

# **URGENT APPEAL TO THE GOVERNMENT OF CANADA TO SUSPEND THE 5G ROLLOUT AND TO CHOOSE SAFE AND RELIABLE FIBRE CONNECTIONS**

**MAY 14, 2020**

If recent events have shown us anything, it is that our health is what matters most,  
late responses to early warnings of potential harm are costly ...  
and we need the Internet!

The telecommunications industry is rushing to deploy 5G across Canada,  
with no prior health and environmental impact assessment,  
without fully understanding the economic consequences,  
and without informed consent.

Full 5G rollout will require the installation of hundreds of thousands<sup>1</sup>  
of new antennas throughout the country on cell towers, hydro poles, lamp posts,  
buildings and other structures, often within a few metres of where we live and work.

Canadians are largely unaware of the risks of chronic exposure to  
radiofrequency (RF) radiation emitted by cell tower antennas, small cell antennas,  
cellphones<sup>2</sup>, cordless phones, and Wi-Fi and Bluetooth devices such as tablets, laptops,  
baby monitors, wireless printers/keyboards/mice, gaming consoles, virtual reality  
headsets, wearables, "smart" appliances, and utility meters.

RF radiation is scientifically demonstrated to cause or contribute to  
numerous health effects, including cancers, sperm damage, reproductive harms,  
learning and memory deficits, and neurodegenerative, cellular and genetic damage.

We rely on the government to ensure our safety.  
To date, Health Canada and other Ministries have let us down.

We urge Canadians to appeal to the Government of Canada to "look before we leap,"  
to immediately suspend any further 5G rollout, and  
to press for a safer, more cost-effective and secure alternative –  
namely fibre optic and wired connections to every home and business.

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This Appeal is available online in English and in French at [c4st.org/5Gappeal](http://c4st.org/5Gappeal).  
La version française de cet Appel est disponible à [www.stopponsla5G.ca/appel](http://www.stopponsla5G.ca/appel).

# URGENT APPEAL TO THE GOVERNMENT OF CANADA TO SUSPEND THE 5G ROLLOUT AND TO CHOOSE SAFE AND RELIABLE FIBRE CONNECTIONS

This Appeal was jointly developed by the following Canadian organizations:



**((5G )) Winnipeg Awareness!**



## Canadian organizations supporting this Appeal at launch (May 14, 2020):

- 5G Winnipeg Awareness [MB]
- Albertans for Safe Technology [AB]
- CALM - Call to Action to Limit Microcells [Canada-wide]
- Canadians for Safe Technology / Canadiens pour une technologie sécuritaire (C4ST)
- Canadians for Safe Technology (C4ST) Youth Riding Reps [ON]
- Citizens Against the Proliferation of Cell Antennas in the Eastern Townships [QC]
- Coalition to Reduce Electropollution (CORE) [BC]
- Coalition to Stop Smart Meters [BC]
- Electrosensitive Society [Canada-wide]
- Environmental Health Association of Manitoba [MB]
- EPIC - Electromagnetic Pollution Illnesses Canada Foundation
- Kingstonians for Safe Technology [ON]
- Let's Connect Salt Spring [BC]
- Let's Stop 5G - Let's Live Safely campaign / Campagne Stoppons la 5G - Vivons sans danG [QC]
- Parents for Safe Schools [BC]
- Prevent Cancer Now (PCN) [Canada-wide]
- Rassemblement ÉlectroSensibilité Québec (RESQ) [QC]
- Stop 5G Magog-Sherbrooke [QC]
- Stop 5G Montréal [QC]
- Stop 5G Rimouski [QC]
- Stop 5G Sutton [QC]
- Stop 5G Val-David [QC]
- Transition Wolfville Area [NS]
- WEEP - The Canadian Initiative to Stop Wireless Electrical and Electromagnetic Pollution

## WHEREAS:

- 1. All Canadians need safe, fast, reliable, energy-efficient, secure and affordable Internet access.**
  - a. **Connectivity with wires, and in particular fibre optic cable (fibre), is the best means to fulfill this need.** Fibre does not emit radiofrequency (RF) radiation that is harmful; fibre is at least 100 times faster,<sup>3</sup> more reliable, secure and resilient<sup>4</sup> and is far more protective of privacy<sup>5,6</sup> than wireless connectivity;<sup>7</sup>
  - b. **Wireless technologies emit harmful RF radiation, have a much larger carbon footprint than wired technologies,** rely on rare minerals,<sup>8</sup> and the Institute of Electrical and Electronics Engineers (IEEE) published that, "Wireless technologies will continue to consume at least 10 times more power than wired technologies";<sup>9</sup>
  - c. **The economic burden of wireless technologies has never been evaluated.**<sup>10</sup> While the benefits have been widely discussed, the actual costs – increasing healthcare costs,<sup>11</sup> lost productivity related to adverse health effects from RF radiation exposure, costs engendered by security<sup>12</sup> and privacy breaches,<sup>13</sup> environmental damage,<sup>14,15</sup> and the foreseeable impacts to safety and property from the degradation of weather forecast accuracy<sup>16</sup> – have never been assessed to determine if they outweigh the benefits.<sup>17</sup>
- 2. Canadians expect their government to protect their health and the environment.**
  - a. **There has been no testing to ensure that 5G technology is safe for humans and the environment;**<sup>18,19</sup>
  - b. **Health Canada's *Safety Code 6*,**<sup>20</sup> the exposure guidelines for human exposure to RF radiation, does not protect Canadians' health,<sup>21,22,23,24</sup> nor does it address environmental safety. Canada's guidelines lag behind those of many other countries.<sup>25</sup> Health Canada's process to update *Safety Code 6* (in 2015) was deeply flawed,<sup>26,27</sup> and exposure limits are based on the outdated premise that RF radiation causes harm only at exposure levels that produce excessive heat.<sup>28,29,30</sup> Hundreds of peer-reviewed scientific publications describe biological effects and harms with exposures far below Canada's limits, in humans, plants, laboratory animals and wildlife such as birds and pollinators;<sup>31,32,33,34</sup>
  - c. **Wireless transmitters emit RF radiation, which is scientifically demonstrated to cause or contribute to numerous health effects** including cancers,<sup>35,36</sup> sperm damage,<sup>37</sup> reproductive harms,<sup>38</sup> learning and memory deficits,<sup>39</sup> and neurodegenerative, cellular and genetic damage.<sup>40,41,42</sup> A growing number of Canadians also experience immediate and debilitating health problems (that could be prevented) such as headaches, irregular heartbeats, cognitive difficulties and insomnia, resulting in poor quality of life.<sup>43</sup> All Canadians are susceptible to developing such health issues, unless their ever-increasing exposure to RF radiation is curtailed;
  - d. **Scientists report environmental harms to birds,**<sup>44,45</sup> pollinators,<sup>46</sup> trees<sup>47</sup> and other species;<sup>48,49</sup> however, there are no environmental guidelines for RF radiation;<sup>50</sup>
  - e. **The default in Canada is for most of our wireless devices and antennas to be "always on," i.e., transmitting;**
  - f. **In 2015, the House of Commons Standing Committee on Health (HESA) published a report entitled *Radiofrequency Electromagnetic Radiation and the Health of Canadians*.**<sup>51</sup> Its 12 recommendations (listed on page 8 of this Appeal) addressed several of the issues mentioned above, and included a national awareness campaign about the harmful effects of wireless technologies and how to reduce risks. The report received all-party support and was tabled by the Conservative (2015) and Liberal (2016) majority governments. In 2010, a similar report was published.<sup>52</sup> None of the recommendations have been implemented.<sup>53,54</sup>
- 3. Canadians expect and deserve a transparent public consultation process to choose telecommunications infrastructure.**
  - a. **There are no requirements for Canadians to be consulted**<sup>55</sup> when cell antennas are added to existing structures (towers, buildings, lamp posts or hydro poles close to our homes); and municipalities do not have to be notified unless the municipality owns the structure. As for new towers, the public and the municipality must be consulted; however, the public consultation is carried out by the telecommunication company and is inadequate. Telecommunication companies, regarding health and radiofrequency emissions, say that they comply with *Safety Code 6*. Further, if a municipality is opposed to the installation of a cell tower, the federal government can legally override that refusal.<sup>56</sup> Recently, the 2020 report of the Broadcasting and Telecommunications Legislative Review Panel recommends giving the federal government even greater control over where antennas are placed in Canada;<sup>57</sup>

**WE, THE CITIZENS AND RESIDENTS OF CANADA,  
URGENTLY APPEAL TO THE GOVERNMENT OF CANADA TO:**

- 1. Ensure all Canadians can have Internet access that is safe, fast, reliable, resilient, secure, affordable and, in the long term, the most environmentally and economically sound for Canada:**
  - a. **Require all telecommunications providers to provide fibre to the premises (FTTP)** that can connect to wireline equipment in the premises, and to not replace existing wired telephone and Internet services with wireless;
  - b. **Invest in wired technologies, instead of wireless and satellite options**, to expand high-speed Internet in communities underserved by the private sector across Canada;
  - c. **Complete an economic analysis, by the end of 2021, of the incremental revenue from 5G versus the total potential economic burden.** This would include, but not be limited to: increased healthcare costs; lost productivity arising from adverse health effects; security and privacy breaches; damage to the environment; and risks to safety and property including those resulting from degraded weather forecast accuracy;
  - d. **Immediately suspend the installation of new antennas**, especially “small cell” antennas near homes, hospitals, schools, public buildings and sensitive wildlife habitats, until safety guidelines have been appropriately revised and implemented, and until the total economic implications are understood;
  - e. **Immediately suspend the auctioning and transferring of all spectrum licences**, until safety guidelines have been appropriately revised and implemented, and until the total economic implications are understood;
- 2. Protect Canadians’ health and the environment *before further rollout of wireless infrastructure*, including 5G:**
  - a. **Implement the 12 recommendations** (listed on page 8 of this Appeal) in the House of Commons Standing Committee on Health (HESA) 2015 report *Radiofrequency Electromagnetic Radiation and the Health of Canadians*;
  - b. **Revise Health Canada’s Safety Code 6.** A truly independent panel with appropriate expertise must systematically review the scientific evidence of the effects of RF radiation. This requires rigorous scientific methods, transparency, full public consultation from initial scoping throughout the process, and health-protective precautionary interpretation of findings;
  - c. **Establish binding guidelines to protect wildlife and the environment from RF radiation using a similar process;**
  - d. Building on the regulation of chemicals, **shift the burden of proof to the telecommunications and wireless technology industries**, and require that they prove that their products are not harmful to Canadians or to the environment;
  - e. **Ensure Canadians' indoor and outdoor exposure to RF radiation from wireless technologies is kept as low as possible** (ALARA or “as low as reasonably achievable”) through proper regulation, monitoring, enforcement and ongoing public education and technical device management. One of many examples would be to require that all wireless devices and antennas not transmit (i.e., not emit radiation) when not in use.
- 3. Provide a meaningful, transparent process for municipalities and their citizens to have a decisive say over the installation of cellular network antennas.**
  - a. **Provide a meaningful, transparent process for municipalities and their citizens to have a decisive say over whether and where cellular network antennas are installed**, on either towers or non-tower structures (e.g., lamp posts, hydro poles and buildings). Informed public participatory consultation and local decision-making regarding current and future antenna siting would replace the broad powers currently resting with the Minister of Innovation, Science and Economic Development Canada (ISED).

*Endnotes begin on the next page, followed by the 12 recommendations in the House of Commons Standing Committee on Health (HESA) 2015 report “Radiofrequency Electromagnetic Radiation and the Health of Canadians.”*

**YOU CAN SIGN THE APPEAL at [appel5Gappeal.ca](http://appel5Gappeal.ca)**

## Endnotes

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- <sup>1</sup> There are currently 764,581 transmitters in Canada according to the Innovation, Science and Economic Development (ISED) Spectrum Management System database (as of April 3, 2020). 5G network infrastructures will require a much greater cell density. [http://sms-sgs.ic.gc.ca/eic/site/sms-sgs-prod.nsf/eng/h\\_00010.html](http://sms-sgs.ic.gc.ca/eic/site/sms-sgs-prod.nsf/eng/h_00010.html) - <https://www.itworldcanada.com/article/everything-you-need-to-know-about-5g/416498>
- <sup>2</sup> The Secret Inside Your Cellphone (Wendy Mesley, CBC Marketplace). [https://youtu.be/Wm69ik\\_Qdb8](https://youtu.be/Wm69ik_Qdb8)
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## THE 12 RECOMMENDATIONS\*

in the House of Commons Standing Committee on Health (HESA) 2015 report  
“Radiofrequency Electromagnetic Radiation and the Health of Canadians”

<https://www.ourcommons.ca/Content/Committee/412/HESA/Reports/RP8041315/hesarp13/hesarp13-e.pdf>

1. That the Government of Canada, in collaboration with the health departments of the provinces and territories, examine existing cancer data collection methods to improve the collection of information relating to wireless device use and cancer.
2. That Statistics Canada consider including questions related to electromagnetic hypersensitivity in the Canadian Community Health Survey.
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.
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.
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.
6. That Health Canada ensure the openness and transparency of its processes for the review of Safety Code 6, so that all Canadians have an opportunity to be informed about the evidence considered or excluded in such reviews, that outside experts are provided full information when doing independent reviews, and that the scientific rationale for any change is clearly communicated.
7. That the Government of Canada establish a system for Canadians to report potential adverse reactions to radiofrequency fields.
8. That an independent scientific body recognized by Health Canada examine whether measures taken and guidelines provided in other countries, such as France and Israel, to limit the exposure of vulnerable populations, including infants, and young children in the school environment, to radiofrequencies should be adopted in Canada.
9. That the Government of Canada develop an awareness campaign relating to the safe use of wireless technologies, such as cell phones and Wi-Fi, in key environments such as the school and home to ensure that Canadian families and children are reducing risks related to radiofrequency exposure.
10. That Health Canada conduct a comprehensive review of all existing literature relating to radiofrequency fields and carcinogenicity based on international best practices.
11. That the Government of Canada, through the Canadian Institutes of Health Research, consider funding research into the link between radiofrequency fields and potential health effects such as cancer, genetic damage, infertility, impairment to development and behaviour, harmful effects to eyes and on the brain, cardiovascular, biological and biochemical effects.
12. That the Government of Canada and manufacturers consider policy measures regarding the marketing of radiation emitting devices to children under the age of 14, in order to ensure they are aware of the health risks and how they can be avoided.

\* In 2015, the House of Commons Standing Committee on Health (HESA) held hearings that included invited testimony and briefs from Canadian and international experts. In its report, HESA made these important recommendations that still await action.