

Environmental Petition

Name of petitioner(s):

Barbara Payne on behalf of Electromagnetic Pollution Illnesses Canada Foundation (EPIC)

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Office of the Auditor General of Canada

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Via email to petitions@oag-bvg.gc.ca

Attention: Petitions

Date: June 16, 2017

Dear Commissioner,

I hereby submit this petition to the Auditor General of Canada under section 22 of the *Auditor General Act*.

Signature of the petitioner:



Electromagnetic Pollution Illnesses Canada Foundation (EPIC) is a volunteer-based not-for-profit in Canada established to:

- provide support and services to adults and children affected by electromagnetic pollution;
- provide information to the public about electromagnetic pollution and its impact on health and wellbeing;
- promote the creation of healthy environments.

Title of the Petition: Recognition, protection, and accessibility for persons who suffer health impairment related to contamination by electromagnetic pollution in indoor and outdoor environments: Furthering Honourable Health Minister Philpott's topic "Greater Understanding and Management of Electromagnetic hypersensitivity (EHS)" in response to the Standing Committee on Health (HESA) report *Radiofrequency Electromagnetic Radiation and the Health of Canadians* (related to *Safety Code 6* et al.)

We request a response from Health Canada, Statistics Canada, and the Honourable Minister of Science.

INTRODUCTION:

In the 41st Parliament, the Standing Committee on Health (HESA) studied *Safety Code 6* and heard testimony from 22 witnesses. Meetings were held March 24¹, April 23², and 28³, 2015. Consequently, a HESA report, *Radiofrequency Electromagnetic Radiation and the Health of Canadians*⁴, which included 12 Recommendations, was tabled in the House of Commons in June 2015. Four of the report's Recommendations are regarding Electromagnetic hypersensitivity (EHS).

An immediate response was not prepared because of the dissolution of Parliament. The HESA in the next Parliament re-tabled the report in June 2016. On October 6, 2016, the Honourable Jane Philpott, Minister of Health, responded on behalf of the Government of Canada.

The purpose of this petition is to ask questions regarding Minister Philpott's response to the four HESA Recommendations regarding EHS:

RECOMMENDATION 2

That Statistics Canada consider including questions related to electromagnetic hypersensitivity in the Canadian Community Health Survey.

RECOMMENDATION 3

That the Government of Canada, through the Canadian Institutes of Health Research, consider funding research into electromagnetic hypersensitivity testing, diagnosis and treatment, and its possible impacts on health in the workplace.

RECOMMENDATION 4

That the Canadian Medical Association, the Royal College of Physicians and Surgeons, the College of Family Physicians of Canada and the World Health Organization consider updating their guidelines and continuing education materials regarding the diagnosis and treatment of electromagnetic hypersensitivity to ensure they are based on the latest scientific evidence and reflect the symptoms of affected Canadians.

1 March 24, 2015 -

<http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=e&Mode=1&Parl=41&Ses=2&DocId=7892702>

2 April 23, 2015 -

<http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=e&Mode=1&Parl=41&Ses=2&DocId=7936469>

3 April 28, 2015-

<http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=e&Mode=1&Parl=41&Ses=2&DocId=7945128>

4 <http://www.parl.gc.ca/content/hoc/Committee/412/HESA/Reports/RP8041315/hesarp13/hesarp13-e.pdf>

RECOMMENDATION 5

That the Government of Canada continue to provide reasonable accommodations for environmental sensitivities, including electromagnetic hypersensitivity, as required under the *Canadian Human Rights Act*.

Minister Philpott's response consisted of an introduction and three sections that addressed the 12 Recommendations. The section that is the subject of this petition is in Minister Philpott's response⁵ titled "Greater Understanding and Management of Electromagnetic-hypersensitivity (EHS)" and addressed the above recommendations.

We have divided the Minister's response text (appears framed and in italics) according to six Topics, and within each Topic the Minister's response is followed by our background information and our questions. Topics 7 and 8 deal with closely related issues.

Topic 1⁶ **Health Canada's statement on symptoms attributed to electromagnetic fields (EMFs)**

*Health Canada acknowledges that some people have reported an array of health symptoms that they attribute to exposure to EMF [electromagnetic fields]. At present, the symptoms attributed to EMF exposure have been termed idiopathic environmental intolerance (IEI-EMF) by the WHO, where "idiopathic" refers to unknown causes. This means that while the symptoms attributed by some persons to EHS are real, the scientific evidence provides strong support that these health effects are not associated with EMF exposure.*⁷

BACKGROUND:

Electromagnetic hypersensitivity (EHS) is a descriptive term for symptoms caused by exposure to electromagnetic fields radiation (such as radiofrequency radiation, microwave radiation, et al.). Other names often used for EHS are: electrosensitivity (ES), electromagnetic sensitivity (EMS), electrohypersensitivity (EHS), electromagnetic fields (EMF) syndrome, and idiopathic environmental intolerance (IEI-EMF).⁸

Physical symptoms of EHS can be acute or chronic and range from mild effects such as headache, nausea, tingling, skin reactions, anxiety, and tinnitus (buzzing/ringing in the ears) to severe effects such as pain, neurological conditions, cardiovascular irregularities, hormonal irregularities, blood sugar irregularities, seizures, paralysis, and stroke. For many people, sleep disruption is a symptom of EHS, and reduced

⁵ <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=8481964>

⁶ [Sentences 1-3]

⁷ <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=8481964>

⁸ The Swedish Radiation Safety authority in its 2015 report uses the terms idiopathic environmental intolerance attributed to electromagnetic fields (IEI--EMF) and electromagnetic hypersensitivity (EHS) as synonyms depending on the use of the terminology in the original papers. Page 75.

<https://www.stralsakerhetsmyndigheten.se/Global/Publikationer/Rapport/Stralskydd/2015/SSM-Rapport-2015-19.pdf>

quantity or quality of sleep contributes to further physiological and other problems. Behaviour, concentration, and memory can also be affected. Other information on EHS and other environmental illnesses can be found in “The Medical Perspectives on Environmental Sensitivities” on the Canadian Human Rights Commission website.⁹

The World Health Organization (WHO) also uses the term “electromagnetic sensitivity” to describe this condition. However, the WHO’s information sheet, “Electromagnetic fields and public health. Electromagnetic hypersensitivity. Background. December 2005”¹⁰, is outdated. Likewise, the draft report, and latest version available to the public, on this topic that the WHO is working on does not include all of the more recent relevant studies. Concerns about the WHO working group and process that the WHO is using in preparing the report have been expressed.^{11,12}

QUESTIONS:

1. (a) How have Canadians reported their electromagnetic hypersensitivity (EHS) symptoms to Health Canada? (b) How many Canadians have reported their EHS symptoms to Health Canada? (c) Has Health Canada conveyed those reports to the World Health Organization?
2. What are the specific primary research studies (complete references with author, year, title, journal name), other than short-term provocation studies, that Health Canada relies on to make its evidence statement about association of health effects with EMF exposure?
3. Has Health Canada contacted representatives in the Swedish government: to understand its decision to officially designate electrohypersensitivity (EHS) as a fully recognized functional impairment; and to identify what benefits are provided to individuals in Sweden who suffer due to EHS?

Topic 2¹³ Other agencies' statements on symptoms attributed to electromagnetic fields (EMFs)

Other recent reviews have been carried out by international bodies including the Swedish Radiation Safety Authority (2015), Public Health England (2012) and the Australian Radiation Protection and Nuclear Safety Agency (2015); all reaching similar conclusions. Domestically, in its 2014 review of Safety Code 6 the Royal Society of Canada found, “taken together, research in the past ten years does not provide firm evidence for the hypothesis that people with IEI-EMF can perceive RF energy levels below the limits in Safety Code 6 or that there is a causal link between exposure to RF and their symptoms”.

BACKGROUND:

None of the reports cited refer to the following highly relevant publications¹⁴.

9 http://www.chrc-ccdp.gc.ca/sites/default/files/envsensitivity_en.pdf

10 <http://www.who.int/peh-emf/publications/facts/fs296/en/> [accessed 3 May 2017]

11 <http://www.bioinitiative.org/advisors-committee/>

12 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.

13 [Sentences 4-5]

14 Although the Minister cites the Australian report as being published in 2015 the title of the Australian Radiation

a) The “EUROPAEM [European Academy for Environmental Medicine] EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses”¹⁵ lists over 20 “health problems” and provides guidelines for treatment and diagnosis for family physicians to help identify and treat patients with EHS.*

b) Belpomme, D., Campagnac, C., & Irigaray, P. (2015). Reliable disease biomarkers characterizing and identifying electrohypersensitivity and multiple chemical sensitivity as two etiopathogenic aspects of a unique pathological disorder. *Reviews on Environmental Health*, 30(4), 251–271.*

* Authors and their affiliations are listed in Appendix 1.

It should also be noted that the opinions and conclusions in the reports cited by the Minister of Health are surrounded by controversy in aspects of flawed process, potential conflict of interest, and omissions – as detailed by the Swedish Radiation Protection Foundation¹⁶, the Australian group Oceania Radiofrequency Scientific Advisory Association (ORSAA)¹⁷, Starkey (2016)¹⁸, the BioInitiative Working Group¹⁹, Pall (2015)²⁰, the Canadians for Safe Technology report on “140 omitted studies”²¹, and in articles published in the *Canadian Medical Association Journal* (CMAJ).^{22,23}

The concerns, which include bias of an unbalanced group evaluating the scientific literature, also extend to the European Union's report²⁴ and are outlined in a letter to the European Ombudsman signed by over 40 non-governmental organizations (NGOs).²⁵

In 2014, more than 50 Canadian medical doctors appealed to the Minister of Health for “guidelines and resources to assist Canadian physicians in assessing and managing problems related to microwave

Protection (ARPANSA) report is “Review of Radiofrequency Health Effects Research - Scientific Literature 2000-2012” Technical Report Series 164. [ARPANSA site <http://www.arpansa.gov.au/> - accessed 3 May 2017]

15

https://www.researchgate.net/publication/305689940_EUROPAEM_EMF_Guideline_2016_for_the_prevention_diagnosis_and_treatment_of_EMF-related_health_problems_and_illnesses

16 <http://www.stralskyddsstiftelsen.se/english/> The report is on the conflict of interest of the experts in the 2016 version which are the same experts as in 2015. <http://www.stralskyddsstiftelsen.se/2016/05/varning-for-stralsakerhetsmyndigheten-ssm-fyra-skall-till-varfor-du-inte-kan-lita-pa-ssm/>

17 Personal communication with Steve Weller, member of Oceania Radiofrequency Scientific Advisory Association (ORSAA) - <http://www.orsaa.org/>.

18 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.

19 The 2012 working group consisted of 29 electromagnetic field (EMF) experts from 10 countries - http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec25_participants.pdf

20 Pall, M. L. (2015). Scientific evidence contradicts findings and assumptions of Canadian Safety Panel 6: microwaves act through voltage-gated calcium channel activation to induce biological impacts at non-thermal levels, supporting a paradigm shift for microwave/lower frequency electromagnetic field action. *Reviews on Environmental Health*, 30(2), 99–116.

21 <http://archives.c4st.org/website-pages/hc-resolution-documents/c4st-analysis-of-ignored-studies-full.html>

22 Scientists Decry Canada's Outdated Wi-Fi Safety Rules

<http://archives.c4st.org/news/what-s-happening-in-canada/scientists-decry-canadas-outdated-wi-fi-safety-rules.html>

23 Canadian Medical Association Journal reports Health Canada's wireless limits are "A Disaster to Public Health" <http://archives.c4st.org/news/what-s-happening-in-canada/canadian-medical-association-journal-reports-health-canadas-wireless-limits-are-a-disaster-to-public-health.html>

24 Mentioned elsewhere in the Minister's response.

25 <http://www.stralskyddsstiftelsen.se/2015/03/bias-in-the-assessment-of-electromagnetic-fields-emf/>

radiation”²⁶ (Appendix 2).

QUESTIONS:

4. Given the new information from experts in clinical settings from respected institutions, and the request to the Minister of Health outlined in the Canadian medical doctors’ 2014 declaration, will Health Canada update its assumptions regarding electromagnetic hypersensitivity (EHS)?
5. (a) Will Health Canada provide the necessary resources to provide appropriate care for Canadians who suffer due to electromagnetic hypersensitivity (EHS)? (b) If not, why not?

Topic 3²⁷ Accommodating Electromagnetic hypersensitivity (EHS) in the workplace

Health Canada agrees that the Government of Canada should continue to provide accommodation measures for individuals suffering from disabilities, as required under the Canadian Human Rights Act and has shared a copy of the Committee’s report with officials at the Canadian Human Rights Commission for their consideration as appropriate.

BACKGROUND:

The Canadian Human Rights Commission establishes guidelines for employers to accommodate workers and has published a rationale titled “The Medical Perspectives on Environmental Sensitivities”.²⁸ We are aware that the Government of Canada has accommodated at least one individual in the workplace.

More than 1000 physicians signed the “Freiburg Appeal” in 2002. The 2012 updated Appeal states, “... as physicians and scientists call again on our colleagues and the wider global community, but also on all politicians around the world to identify and clearly mark protected zones for electrosensitive people; establish public areas without wireless access or coverage, especially on public transport, similar to smoke-free areas for nonsmokers.”²⁹

QUESTIONS:

6. What other proactive steps will Health Canada take to inform and educate within the public service, as well as in the private sector, to make employers aware of the potential consequences of firsthand and secondhand exposures to wireless radiation and increased risk to susceptible individuals?
7. Are there any plans to determine the extent of electromagnetic hypersensitivity (EHS) within the federal public service?
8. Why is the government of Canada not taking an active and visible approach to educate employers about the need to provide a safe working environment for employees as recommended by the

26 <http://www.c4st.org/images/documents/hc-resolutions/medical-doctors-submission-to-health-canada-english.pdf>

27 [Sentence 6]

28 http://www.chrc-ccdp.gc.ca/sites/default/files/envsensitivity_en.pdf

29 <http://freiburger-appell-2012.info/en/home.php>

Topic 4³¹ Research on Electromagnetic hypersensitivity (EHS)

As outlined above, the Government of Canada supports research in areas related to EMF and health through CIHR's investigator-initiated research programs. We encourage scientists interested in conducting further research studies in this area to make use of CIHR funding opportunities (<https://www.researchnet-recherchenet.ca/rnr16/search.do?fodAgency=CIHR&fodLanguage=E&all=1&search=true&org=CIHR&sort=program&masterList=true&view=currentOpps>).

BACKGROUND:

We did not find pertinent funding opportunities at the suggested website.

QUESTION:

9. What are the specific details of the opportunities for this type of project? Please provide links.

Topic 5³² Estimating prevalence of Electromagnetic hypersensitivity (EHS) in the Canadian population

The Canadian Community Health Survey (CCHS) is a cross-sectional survey that collects information related to health status, health care utilization and health determinants for the Canadian population. New questions related to EHS could only be included in the CCHS once they meet Statistics Canada quality criteria for content. In the case of EHS, the lack of a clear etiology and definition by the research community (standard and accepted definition related to an accepted medical disorder) would limit the feasibility of interpreting and reporting on any data collected.

BACKGROUND:

There are no data for Canada. Studies elsewhere estimate per cent of the general population affected:

a. Sweden: Electrohypersensitivity (EHS) is officially a fully recognized, functional impairment, i.e. it is not regarded as a disease. Survey studies show that somewhere between 230,000 to 290,000 Swedish men and women – out of a population of 9,000,000 (2.6 to 3.2%) – report a variety of symptoms when being in contact with electromagnetic field (EMF) sources.³³

b. Taiwan: Tseng M, M.-C., Lin, Y.-P., & Cheng, T.-J. (2011). Prevalence and psychiatric comorbidity of self-reported electromagnetic field sensitivity in Taiwan: A population-based study. *Journal of the*

30 http://www.chrc-ccdp.gc.ca/sites/default/files/envsensitivity_en.pdf

31 [Sentence 7-8]

32 [Sentences 9-10]

33 <http://iopscience.iop.org/article/10.1088/1755-1315/10/1/012005/meta>

Formosan Medical Association, 110(10), 634–641. reported 13.3% of the population.

c. United Kingdom: Eltiti, S., Wallace, D., Zougkou, K., Russo, R., Joseph, S., Rasor, P., & Fox, E. (2007). Development and evaluation of the electromagnetic hypersensitivity questionnaire. *Bioelectromagnetics*, 28(2), 137–151. found 4.0% of the population reported symptoms.

d. USA (California): Levallois, P., Neutra, R., Lee, G., & Hristova, L. (2002). Study of self-reported hypersensitivity to electromagnetic fields in California. *Environmental Health Perspectives*, 110(Suppl 4), 619–623. reported 3.2% of the population were affected.

Based on information from other countries, it is not unreasonable to estimate that this condition could be affecting at least 3% of Canadians.

Note that approximately 2% of Canadian children have a peanut allergy.³⁴

According to a January 2007 Statistics Canada report, approximately 5% of Canadians (1.2 million persons) suffer “medically unexplained physical symptoms”. These included multiple chemical sensitivity, fibromyalgia, and chronic pain.³⁵ A similar survey was also conducted in 2014.³⁶ Appendix 3 shows a Statistics Canada table with population percentages: “Prevalence of disability by type, Canada, 2012”; 8 of the 11 types are lower than 4%.

QUESTIONS:

10. Has the Government of Canada evaluated the potential loss in productivity and other economic factors with over 1 million Canadians possibly suffering from Electromagnetic hypersensitivity (EHS)?
11. Would Statistics Canada conduct a survey similar to those conducted in 2007 and 2014 that would also include Electromagnetic hypersensitivity (EHS)?

Topic 6³⁷ Clinical guidelines for Electromagnetic hypersensitivity (EHS) and related education about EHS and EMFs in indoor and outdoor environments

In response to the Committee’s recommendation for updates to clinical guidelines and continuing education materials for health care providers, Health Canada has shared the report of the Committee with the Canadian Medical Association, the Royal College of Physicians and Surgeons, the College of Family Physicians, and the WHO for their consideration of recommendations relating to their respective mandates as appropriate.

34 Approximately 2% of the population has a peanut allergy - <http://www.theglobeandmail.com/life/parenting/for-schools-and-parents-what-is-the-right-approach-to-food-allergies/article16618717/>

35 <http://www.statcan.gc.ca/pub/82-003-x/2006001/article/9526-eng.htm>

36 <http://www.statcan.gc.ca/daily-quotidien/150617/dq150617b-eng.htm>

37 [Sentence 11]

BACKGROUND:

EHS is an emerging medical phenomenon. Dr. Riina Bray, Medical Director, Environmental Health Clinic, Women's College Hospital in Ontario, in her testimony to the Parliamentary Standing Committee on Health (HESA) in April 2015³⁸, stated, “Since the time these diagnoses were initially made 10 years ago, the numbers have increased dramatically....” One key element of treatment involves identifying and reducing exposure to sources of wireless radiation. Yet, Canadian family physicians are not informed by Health Canada to interview symptomatic patients about the use of wireless devices in their personal, home, or work environments and to prescribe practices of prudent avoidance. In the absence of authoritative instruction, the Canadian physician’s standard of practice is to prescribe a costly treatment plan to abate the symptoms, instead of eliminating the cause.

The following are two recent publications (mentioned previously) that outline objective testing, diagnoses, and treatment:

- a) The “EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses”³⁹ lists over 20 “health problems” and provides guidelines for treatment and diagnosis for family physicians to help identify and treat patients who suffer due to EHS.
- b) Belpomme, D., Campagnac, C., & Irigaray, P. (2015). Reliable disease biomarkers characterizing and identifying electrohypersensitivity and multiple chemical sensitivity as two etiopathogenic aspects of a unique pathological disorder. *Reviews on Environmental Health*, 30(4), 251–271.

In their published research paper “Electromagnetic hypersensitivity – an increasing challenge to the medical profession”, Dr. Lena Hedendahl et al.⁴⁰ state, “It seems necessary to give an International Classification of Diseases to EHS to get it accepted as EMF-related health problems”.

QUESTIONS:

- 12. How can the Government of Canada invest resources to better understand electromagnetic hypersensitivity (EHS) testing, diagnosis, treatment, and possible impacts on health in the workplace that could impact over 1 million Canadians⁴¹? Will it invest; and if not, why not?
- 13. (a) Has Health Canada undertaken to gather perspectives on the emerging public health issue of electromagnetic hypersensitivity (EHS) and suggestions for a working definition from the Environmental Health Clinic at Women's College Hospital, Toronto, Ontario⁴², the Environmental Health Centre, Rivers Falls, Nova Scotia,⁴³ Dr. Stephen Genuis, MD⁴⁴ in

38 <http://www.parl.gc.ca/content/hoc/Committee/412/HESA/Evidence/EV7945128/HESAEV58-E.PDF>. As an individual.

39 <https://www.emfanalysis.com/wp-content/uploads/2016/09/EUROPAEM-EMF-Guideline-2016.pdf>

40 <https://www.ncbi.nlm.nih.gov/pubmed/26372109>

<https://doi.org/10.1515/reveh-2015-0012>

41 3% of 35 million

42 <http://www.womenscollegehospital.ca/>

43 Integrated Chronic Care Service,, Environmental Health Centre, Nova Scotia
<http://www.cdha.nshealth.ca/integrated-chronic-care-service-iccs>

44 Author of: Genuis, S. J., & Lipp, C. T. (2012). Electromagnetic hypersensitivity: fact or fiction? *The Science of the Total Environment*, 414, 103–112. Dr. Genuis invited the members of the Royal Society of Canada to contact him if they had any questions when they had the public hearings.

Edmonton, Alberta,⁴⁵ or any of the medical doctors who provided submissions to the Royal Society of Canada's panel during their 2013 hearings⁴⁶? (b) If not, why not? (c) If yes, when will details be publicly available?

14. What is Health Canada doing to support the International Classification of Diseases initiative proposed by Dr. Lena Hedendahl et al. (2015) in their paper "Electromagnetic hypersensitivity – an increasing challenge to the medical profession"?⁴⁷
15. In keeping with Recommendation 4: (a) Did Health Canada provide the EUROPAEM (2016) and Belpomme et al. (2015) papers on clinical guidelines and markers for EHS as part of the "latest scientific evidence" on electromagnetic sensitivity when it forwarded the HESA Committee's report to the Canadian Medical Association, the Royal College of Physicians and Surgeons, the College of Family Physicians, and the World Health Organization? (b) What other "latest scientific evidence" was provided by Health Canada to these bodies?

Topic 7 Health Canada inaction regarding recommendations made by the Royal Society of Canada expert panel in 2014

BACKGROUND:

The Royal Society of Canada panel's 2014 report states: "*Health Canada is urged to investigate the symptoms of IEI-EMF [Idiopathic Environmental Intolerance-Electromagnetic Fields] individuals with the aim of understanding the etiology of their condition, developing criteria for differential diagnosis of the condition, and finding ways to provide effective treatment for such individuals*"⁴⁸

QUESTION:

16. Health Canada references the Royal Society report at least three times in its defense of *Safety Code 6*.^{49,50,51} Why has Health Canada not followed through on this recommendation?

Topic 8 Transparency and gaps in recordkeeping

BACKGROUND:

In the 2009 update of *Safety Code 6* (1999), the sentence "*Certain members of the general public may be more susceptible to harm from microwave exposure*" was removed. Attempts to learn under whose direction this sentence was removed have been made by filing a records request under the *Access To Information Act*. Official responses show that, "*Health Canada has no emails or written correspondences regarding the rationale for removal of this statement.*" (Appendix 4)

45 Genuis, S. J., & Lipp, C. T. (2012). Electromagnetic hypersensitivity: fact or fiction? *The Science of the Total Environment*, 414, 103–112.

46 These were later forwarded to Health Canada by Canadians for Safe Technology during the public consultations on *Safety Code 6*.

47 Reviews on Environmental Health, 30(4), 209–215. <https://www.ncbi.nlm.nih.gov/pubmed/26372109>

48 https://rsc-src.ca/sites/default/files/pdf/SC6_Report_Formatted_1.pdf

49 <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=8481964>

50 http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct/index-eng.php

51 <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09583.html>

QUESTIONS:

17. Why was the above statement – about susceptibility to harm from exposure – removed from the 2009 update to Safety Code 6?
18. How is it possible that such an important statement was removed without any internal communication within Health Canada?
19. Will a process be put in place so that any changes in the current *Safety Code 6* (2015)⁵² are made in a transparent manner with reasons given?

⁵² http://www.hc-sc.gc.ca/ewh-semt/consult/_2014/safety_code_6-code_securite_6/final_finale-eng.php

Appendix 1

Lists of authors and their affiliations for the EUROPAEM publication and the Belpomme et al. publication (re Topic 2 and Topic 6)

a) Names and affiliations of authors of the EUROPAEM Guideline:

European Academy for Environmental Medicine (EUROPAEM) – EMF working group: *Corresponding author: Gerd Oberfeld, Department of Public Health, Government of Land Salzburg, Austria, E-mail: gerd.oberfeld@salzburg.gv.at Igor Belyaev: Cancer Research Institute BMC, Slovak Academy of Science, Bratislava, Slovak Republic; and Prokhorov General Physics Institute, Russian Academy of Science, Moscow, Russia Amy Dean: American Academy of Environmental Medicine, Wichita, KS, USA Horst Eger: Association of Statutory Health Insurance Physicians of Bavaria, Medical Quality Circle “Electromagnetic Fields in Medicine – Diagnostic, Therapy, Environment”, no. 65143, Naila, Germany Gerhard Hubmann: Center for Holistic Medicine “MEDICUS”, Vienna, Austria; and Wiener Internationale Akademie für Ganzheitsmedizin (GAMED), Vienna, Austria Reinhold Jandrisovits: Medical Association Burgenland, Environmental Medicine Department, Eisenstadt, Austria Markus Kern: Medical Quality Circle “Electromagnetic Fields in Medicine – Diagnosis, Treatment and Environment”, Kempten, Germany; and Kompetenzinitiative zum Schutz von Mensch, Umwelt u. Demokratie e.V., Kempten, Germany Michael Kundi and Hanns Moshammer: Institute of Environmental Health, Medical University Vienna, Vienna, Austria Piero Lercher: Medical Association Vienna, Environmental Medicine Department, Vienna, Austria Kurt Müller: European Academy for Environmental Medicine, Kempten, Germany Peter Ohnsorge: European Academy for Environmental Medicine, Würzburg, Germany Peter Pelzmann: Department of electronics and computer science engineering, HTL Danube City, Vienna, Austria Claus Scheingraber: Working Group Electro-Biology (AEB), Munich, Germany and Association for Environmental- and Human-Toxicology (DGUHT), Würzburg, Germany Roby Thill: Association for Environmental Medicine (ALMEN), Beaufort, Luxembourg

b) Names and affiliations of authors of the publication on reliable disease markers for electrohypersensitivity (EHS):

Dominique Belpomme: Paris V University Hospital, France; and European Cancer and Environment Research Institute (ECERI), Brussels, Belgium Christine Campagnac: Hospital Director, seconded from Assistance Publique-Hôpitaux de Paris (AP-HP), Paris, France; and European Cancer and Environment Research Institute (ECERI), Brussels, Belgium; Philippe Irigaray, PhD, Association for Research and Treatments Against Cancer (ARTAC) France; and European Cancer and Environment Research Institute (ECERI), Brussels, Belgium.

Appendix 2

Declaration sent by Canadian medical doctors to the Minister of Health during the public consultation process regarding revisions to *Safety Code 6* (2009)

Declaration: Doctors Call for Protection from Radiofrequency Radiation Exposure

Physicians Call for Health Canada to Provide:

- i) Wireless safety standards that are more protective of the health of Canadians; and
- ii) Guidelines and resources to assist Canadian physicians in assessing and managing health problems related to microwave radiation.

There is considerable evidence and research from various scientific experts that exposure to microwave radiation from wireless devices; Wi-Fi, smart meters and cell towers can have an adverse impact on human physiological function.^{1 2} Many recent and emerging studies from university departments and scientific sources throughout the world support the assertion that energy from wireless devices may be causatively linked to various health problems including reproductive compromise, developmental impacts, hormonal dysregulation and cancer. In fact, in 2011 the World Health Organization listed microwave radiation as a Class 2B possible carcinogen³ and subsequent research strengthened the evidence that a stronger designation may be justified.^{4 5 6}

Out of sincere concern for the health of Canadians at all stages of life – from the developing fetus through childhood and into adulthood – we respectfully request that:

- i) Health Canada develop and support strategies to raise awareness about microwave radiation impacts and to minimize prolonged exposure to microwave radiation in schools and other places where children are regularly exposed.
- ii) As Health Canada has acknowledged that a full literature review was not part of its latest update of Safety Code 6 (the safety guideline for wireless exposure pertaining to thermal effects on the tissue of adult males) we request a comprehensive literature review for all age ranges with less reliance on industry-funded studies.
- iii) Health Canada provide guidelines and resources to assist Canadian physicians in becoming apprised of microwave exposure and related health problems and clinical presentations that may be associated with over-exposure or sensitivity (similar to the 2012, “**Guideline of the Austrian Medical Association for the diagnosis and treatment of EMF related health problems and illnesses.**”) (Note; this guideline is under review with an update expected.)

Dr. Jennifer Armstrong, MD, DIBEM, BSc, Past President, American Academy of Environmental Medicine, OEHC Ottawa Environmental Health Clinic, Ottawa, ON

Dr. Claire Astley, MD, DrTCM, Medical Acupuncture Practice, Victoria, BC

Dr. Robert Banner, MD, CCFP, FCFP, FRCP, Dip AAPM, Dip CAPM, ABIHM, London, ON

Dr. John Barnhill, MD, FRCS(C), CCFP, Richmond, BC

Dr. Warren Bell, BA MD CM CCFP FCFP; Board member and Past Founding President, CAPE (Canadian Association of Physicians for the Environment); Member and Past Founding President, WA:TER (Wetland Alliance: The Ecological Response); Founding member, HUESSS (Health Uranium Environment Sustainability Survival Solidarity); Rural Preceptor, Faculty of Medicine, UBC, Vancouver, BC

Dr. Alison C. Bested, MD, FRCPC, Clinical Associate Professor, Faculty of Medicine, University of British Columbia, BC

- More to Follow -

Dr. Mel Borins, MD, Toronto, ON
Dr. Jody Bowle-Evans, BA, MD, CGPP, Creemore, ON
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Appendix 3

Excerpt from “Disability in Canada: Initial findings from the Canadian Survey on Disability” (viewed May 6, 2017 at <http://www.statcan.gc.ca/pub/89-654-x/89-654-x2013002-eng.htm>)

Table 1
Prevalence of disability by type, Canada, 2012

Disability type	%
Pain	9.7
Flexibility	7.6
Mobility	7.2
Mental/psychological	3.9
Dexterity	3.5
Hearing	3.2
Seeing	2.7
Memory	2.3
Learning	2.3
Developmental	0.6
Unknown	0.3

Appendix 4

Excerpt from a request made under the *Access To Information Act*

"I am writing in regards to your complaint filed with the Office of the Information Commissioner concerning your request A-2011-00827:

("Previously disclosed records under A-2011-00503 that read as follows:)

Request all submissions, emails, printed and electronic correspondence sent or received by Health Canada concerning the 2009 update of Safety Code 6 (Limits of Human Exposure to Radio-frequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz)"

Please note that our office of primary interest, Healthy Environments and Consumer Safety Branch- Environmental and Radiation Health Sciences Directorate (HECSB- ERHSD) at Health Canada has confirmed that there are no e-mails or written correspondence on why the sentence "Certain members of the general public may be more susceptible to harm from microwave exposure" was removed.

We trust this information clarifies the matter.

Sincerely,
N. Muminovic
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Public Health Agency of Canada
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