as to why the findings in these studies were without merit.⁷ The **Code 6 Safety (2015) Rationale** does not come close to justifying

² Starkey, S. J. (2016). Inaccurate official assessment of radiofrequency safety by the Advisory Group on Non-ionising Radiation. *Reviews on Environmental Health*, 31(4), 493–503.

³ **Federal Wi-Fi panel criticized for undisclosed conflict**

<http://www.cmaj.ca/content/185/11/E515?cited-by=yes&legid=cmaj;185/11/E515>

⁴ **Chair of Wi-Fi safety panel steps down**

<http://www.cmaj.ca/content/185/12/E573.full>

⁵ **Second Wi-Fi panel member's conflicts are problematic**

<http://www.cmaj.ca/content/185/13/E605>

⁶ <http://c4st.org/images/documents/hc-resolutions/list-of-140-omitted-studies.pdf>

⁷ **Scientists decry Canada's outdated Wi-Fi safety rules**

their exclusion - with not even a mention of the studies, never mind reasons the studies were dismissed.⁸ The authoritative report cited in the references (SCNIHR 2015) missed over 70 of the same studies the Royal Society panel missed. Without a complete scientific database one has to question the basis of the decisions made.

What we know so far of the upcoming review and monograph being prepared by the World Health Organization's EMF (electromagnetic field) Project does not bode well. Four of the six core members and six of the 20 additional experts are also on ICNIRP. Further signs of an incomplete and biased review are that, although Russia and China have safety standards 1% of Canada's (lower/safer), the experts will not be including "*identified Russian papers and only epidemiological Chinese papers*"⁹

Progress has been made in recognizing electrosensitivity and the importance of minimization exposure to EMR for recovery of health. Electrosensitivity is recognized as a functional disability in Sweden. There have been other legal cases e.g. in Spain¹⁰ and elsewhere. More relevant studies can be found at: <http://c4st.org/electrosensitivity/> and by contacting me.

Last but not least are Canadians themselves who have come forward, at risk of being ridiculed, that they¹¹ or their children^{12,13} are electrosensitive. Many individuals were turned away from presenting to the Royal Society panel due to lack of time. Estimates of the prevalence of electrosensitive individuals ranges from 1.5% in Sweden to 13.3% in Taiwan¹⁴. There is no reason to believe that the prevalence of Canadians affected would not fall within this range. EHA-MB in a submission to the 2015 HESA documented 10 Manitobans who are affected by EMR (see below). More have come forward since that survey was conducted.

The harm being done to Canadians and the evident willful blindness which seems to permeate Health Canada on this issue, brings to mind the Krever inquiry¹⁵ into the Canadian blood supply. That inquiry resulted in the findings of systemic failings resulting in suffering and death in a preventable public health situation. Justice Krever heard from 427 witnesses. "*Government officials were reluctant to trace recipients of possibly tainted blood and blood products who were at risk because, Krever notes, the bureaucrats "appear to have been more concerned about preventing public questioning about the safety of the blood system and deflecting controversy," than with providing timely health information.*"

<http://www.cmaj.ca/content/187/9/639.full>

⁸ **Safety Code 6 (2015) Rationale** [http://c4st.org/images/documents/safety-code-](http://c4st.org/images/documents/safety-code-6/Health_Canada_Safety_Code_6_2015_Rationale_Page_36_References_62p_March2015.pdf)

[6/Health_Canada_Safety_Code_6_2015_Rationale_Page_36_References_62p_March2015.pdf](http://c4st.org/images/documents/safety-code-6/Health_Canada_Safety_Code_6_2015_Rationale_Page_36_References_62p_March2015.pdf)

⁹ Line 48 of the draft RF- EHC monograph. http://www.who.int/peh-emf/research/rf_ehc_page/en/

¹⁰ <https://beingelectrosensitive.blogspot.ca/2016/08/spain-ehs-legally-recognised.html>

¹¹ Melissa Chalmers, commercial airline pilot (Ontario) and Olga Sheean, author (BC) are both Canadians <https://wearetheevidence.org/>

¹² **Wireless technology exposure impacting 11-year-old student**

<http://www.oliverchronicle.com/wireless-technology-exposure-impacting-11-year-old-student/>

¹³ Charlene Acres presentation to Royal Society of Canada, 28Oct2013

<https://www.youtube.com/watch?v=A6yUpX9Ved8>

¹⁴ Hedendahl, L., Carlberg, M., & Hardell, L. (2015). Electromagnetic hypersensitivity--an increasing challenge to the medical profession. *Reviews on Environmental Health*, 30(4), 209–215.

¹⁵ Commission of Inquiry on the Blood System in Canada

<http://publications.gc.ca/site/eng/72717/publication.html>

EHA-MB
Environmental Health
Association of
Manitoba

If an inquiry of similar status were called today, which would ensure a fair and open hearing with an unbiased, objective judge (or panelists), there would be well beyond that number of people willing to be witnesses. These witnesses would describe ill health due to EMR exposures, loss of income, marriage break down, separation of parents from children, leaving homes to find low EMR refuges and seeking recovery at great emotional and financial cost, and sadly, with no place to turn, suicide.

The Canadian Human Rights Commission includes electrosensitivity as part of environmental sensitivities¹⁶. But this is not enough. Legislation such as including EMR as a potential environmental pollutant would be another important step in protecting the health and well-being of electrosensitive Canadians, the canaries in the EMR coal mine, and consequently all Canadians.

Please do not defer to Health Canada on this issue but pursue your own study. We have much more science based and anecdotal information on this issue and would be glad to offer our assistance.

The EHA-MB recommendations are listed at the beginning of this letter.

Acknowledgement of receipt of this brief would be appreciated.

Sincerely,

Marg Friesen M.Sc.

Director, Environmental Health Association of Manitoba

Email: ehamanitoba@gmail.com

The Environmental Health Association of Manitoba, Inc. is a not-for-profit, non-governmental, non-partisan organization run entirely by volunteers and funded by donations. Goals of EHA-MB are to promote education and information on environmental sensitivities and environmentally induced illnesses to the public, educational institutions and medical community in Manitoba and to provide information and support to individuals in Manitoba suffering from environmental sensitivities and environmentally induced illnesses, including Electrosensitivity (Electromagnetic Hypersensitivity - EHS). We represent many health conditions that are related to environmental factors and are often referred to as "the canaries in the mines" i.e. early indicators of conditions that can become harmful to many others.

¹⁶ <http://www.chrc-ccdp.ca/eng/content/policy-environmental-sensitivities>
http://www.chrc-ccdp.gc.ca/sites/default/files/envsensitivity_en_1.pdf

DATE: 13 April 2015

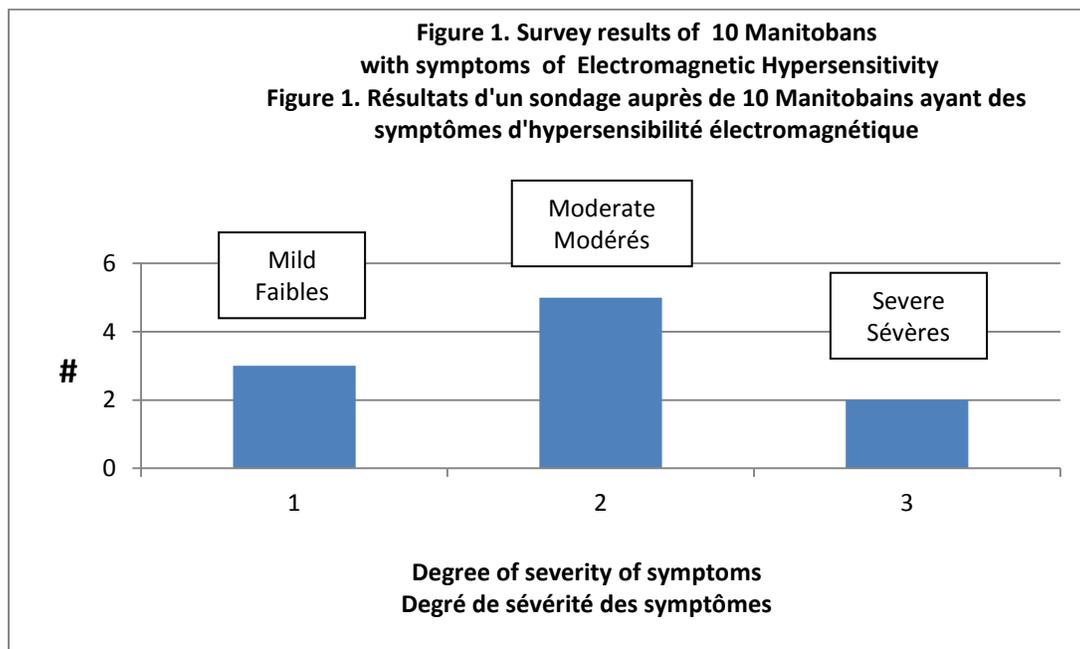
TO: The Chair, Mr. Ben Lobb (Huron-Bruce, CPC), Standing Committee on Health (HESA), House of Commons
andrew.chaplin@parl.gc.ca

FROM: Environmental Health Association of Manitoba

RE: Recommendations concerning Manitobans made ill by wireless radiation exposure

Illness related to exposure to wireless radiation has been reported across Canada, including in Manitoba. Ten affected Manitobans, who reported Electromagnetic Hypersensitivity (EHS) symptoms to us in 2013, completed a preliminary questionnaire/survey detailing their level of sensitivity to wireless radiation (electromagnetic fields - EMFs) (Figure 1). This was presented as a written submission to the Royal Society of Canada Expert Panel (28 October 2013) for their public consultation process as a written brief and oral video presentation - see first 4 minutes of <http://www.c4st.org/RSC-public-consultation>

Three survey respondents were physician diagnosed; at least one had objective blind testing and a SPECT brain scan. Two of those indicating severe effects consider themselves to be "**environmental refugees**" and cannot live freely in everyday society. They have problems finding suitable places to live and have great concern over where they will find a safe place to live should wireless technology expand even further. Even those who are mildly and moderately affected have considerable restrictions and concerns although they are managing activities of daily living under the current conditions.



1. Mild: I am aware that electromagnetic fields (EMFs) are at times affecting my body but this does not interfere with day to day or other activities.

2. Moderate: I am aware that symptoms in response to exposure to EMFs (either a high level short term exposure or a low level long term exposure) can prevent me from continuing a certain activity; however, adverse symptoms disappear quickly and do not severely interfere with my usual day to day or other activities.

3. Severe: I have severe and chronic symptoms when exposed to EMFs under certain conditions that severely affect my health and well-being, and restrict day to day and other activities.

Environmental Health Association Manitoba (EHA-MB) recommends that:

1. Safety Code 6 (2015) be amended to be protective of all those with adverse health effects related to wireless radiation exposure;
2. Electromagnetic Hypersensitivity (EHS) be recognized as a functional disability (as in Sweden);
3. A Canada-wide training program be established so medical doctors¹⁷ and other health care providers in every Province and Territory can recognize symptoms, diagnose and treat patients with EHS appropriately (see Austrian Guidelines reference below);
4. There be protective measures provided immediately for those severely affected. Some of the survey respondents cannot find suitable low wireless radiation housing;
5. There be accommodation in the workplace for those with wireless radiation related illness. One of our members was able to return to work, with accommodation, to her position with the Federal government after becoming disabled with wireless radiation related adverse health effects;
6. Public education programs be established to make people aware of how to take preventative measures and to recognize the early warning signs of EHS so they can take proper measures before symptoms become debilitating;
7. Resources be allocated for research in appropriate testing (e.g. blood work), diagnosis and treatment for those adversely affected by wireless radiation;
8. There be high quality, systematic collection of data, by:
 - 1) including questions regarding EHS symptoms and triggers on the Canadian Community Health Survey;
 - 2) physician reporting to the Canadian Institute for Health Information (Statistics Canada); and
 - 3) via a user-friendly, on-line system for reporting adverse symptoms and triggers.

In all cases, the (anonymized) data should be made available to the public.

Please contact me for further information or if there are questions.

Respectfully submitted,

Murray Cunningham

President, Environmental Health Association of Manitoba

Email: ehamanitoba@gmail.com Website: www. ehamanitoba.weebly.com.

Reference:

Austrian Medical Association. 2012. **"Guidelines of the Austrian Medical Association for the Diagnosis and Treatment of EMF-Related Health Problems and Illnesses (EMF Syndrome). Consensus Paper of the Austrian Medical Association's EMF Working Group."**
<http://www.ehsf.dk/dokumenter/7810-Austrian-EMF-Guidelines-2012.pdf>.

The Environmental Health Association of Manitoba, Inc. is a not-for-profit, non-governmental, non-partisan organization run entirely by volunteers and funded by donations. Goals of EHA-MB are to promote education and information on environmental sensitivities and environmentally induced illnesses to the public, educational institutions and medical community in Manitoba and to provide information and support to individuals in Manitoba suffering from environmental sensitivities and environmentally induced illnesses, including Electrosensitivity (Electromagnetic Hypersensitivity - EHS). We represent many health conditions that are related to environmental factors and are often referred to as "the canaries in the mines" i.e. early indicators of conditions that can become harmful to many others.

¹⁷ Some Medical Doctors (MDs) who have clinical experience in this area:

Dr. S. Genuis (Alberta), Dr. R. Bray (Ontario), Dr. J. Fox (Nova Scotia), Dr. D. Belpomme (France), Dr.E. Mallery-Blythe (UK).