

NO SAFE PLACE

shattered lives, healthcare set to crash – you can't fix this fast enough



A letter to Mayor Gregor Robertson

by Olga Sheean

Main themes in this document:

Ignored, excluded and incapacitated—citizens forced to flee3

Evidence of harmful effects: quick facts5

Scientific fact *versus* political spin and misinformation7

Physical effects of EMR.....13

The key symptoms of EHS13

Important landmarks on the EMF lifeline16

Human rights and human wrongdoings17

Questions for you and the government to answer20

A taste of what’s to come: the real cost of electromagnetic radiation.....23

Scientists call for more protective measures, given increasing evidence of risk from EMFs24

Also sent to:

- Prime Minister Justin Trudeau
- David Eby, MLA
- Hedi Fry, MP
- Elizabeth May, MP
- Joyce Murray, MP
- The David Suzuki Foundation
- Dr Erica Mallery-Blythe, PHIRE/Radiation Research Trust
- Dr Dietrich Klinghardt, the Klinghardt Academy
- Elizabeth Kelley, Director, EMFscientist.org
- Dr Joel Moskowitz, Electromagnetic Radiation Safety, saferemr.com
- *The Vancouver Sun*
- *Metro News*
- *The Globe and Mail*
- *The Tyee*

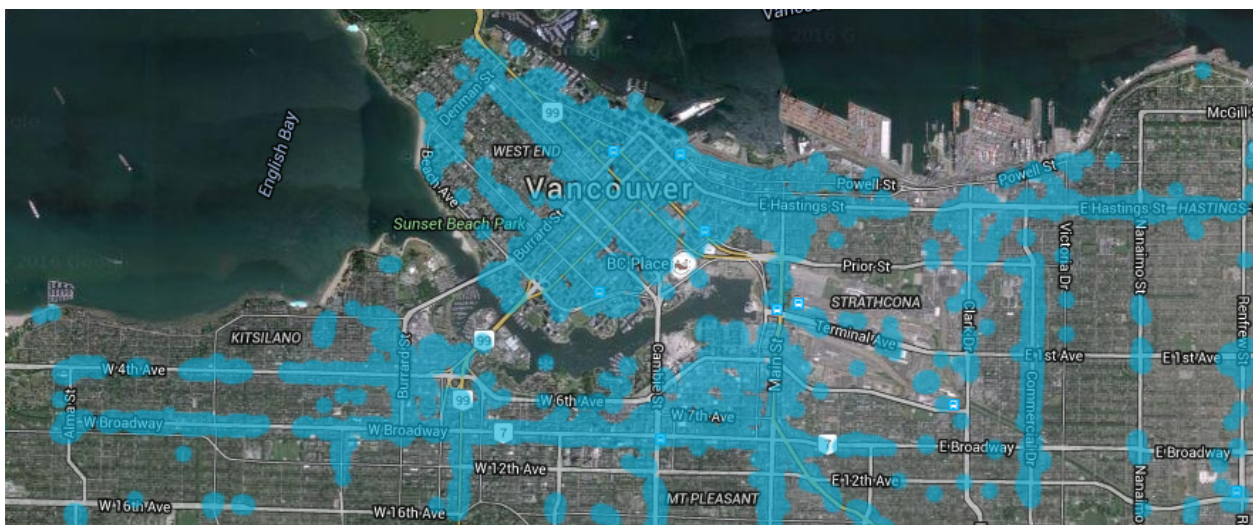
Dear Mr Robertson,

In 2003, when I worked for the World Health Organization (WHO) in Geneva, the Director General Dr Gro Harlem Brundtland resigned because cell phone radiation was making her ill. Along with countless other doctors, researchers and scientists, Brundtland has stated that “research shows deleterious effects” from the use of cell phones and other devices emitting radiation. “This is not an innocent technology,”¹ she says. It’s an inconvenient truth that we ignore because we’re so far down the rabbit hole of wireless living.

Your campaign to bombard the city with harmful radiation (benignly referred to as Wi-Fi) clearly demonstrates that you are uninformed about the scientifically proven harmful effects of non-ionizing/non-thermal Wi-Fi and other electromagnetic radiation (EMR). It also shows that, as an elected public servant, you have failed to do your own due diligence. In promoting free Wi-Fi as a positive enhancement to the community, you have led people to believe that there is no danger involved and that they can use their various electronic gadgets to their hearts’ content—with no regard for others (babies, children, transit passengers, neighbours etc) affected by them doing so.

Ignored, excluded and incapacitated: citizens forced to flee

Because of this, I’m being forced to leave Vancouver, where I have happily lived since 1992. I am one of a rapidly growing number of people with electromagnetic hypersensitivity (EHS), and I can no longer tolerate the radiation bombarding our beaches, community centres, libraries, cafés, schools, doctors’ offices and even hospitals. **You might appreciate the irony of someone recovering from brain surgery at VGH for the removal of a life-threatening acoustic neuroma, while being bombarded by the very same radiation known to have caused the tumour in the first place.** I’d prefer not to get another one.



The greenest city in the world? Blue areas show Wi-Fi coverage by just one of several Internet service-providers in Vancouver.

¹ See: <http://bit.ly/1V7KBvd> for an interview with Brundtland on the effects of EMR.

Sitting on the beach, being in nature, riding my bike, going to see a movie, shopping downtown, meeting friends in cafés and browsing in the library were simple things that I used to enjoy but can no longer comfortably do. Far from making the city more user-friendly, you have turned it into a death trap for those who are sensitive to electromagnetic fields (EMFs). In my neighbourhood alone, I know of several other people suffering from EHS—one of them virtually housebound.

Nowhere safe to go, and no safe way to get there

With Wi-Fi now in taxis, in car-sharing coops and on buses, trains, ferries and most commercial airlines, there is not one single form of public transport that those with EHS can safely use. (More accurately, there is not one single form of public transport that anyone with red blood cells and a central nervous system can safely use.) They cannot travel, visit family, go on holiday or even get out of the irradiated city that's making them ill ...without getting even more ill. With nowhere safe to go and no safe way of getting there, those with EHS have effectively been stranded, abandoned and immobilized by the municipal, provincial and federal governments.

Those with EHS are the unwelcome biological indicators of just how unhealthy and unsustainable our radiation-riddled lives have become.

There's a reason that those with EHS go largely unheard, beyond the fact that most are too incapacitated or depleted to fight the status quo. We're the 'canaries in the coal mine'—the harbingers of what's to come—and nobody wants to be bothered by facts that would burst their electronic bubble.

Does this ring a Bell? It Shaw does. Telus more!

Given the vast body of scientific evidence of the harm caused by Wi-Fi and other forms of EMR, it is clear that you, the government and service-providers such as BC Hydro, Telus, Shaw and Bell have **failed utterly in your responsibility to acknowledge the dangers and take the appropriate measures to protect our well-being.**

I'm not sure which is more reprehensible—denying that there is any danger, when you know otherwise, or failing to inform yourself by doing the proper research. Relying on the misleading and inaccurate information promoted by the service-providers is unacceptable, particularly in an elected city mayor whose campaign promise included “protecting human health”.

You are, in fact, promoting harm. Many young mothers carry their baby—and their cell phone—in a body sling. There's a whole generation of babies being exposed to dangerously high levels of radiation from cell phones that are not even an inch away from their tiny bodies. If this radiation harms mature adults (and we *know* it does), what's it doing to these fragile infants?

“[Health Canada is] either giving you partial information or giving you misinformation [regarding whether Wi-Fi radiation is safe for children]. Because there is scientific consensus that microwaves [used for Wi-Fi] cause biological effects. [...] And there is no evidence whatsoever that it is safe for children.”

—Dr Zory Glaser (PhD), formerly head of the US Navy Microwave Laboratory and FDA advisor, serving on the Technical Electronic Product Radiation Safety Standards Committee

Evidence of harmful effects: quick facts*

- There is now **10 billion times more radiation** in our environment than there was in the 1960s.
- If current trends continue, **50% of the population** in Austria, California, England, Ireland, Germany and Sweden will be feeling the effects of electromagnetic radiation by 2017. Canada will be no different.
- Swisscom, the Swiss telecommunications company, says non-thermal wireless radiation **“has a genotoxic effect”**, causing **“clear damage to hereditary material [DNA]”** and an **“increased cancer risk”**.
- **EMR adversely affects the blood cells of ALL individuals**, whether they feel the effects or not.
- **EMR damages cell membranes**, causing them to **leak calcium** and create many health issues, such as **altered brain function, autism, infertility, EHS, hypocalcaemia, DNA damage, thyroid problems, osteoporosis, endocrine imbalances, early dementia, asthma, neurological disorders and multiple chemical sensitivities**.
- **Autism in children is doubling every five years**, paralleling the rise of EMR, and there is now a **1-in-50 chance** of a child developing or being born with autism in North America.
- **Almost every grade in every elementary school** in North America has **at least one child with autism**—a disorder that was nearly unheard of a generation ago (<http://usat.ly/NZXMIi>).
- Electromagnetic radiation **breaks down the all-important blood–brain barrier**, causing the death of neurons, which can result in **early dementia** and **Alzheimer’s disease**.
- Just 5 minutes of Wi-Fi exposure can cause **cell mutation, oxidation and rouleaux**—all of which are associated with **illness and disease**.
- The average cumulative whole-body exposure from a Smart meter at 3 feet is about 100 times more than that from a cell phone (see <https://youtube/a6-hcOr-sxA>, at minute 2.17).

* See elsewhere in this document for references to the studies/data confirming these facts.

Even if I were ignorant of the damaging impact of radiation, my body registers the physical effects whenever I'm near a Wi-Fi or cell phone signal. Since purchasing a gauss meter that detects radio-frequency (RF) and other forms of harmful radiation, I've finally made the causal connection between Wi-Fi radiation and my symptoms—the headaches, tension, neurological issues, electrical 'zapping', premature aging, high oxidative stress, insomnia and fatigue I've been experiencing for years. These are the classic bio-markers/symptoms of EHS, recognized by medical experts and researchers worldwide.

Instantly penetrating cement, metal, plastic, clothing, cars, bone, muscles, tissue and skin, electromagnetic radiation affects us all within minutes.

Electromagnetic hypersensitivity appears in two stages, explains French oncologist Dr Dominique Belpomme. “The first phase is induced by exposure to a specific EMF frequency—either an acute or chronic exposure, such as talking on a cell phone 20 minutes every day. The first signs of hypersensitivity [due to cell phone use] are pain and a heat sensation in the ear. In the second phase, the disease sets in. That's when you become intolerant at all frequencies.”

Once upon a time...

...the Earth was flat. Smoking was good for you. Thalidomide was great for morning sickness. Asbestos made for excellent insulation. Nuclear power was the way to go. GMO crops were a godsend to farmers everywhere. And hydrogenated oils were a cost-effective choice. Now, we have Wi-Fi and mobile networks, connecting us with everyone, everywhere, every second of every day... and creating a pervasive, virtually inescapable, unprecedented, unchecked, uncontrolled and rapidly escalating proliferation of radiation in our environment. But don't worry; the Mayor of Vancouver says it's safe!²

Like so many of those unfounded claims, Wi-Fi is now being promoted as a safe and beneficial technology in industry-sponsored studies and PR. Consequently, the media have featured many misleading, inaccurate and incomplete reports about Wi-Fi radiation, claiming that there is *no apparent causal relationship* and that there is *zero evidence* supporting the experiences of those with EHS.³ Such claims merely reveal the reporters' ignorance of the latest research—and perhaps their own addictive love affair with their iPhone. Some have claimed that reactions to electromagnetic radiation are *psychosomatic*, which is an insult to the countless individuals who had no idea that EMR was causing their illness and only discovered the very clear 'causal relationship' after years of research, functional impairment, huge expense and misdiagnosis.

Nonetheless, such theories are likely to be hugely reassuring to those who are unaware of the FACTS.

² See <http://bit.ly/1svnHmQ> for a small sample of the compelling evidence to the contrary.

³ See, for example, <http://bit.ly/1RNGwe0>.

Scientific fact versus political spin and misinformation

SPIN: Non-ionizing Wi-Fi radiation does not generate enough heat to do damage and, therefore, this non-thermal form of radiation is not harmful to humans.

FACT: Scientific studies—and the telecommunications industry itself—confirm that non-thermal radiation is harmful to the human body.⁴

- “Weak non-ionizing electromagnetic radiation in the environment can be linked to more ‘modern illnesses’ than even the pessimists thought possible,” says Dr Andrew Goldsworthy. “Modern science can now begin to explain how.” (For details, see: <http://bit.ly/1taEDi3>.)
- The American Academy of Environmental Medicine reports that: “epidemiological studies demonstrate that **significant harmful biological effects** occur from non-thermal RF exposure” (<http://bit.ly/24XtlpS>).
- A **Swisscom patent** application clearly states that **non-thermal wireless radiation “has a genotoxic effect ... elicited via a non-thermal pathway”** and that “when human blood cells are irradiated with electromagnetic fields, clear **damage to hereditary material [DNA]** has been demonstrated [with] indications of an **increased cancer risk.**” The international patent (<http://bit.ly/1OQbG4V>), filed in 2003, was for technology to reduce the ‘electrosmog’ from wireless local networks, intended to reduce the cancer risks associated with non-thermal exposure to microwave radiation. (For more details, see: <http://bit.ly/1BCVa0W>.)
- A **British epidemiological study (confirmed by Swedish, Japanese and Italian findings)** shows an association between long-term use of a cell phone and **acoustic neuromas** (<http://microwavenews.com/uk-study-points-acoustic-neuroma>). Although acoustic neuromas (which grow on the eighth cranial/auditory nerve) are ‘benign’, they can still kill you.

A \$25m study by the National Toxicology Program of the NIH found that cell phone radio frequency radiation caused two types of tumours: glioma and schwannoma [acoustic neuromas].

<http://goo.gl/eN6hKo>

⁴ Dr Andrew Goldsworthy has produced compelling, comprehensive accounts of the multiple effects of EMFs, referencing over 70 scientific studies, the dangers of electromagnetic smog, and why the body is affected the way it is (see <http://bit.ly/1PIASJZ>; <http://bit.ly/28ltGL9>; and <http://bit.ly/1taEDi3>).

SPIN: Extremely low frequency (ELF) radiation has no significant health effects.

FACT: The electromagnetic fields that are most harmful to humans are those in the ELF range and also the radio frequencies that are pulsed or amplitude-modulated by ELF (see <http://bit.ly/1PLASJZ> for following three points).

- ELF radiation has been scientifically proven to **damage cell membranes**, causing them to leak calcium and create many health issues, such as **altered brain function, autism, infertility, EHS, hypocalcaemia, DNA damage, early dementia, asthma and multiple chemical sensitivities**.
- Electromagnetic radiation can break the **all-important blood–brain barrier**, causing the death of neurons, which can result in **early dementia and Alzheimer’s disease**.
- Gland cells are particularly sensitive to radiation, which can **damage the thyroid and endocrine system, disrupting the metabolism**. Even short-term exposure to radiation from a cell phone tower was shown to **increase cortisol levels**, with long-term exposure resulting in **permanently elevated adrenaline**.
- EMFs disrupt the production of melatonin, the body’s only antioxidant, resulting in high levels of damaging **free radicals/oxidative stress and accelerated aging**.⁵
- Inward calcium leakage in the neurons of the brain stimulates hyperactivity and makes the brain less able to concentrate on tasks, resulting in **attention deficit hyperactivity disorder (ADHD)**.⁶

“International exposure guidelines for electromagnetic fields must be strengthened to reflect the reality of their impact on our bodies, especially on our DNA. The time to deal with the harmful biological and health effects is long overdue. We must reduce exposure by establishing more protective guidelines” (see Appendix 1).

⁵ Henshaw, DL and Reiter, RJ (2005). Do magnetic fields cause increased risk of childhood leukemia via melatonin disruption? Bioelectromagnetics Supplement 7: S86-S97.

⁶ Beason and Semm, 2002; Krey and Dolmetsch, 2007, Volkow et al, 2011.

SPIN: There is no demonstrable medical proof of harm being caused by Wi-Fi or Smart meters.

FACT: The damaging effects of RF radiation from cell phones, Wi-Fi and Smart meters can now be medically demonstrated.

- The damage done to red blood cells from brief exposure to RF radiation can be seen via live-blood-cell (dark-field microscopy) analysis, which reveals cell mutation, **oxidation and rouleaux** (aggregation of red blood cells) (<https://youtu.be/y4JDEspdx58>).
- Just 5 minutes of exposure to Wi-Fi radiation results in cellular damage associated with **pathological processes** (see: <https://vimeo.com/100623585>, at minute 4.48).
- According to the *BioInitiative Report*,⁷ bioeffects occur within minutes and at very low levels of exposure to EMFs and RF radiation—similar to those from cell and cordless phone use, as well as exposure to mobile phone masts (cell towers), Wi-Fi and wireless utility Smart meters that produce whole-body exposure. Chronic base-station-level exposures have also been shown to result in illness (<http://bit.ly/1Xn4ZIV>).

“WHO continues to ignore its own agency’s recommendations and favours guidelines recommended by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). These guidelines, developed by a self-selected group of industry insiders, have long been criticized as non-protective” (see Appendix 1).

⁷ The 2012 *BioInitiative Report* was prepared by 29 authors (including 10 MDs, 21 PhDs, 3 MsCs, MAs or MPHs) from 10 countries (Austria, Canada, Denmark, Greece, India, Italy, Russia, the Slovak Republic, Sweden and the USA). Among the authors is the Chair of the Russian National Committee on Non-Ionizing Radiation, and a Senior Advisor to the European Environmental Agency.

SPIN: Only vulnerable, hypersensitive or weak individuals are affected.

FACT: The damaging effects of EMR have been medically proven to occur in every human body.

- Dr Erica Mallery-Blythe, a former A&E doctor now specializing in EHS, says these **effects occur even in those not experiencing symptoms**, and many of us may be electro-hypersensitive and not realize it. “Everybody has the potential to become electro-hypersensitive [since] **every cell in our body, in our brain or nervous system is dependent on electrical signals**” (<http://www.dailymail.co.uk/femail/article-2331369>).
- Countless other doctors (such as Dr Dietrich Klinghardt⁸ and Dr Andrew Goldsworthy) confirm that **EMR affects the blood cells of all individuals**, ultimately damaging their nervous systems, brains, reproductive organs and physical health.

MYTH #5: The supposed effects of EMR are intangible and cannot be objectively measured.

FACT: Medical doctors and researchers have identified biomarkers of EMF intolerance—biological indicators of EMR damage, found in everyone suffering from EMF sensitivity, as well as in those who had no idea that such a thing existed or that it could be making them ill.

- Exposure has been found to have a **damaging impact on melatonin, serotonin, dopamine, adrenaline, cortisol, testosterone, progesterone, T3 and T4 thyroid hormones and plasma ACTH** (which regulates cortisol) (<http://bit.ly/1rXJUcC> and <http://www.magdahavas.com/>), among many others (see diagram on the main physical effects).
- Dr Dietrich Klinghardt⁹ tests for particular biomarkers in those affected by EMF pollution: an **increase in inflammation markers** (TGF-Beta 1, MMP-9 and copper, which shows chronic inflammation, **hormone abnormalization and neurotransmitter abnormalization**) (<http://bit.ly/1Sc8I8G>).
- Other medical tests for detecting EMF effects include live-blood-cell analysis, brain and nervous system analysis, and cardiac analysis (<https://www.emfanalysis.com/ehs-biomarkers/>).

8 Dr Dietrich Klinghardt, MD, PhD, is Founder of the Klinghardt Academy (USA), the American Academy of Neural Therapy, Medical Director of the Institute of Neurobiology, and lead clinician at the Sophia Health Institute (Washington State). He is also Founder and Chairman of the Institute for Neurobiology (in Germany & Switzerland). See <https://youtu.be/PktaaxPI7RI> and <http://www.klinghardtacademy.com/>

9 See <https://youtu.be/PktaaxPI7RI> and <http://www.klinghardtacademy.com/>.

SPIN: When those with EHS were asked to detect the presence of cell phone radiation, from behind a curtain or closed door, they often couldn't tell when the radiation was present, or they reacted even though the cell phone hadn't been switched on—which proves that it's all in their heads.

FACT: This approach has since been invalidated, for several reasons. Many individuals with EHS can physically feel RF radiation, although they often don't know that that's what they're feeling. Even those who feel nothing, however, are still being affected at the cellular level.

- Most people feel nothing, since the effect occurs at the cellular level, beyond their conscious awareness. Only in those with sensitized nervous systems, or those for whom the strength/duration of exposure has created physical symptoms, will the effects be felt.
- To claim that people react physically to the mere suggestion of EMF exposure merely reveals an **ignorance**—not just of **how EMFs affect the human body at the cellular level**, but of human nature itself. If you have a fear of spiders, heights or small spaces, and you're told that you might be given a tarantula, placed on a cliff or locked in a closet, you would instinctively experience anxiety, sweating and other physiological stress responses, whether those threats materialized or not. Yet the danger posed by EMR is very real and a fear of it is well founded.
- As Dr Mallery-Blythe points out: “Electromagnetic hypersensitivity is a **physiological issue, not a psychological one** [and] it can be seen as either a sickness or a super-sense, depending on the environment of the individual, although it is essentially both” (<https://vimeo.com/100623585>).
- French oncologist Dr Dominique Belpomme concurs: “**We know with certainty that electromagnetic hypersensitivity is not psychosomatic.**”

If you don't feel the effects, you won't care.

If you don't care, you won't look.

If you don't look, you won't see.

If you don't see, you won't believe.

But the evidence is there.

SPIN: Service-providers claim that Wi-Fi/cell phone/Smart meter radiation is safe, and the media haven't reported anything conclusive, so there's no need to worry.

FACT: Thousands of scientific studies attest to the damage caused by RF and other forms of radiation.

- The results of many of these studies have been published in reputable medical and scientific journals such as *The Lancet*, *the International Journal of Neuroscience*, *the Journal of Applied Sciences Research*, *Electromagnetic Biology and Medicine* and *NeuroToxicology*, among others (<http://nutritionalbalancing.org/center/environment/articles/emf-emr-health-effects#ref>).
- Studies find adverse biological effects from Wi-Fi frequencies (2.4 or 5GHz), with exposures of <16V/m (such as those from a Wi-Fi-enabled device): <http://bit.ly/1jsIPUp>.
- **A \$25m study by the National Toxicology Program of the NIH found that cell phone radio frequency radiation caused two types of tumours: glioma and schwannoma (acoustic neuromas).**¹⁰
- “EMFs provoke major effects in the brain,” says oncologist Dr Dominique Belpomme. “The most important of these is the opening of the blood–brain barrier. This allows mercury, organochlorines and other pollutants to enter the brain, where they cause various neurodegenerative diseases.”¹¹
- While some reports in the media strive to prove that EMR doesn't harm us, doctors and specialists around the world are quietly helping those whose lives have been torn apart by the very real and devastating phenomenon of electromagnetic hypersensitivity. For a timeline of growing awareness of/landmark rulings re EHS, see: <http://www.emfwise.com/awareness.php>.
- Associate Professor Dr Olle Johansson, a neuroscientist at the Karolinska Institute in Sweden who has been researching the biological effects of RF wireless radiation for more than 30 years, predicts a “paradigm shift” in attitudes towards EMF. Our environment currently has about 10 billion times more RF radiation than it did in the 60s. “If this environment is safe,” Johansson says, “we're talking about **15,000–25,000 papers—in peer-reviewed scientific journals**—all being wrong. That has never happened before.”

¹⁰ www.saferemr.com/2016/05/national-toxicology-program-finds-cell.html

¹¹ See: <http://goo.gl/RCiYLa>

Key physical effects of EMR¹²

1. **Nervous system disruption**, which sends the body into a perpetual fight-or-flight response and prevents it from resting, repairing, healing or regenerating normally.
2. **Reduced production of melatonin**—the body's sleep hormone, required for healthy sleep cycles. Melatonin is also the body's only natural antioxidant. When it is depleted, it causes oxidative stress and accelerated aging due to harmful free radicals.
3. **Impaired immune system**, in the form of decreased natural killer cells and other white-blood-cell damage.
4. **Reproductive problems**, due to sterility, infertility issues and hormonal disruption.
5. **Breakdown of the blood–brain barrier**, causing the death of neurons, which can lead to early dementia, Alzheimer's disease, ADHD and autism.
6. **Increased cerebral glucose metabolism**, also linked to Alzheimer's (known as 'diabetes of the brain').
7. **Oxidative stress and chronic inflammation**, which affect all the body's organs, causing numerous degenerative and other conditions such as cancer, diabetes, osteoporosis, heart disease, rapid aging and arthritis.
8. **Inhibition of repair mechanisms**, preventing the body from recovering or healing normally.

The key symptoms of EHS

- Insomnia/sleep disturbances
- Headaches, sharp pains, tingling, numbness
- Pressure in head/throat/chest/ears, tinnitus
- Dizziness, balance issues
- Electrical buzzing or 'zapping' in head
- Visual/hearing disturbances, eye irritation
- Short-term memory loss, mental/thought block, concentration problems
- Skin rashes, eczema
- Chronic dehydration, insatiable thirst
- Altered heart rate, palpitations, blood pressure anomalies
- Tremors, tics, seizures
- Extreme fatigue
- Joint dysfunction, musculoskeletal pains
- Increased chemical sensitivity and/or allergies
- Sensory overload, inability to rest/relax/heal

¹² Diagnosis and management of electromagnetic hypersensitivity (EHS): rapid overview for a mixed audience—a highly informative presentation by Dr Erica Mallery-Blythe at the British Society of Ecological Medicine convention in March 2014 (<https://vimeo.com/100623585>).

Sound familiar?

If you're experiencing any of these symptoms, it may *not* be because of electromagnetic radiation. However, the likelihood of them being caused or exacerbated by EMR is increasing every day, even though most of the effects go misdiagnosed, undiagnosed and/or are 'treated' with drugs. According to Dr Mallery-Blythe, some features of EHS require emergency management, such as seizures, cardiac chest pain and malignant arrhythmias, among others. There are also some hallmark signs of EHS, she says, such as body hotspots with increased sensitivity (such as the right ear, from using a cell phone, or the right hand, from using a computer mouse); chemical sensitivity; and temporary relief from bathing/showering, which has a grounding effect on the body.

Is this getting on your nerves?

The incidence of chronic neurological illnesses is rapidly increasing, with autism in children *doubling every five years*, according to Dr Dietrich Klinghardt.¹³ And he knows why. "The only thing that parallels the exponential increase in chronic neurological illness is the increased exposure to manmade electromagnetic fields—largely in the high-frequency range from cell phone radiation, the Tetra network [...] Smart meters..." With credentials, expertise and medical specializations too extensive to list, Dr Klinghardt is a recognized authority on EHS and the **many diseases (ALS, Parkinson's, MS, autism etc) exploding out of control, due to the widespread proliferation of radiation**. He has identified the biomarkers of EHS, adding considerably to the research carried out over the past 80 years—most of it showing biological damage being done by EMR. "As a scientist, you don't have to look very far," he says.

How far have the 'scientists' working for Telus, Bell, Shaw, BC Hydro, you or Justin Trudeau looked, Mr Robertson? The evidence is now so vast and compelling that it would be hard for any diligent researcher not to be daunted by the sheer volume of data. Service-providers and politicians who ignore this crucial evidence do a huge disservice to humans everywhere, while often vilifying, patronizing and insulting those with EHS.

You make me sick!

I'm sorry to put it like that... but shouldn't **YOU** be apologizing to **ME**? You—my neighbour, my colleague, my friend, the commuters surrounding me on the bus, the six other people in the elevator with me, and you—the Mayor of Vancouver—all pumping out massive amounts of radiation into our shared environment, which you have rendered so unhealthy that I can no longer inhabit it.

Let's be absolutely clear about this: I'm not the problem. I'm merely a symptom of what's wrong. It's not the *individual* that's sick, disabled or dysfunctional as a result of EMF 'sensitivity'; it's the

13 See <https://youtu.be/PktaaxPl7RI>

environment. In Sweden, those with EHS are not considered to have a disease but a functional impairment resulting from the inhospitable environment in which they live (see, for example: <http://1.usa.gov/1TYtbib>).

Getting greener ...or simply sicker?

While you and Justin Trudeau diligently focus your efforts on reducing the effects of climate change, you might wish to consider the far more pressing reality flagged by Dr Robert O. Becker, MD and scientist, twice nominated for the Nobel Prize: “...**the greatest polluting element in the Earth’s environment is the proliferation of electromagnetic fields**” [EMFs], which is “**far greater, on a global scale, than warming and the increase in chemical elements in the environment.**”

Some EHS doctors claim that *80% of all illnesses* are associated with electromagnetic radiation. They say that headaches, inflammation, insomnia, ADD/ADHD, neurological disorders and countless other conditions are caused or exacerbated by the escalating levels of radiation in our environment. Even autism, they say, has been shown to develop in children newly exposed to Wi-Fi.

Before they even *speak* to their patients, doctors with Wi-Fi/cell phones in their offices are effectively violating their oath to do no harm.

Important landmarks on the EMF lifeline

- “Studies show that 10–50% of the population [in France—i.e., 30 million people] may become very intolerant to EMFs over the next 25 to 50 years,” says French oncologist, Dr Dominique Belpomme,¹⁴ yet this projection is already (as of 2016) very much out of date.
- **The figures are far higher**, says Dr Erica Mallery-Blythe, based on new data showing that the **effects of EMR will be felt much more immediately—by 2017—in about 50% of the population in Austria, California, England, Ireland, Germany and Sweden**—and even that projection may be a gross underestimation.
- **Sweden officially recognized EHS as a functional disability in 2002.** Aware that it’s not the *individual* that is sick, but the *environment*, the Swedes have special EMF-free communities, legal mechanisms and government subsidies for those with EHS.
- **Wi-Fi has been banned/severely restricted in many schools** in Switzerland, France, Germany and other European countries.
- In 2009, the **European Parliament voted for persons with EHS to be recognized as disabled.**
- In 2011, the WHO/International Agency for Research on Cancer (IARC) **classified RF radiation as possibly carcinogenic to humans** (Group 2B), based on **an increased risk of glioma** (a malignant type of brain cancer), associated with wireless phone use. **Acoustic neuromas** have also been found to result from Wi-Fi radiation exposure.
- A Spanish labour court decreed a college professor to be permanently incapacitated by EHS, in 2011.
- In May 2015, **Lloyd’s of London informed British schools that it was excluding liability coverage** for injuries “resulting from or contributed to by electromagnetic fields, electromagnetic radiation, electromagnetism, radio waves or noise”, which means that **school officials could be personally liable for exposing children/staff and staff to microwave radiation** (<http://bit.ly/1XX2Qo4>).
- The Canadian authorities must have briefly ‘seen the light’, back in June 2007, when the **Canadian Human Rights Commission approved a Policy on Environmental Sensitivities** that *also recognized EHS as a disability*. Clearly, that initial awareness has since been cancelled out by powerful political and industry forces.

¹⁴ See <http://goo.gl/RCiYLa>

Human rights and human wrongdoings

The Policy on Environmental Sensitivities states that “**those living with environmental sensitivities are entitled to the protection of the Canadian Human Rights Act, which prohibits discrimination on the basis of disability.** The Canadian Human Rights Commission will [...] process any complaint from any person who believes that he or she has been discriminated against because of an environmental sensitivity. Like others with a disability, **those with environmental sensitivities are required by law to be accommodated**” (http://www.chrc-ccdp.gc.ca/sites/default/files/policy_sensitivity_0.pdf) (for further details, see Appendix 1).

In accordance with the **United Nations Convention on the Rights of Persons with Disabilities**,¹⁵ Canada has an obligation to respect the following principles (with particular relevance to EHS):

- a. Respect for inherent dignity, individual autonomy including the freedom to make one’s own choices, and independence of persons;
- b. Non-discrimination;
- c. Full and effective participation and inclusion in society;
- d. Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity;
- e. Equality of opportunity;
- f. Accessibility;

It must also undertake:

- a. To adopt all appropriate legislative, administrative and other measures for the implementation of the rights recognized in the present Convention;
- b. To take all appropriate measures, including legislation, to modify or abolish existing laws, regulations, customs and practices that constitute discrimination against persons with disabilities;
- c. To take into account the protection and promotion of the human rights of persons with disabilities in all policies and programmes;
- d. To refrain from engaging in any act or practice that is inconsistent with the present Convention and to ensure that public authorities and institutions act in conformity with the present Convention;
- e. To take all appropriate measures to eliminate discrimination on the basis of disability by any person, organization or private enterprise;

The provisions of the Convention extend to all parts of federal states, without any limitations or exceptions. In order to promote equality and eliminate discrimination, Canada (along with the other signatories) must take all appropriate steps to ensure that reasonable accommodation is provided.

¹⁵ See: <http://goo.gl/aEJF1>

According to the **BC Human Rights Code**, landlords, service-providers and other decision-makers have a **legal obligation to accommodate those with a disability**—including EHS.

What accommodation are you making for those with EHS?

Where can we safely enjoy the amenities available to everyone else in the city, without being incapacitated, excluded or otherwise discriminated against, due to Wi-Fi radiation?

What steps are you taking to eliminate the discrimination of those with EHS, in all of the ways described herein?

“...persons with the functional impairment electrohypersensitivity [have the right] to live an equal life in a society based on equality.”

—Dr Olle Johansson, a neuroscientist
at the world-renowned Karolinska Institute in Sweden

If EHS results from the body’s natural reaction to harmful electromagnetic radiation (as demonstrated via blood analysis¹⁶), then discrimination of those with this ‘functional impairment’ denies the basic principles of human physiology, which constitutes discrimination against the human body itself.

Although being exposed to harmful radiation without one’s consent and beyond one’s control is clearly a violation of one’s human rights, it’s hard to determine just how many of those rights are being violated. There’s the right to equal opportunity, the right to sustain a livelihood, the right to access all the services and amenities available to non-EHS citizens, the right to good health, the right to live in a safe environment, the right to choose whether to be exposed to harmful radiation and maybe even the right to exist, given the foregoing. It might even be considered a denial of our very humanity, given our natural reaction to radiation and the body’s inevitable tipping point of intolerance for the ever-escalating levels. We all have tipping points of intolerance—for alcohol, sugar, carcinogens and toxins, as well as for politicians such as Harper or any other public officials who fail to serve our best interests.

¹⁶ Observable effects of RF/MW radiation from Smart meters: cell mutation, oxidation and rouleaux (aggregation of red blood cells), shown through live-blood-cell (dark-field microscopy) analysis. See <https://goo.gl/Nvdpqz>.

Prelude to pathology

It's really quite simple, and it all boils down to this: human blood cells are adversely affected by EMFs. To tout 'safe' standards, to contest the human rights angle, or to resort to transparent, legal grasping in an attempt to disprove the harm caused is unnecessary and irrelevant. Anyone can put a drop of their blood under a high-powered microscope and see for themselves the damage done—as have numerous laypersons, researchers and doctors, including bestselling author Dr John Gray. “With high EMF exposure, blood cells become sluggish and congested,” he says. “When I heard about this [EMF] research, I went out and bought an expensive microscope to test this. I saw this with my own eyes.” The damaged cells (indicating oxidation, cell mutation and the formation of rouleaux) are the precursors to illness and disease. **No further proof is required. While it's certainly a legal issue, it's primarily a physiological, humanitarian one.**

Let's get personal...

What would it take for you to acknowledge the dangers of EMR? If your daughter Hanna developed autism, ADHD or maybe even MS, would that do it? What if *you* started experiencing inexplicable symptoms, to the point where you could no longer work or function normally? Does that seem too personal a question? Every minute of every day, I'm exposed to intense, pervasive, inescapable radiation, sanctioned and promoted by you, with progressively damaging effects on my body and my life. It doesn't get much more personal than that, Gregor.

Let's explore a few more scientific facts. Do you know how much radiation is emitted by your cell phone, your laptop, your iPad or your cordless phone? And if you're exposed to multiple Wi-Fi signals at once, from multiple sources, do you know how much radiation that would be?

I asked a physicist about this, and here's what he said:

When looking at signal strengths on phones or routers, the number of bars is not linearly related to the strength of the field. Thus, bar 4 may be 10 times stronger than bar 3, which may be 10 times stronger than bar 2, which may be 10 times stronger than bar 1. However, bar 5 may be 1,000 to 100,000 times stronger than bar 4. In reality, one signal might be 19mW/m², another 13mW/m², and the others around 2mW/m², with all 10 signals registering as 4 bars. Your total exposure would then be 48mW/m². [Most researchers/doctors specializing in EHS recommend levels of no more than 1mW/m², for prolonged exposure.] Since the number of bars is arbitrary and can cover a wide range of signal strength, there is no simple way to add them. The greater the duration/strength of the signal, the more it interacts with your body.

This raises numerous questions about the rapidly rising RF radiation levels in public spaces and what you're doing to limit the radiation before it becomes intolerable for most human beings.

Questions for you and the government to answer

- Given the data above, how can you ever determine the level of Wi-Fi radiation anywhere, at any time, if you don't know how many devices are being used or at what strength?
- What is the current level of Wi-Fi radiation downtown, in the public library, in Vancouver General Hospital, or in a multi-dwelling residence where everyone has their own Wi-Fi routers, cell phones and countless other wireless devices generating their own strong signals?
- Are you/your team keeping track of the levels? When and how do you measure them? And do businesses have to report back to you if they 'go Wi-Fi' and add to the existing cumulative load, in any one location?
- Do you do all this testing and research in secret or at night? Or do you rely on what others have reported as being 'safe'? (I've never seen you or any other public official carrying an RF meter for testing the Wi-Fi radiation levels around you.)
- Can you tell me how much radiation I'm exposed to, at any given time, in any given place? Do you know what's healthy or tolerable for me—for my particular body, with its unique, individual characteristics and tolerances? Will you call me when the levels go beyond what you think I can personally tolerate?
- What about when I'm in an elevator with 8 other people, all using their iphones, which generate dangerously high levels of radio-frequency radiation, with a reach of 20–40 feet, in a tiny 8' x 10' space, far exceeding what could conceivably be considered healthy for anyone?
- What do you recommend for the rapidly growing number of people like me who cannot consult a naturopath, or even go to VGH, since WiFi is now everywhere, thanks to you? What do you suggest they do, if consulting the medical profession worsens the condition for which they are seeking medical help?

- Do you realize that you will never know the full impact of your campaign, since many of those with EHS are so incapacitated that they have either fled the city, are too sick to fight back, or cannot even use their computer?
- Do you take responsibility for the fact that you've not only allowed all citizens to be bombarded with harmful radiation, beyond their control, but have also led them to believe that Wi-Fi radiation is safe and that they can use their numerous electronic devices as often as they like, without any ill effects?
- Do you, in your role as a public servant, feel confident that you can tell me what I can or cannot safely do, even if you haven't done the necessary research? How many of the thousands of medical/scientific studies, confirming the damaging effects of EMR, have you actually read?
- Is it possible to make Vancouver '*the greenest city in the world*' while simultaneously bombarding it with the kind of radiation that has been shown to prevent the healthy growth of plants and trees, not to mention human beings?¹⁷
- What about the explosive growth of new Wi-Fi technologies and gadgets—with self-driving wireless cars soon to be on the market? Have you established the level at which the ambient radiation will have to be capped, to prevent a catastrophic epidemic of sickness, disability and neurological disorders?
- Have you estimated the cost of this to the healthcare system, which will ultimately be paid for (financially and in immeasurable other ways) by all Canadians?

**The scientific evidence of the harm caused
by electromagnetic radiation is irrefutable.
There is no longer any doubt, just denial.**

¹⁷ See: <http://bit.ly/1dy9fwt> and <http://goo.gl/PO2yiV>.

I would genuinely like to know why you think that you—and Shaw, Bell, Telus, BC Hydro etc—can violate my most fundamental rights as a human being, subjecting me to harmful radiation, without my permission and beyond my control, causing functional impairment, hearing loss, nervous-system dysregulation, neurological disruption, organ damage, pain, social isolation, financial loss, rapid aging, illness and despair. Please advise.

While I'm rightfully angry about that, I also regret not taking this far more seriously, far sooner than I did. Even though I could feel electrical buzzing in my head, when exposed to Wi-Fi signals, I didn't know I had an *acoustic neuroma* growing in there—or even that such things existed. My ignorance and lack of awareness cost me dearly.

I urge you not to make the same mistake.

Sincerely,

Olga Sheean
olga@olgasheean.com

PS: I respectfully request that you not insult my intelligence, increase my stress or further decrease my life expectancy by diminishing, dismissing or invalidating the very real, rapidly escalating, unmonitored and immeasurable dangers of electromagnetic radiation, or the vast body of irrefutable medical and scientific evidence attesting to its damaging impact on human life.

PPS: I almost forgot: where should I send the bill? In the last four years alone, I've spent over \$25,000 on specialists, medical tests, therapies, supplements and EMF-shielding fabrics and devices. Being unable to work normally since undergoing brain surgery has cost me at least \$250,000. The ongoing costs to my relationship, health, well-being, friendships, business, social life, mobility, longevity and quality of life are inestimable. But let's just round it all down to a nice easy \$2 million. Should I send the bill directly to you, so you can split it with your buddies at Shaw, Bell, Telus and BC Hydro? Please let me know.

A taste of what's to come: the real cost of electromagnetic radiation

Available data indicate that, if current trends continue, 50% of the population of many developed countries will, by 2017, be feeling the effects of electromagnetic radiation. Canada is no exception. In Metro Vancouver alone, almost 1.3 million people would be affected, and these are just some of the changes you can expect to see:

- **the incidence of illness will rise dramatically**
- **healthcare costs will soar**
- **healthcare and government services will be unable to cope**
- **absenteeism will increase exponentially**
- **performance, expertise, focus and concentration will suffer**
- **more human error and accidents will occur in all areas of life**
- **shortages will occur in skilled/unskilled labour**
- **businesses will flounder/go under**
- **the incidence of autism in children will skyrocket**
- **more and more people will take drugs to try to control symptoms**
- **young people will have increasing hormonal problems/infertility**
- **adults will age rapidly and leave the workforce early**
- **an increasing percentage of the population will be on disability/pension**
- **home-owners will default on loans**
- **local and national economies will suffer**
- **markets will founder or collapse**
- **lawsuits, lawsuits, lawsuits...**

Appendix 1: Scientists call for more protective measures, given increasing evidence of risk from EMFs

In May 2015, 190 scientists from 39 nations submitted an appeal to the United Nations, UN Member States and the World Health Organization (WHO) requesting that they adopt more protective exposure guidelines for electromagnetic fields (EMFs) and wireless technology in the face of increasing evidence of risk.

All of the scientists have published peer-reviewed papers on the biological or health effects of non-ionizing radiation—part of the EMF spectrum that includes extremely low frequency (ELF) fields used for electricity, or radio frequency (RF) radiation used for wireless communications. The appeal was launched by Dr Martin Blank, who has over 30 years' experience conducting EMF research at Columbia University and is former president of the International Bioelectromagnetics Society. He gives a compelling explanation of the major health crisis we are facing due to increasing levels of environmental pollution from growing and expanding EMF sources.

The appeal calls for precautionary measures, to limit EMF exposures, and to educate the public about health risks, particularly to children and pregnant women, and asks the United Nations, WHO, UNEP and UN 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.

“International exposure guidelines for electromagnetic fields must be strengthened to reflect the reality of their impact on our bodies, especially on our DNA,” says Dr Blank. “The time to deal with the harmful biological and health effects is long overdue. We must reduce exposure by establishing more protective guidelines.”

The appeal highlights WHO's conflicting positions about EMF risk. WHO's International Agency for Research on Cancer classified radiofrequency radiation as a Group 2B “possible carcinogen” in 2011, and extremely low frequency fields in 2001. Nonetheless, WHO continues to ignore its own agency's recommendations and favours guidelines recommended by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). **These guidelines, developed by a self-selected group of industry insiders, have long been criticized as non-protective.**

Dr Joel Moskowitz, PhD, of University of California, Berkeley, says: “ICNIRP guidelines set exposure standards for high-intensity, short-term, tissue-heating thresholds. These do not protect us from the low-intensity, chronic exposures common today.”

The appeal calls on the UN to strengthen its advisories on EMF risk for humans and to assess the potential impact on wildlife and other living organisms under the auspices of the UN Environmental Programme, in line with the science demonstrating risk, thereby resolving this inconsistency.

See: <http://www.emfscientist.org> and <http://goo.gl/sLi7Uu>

Appendix 2: Excerpts from the Canadian Human Rights Commission report, Accommodation for Environmental Sensitivities: Legal Perspective

“...the Act’s prohibition of discrimination applies to all employers, providers of goods, services, facilities or accommodations, and employee organizations under the federal jurisdiction of the Canadian Human Rights Commission.

“The Ad Hoc Committee on Environmental Hypersensitivity Disorders, chaired by former Judge George M. Thomson, defined environmental sensitivities as:

a chronic (i.e. continuing for more than three months) multisystem disorder, usually involving symptoms of the central nervous system and at least one other system. Affected persons are frequently intolerant to some foods and they react adversely to some chemicals and to environmental agents, singly or in combination, at levels generally tolerated by the majority... Improvement is associated with avoidance of suspected agents and symptoms recur with re-exposure.

“Individuals with environmental sensitivities experience adverse reactions to environmental agents below the level deemed to be unsafe or to affect people. The causes, symptoms and triggers of environmental sensitivities vary from individual to individual. **The triggering environmental agents are prevalent throughout the built environment and include electromagnetic fields** and the chemicals found in building materials, furniture, cleaning and copying products, fragrances, and pesticides.

“...there is no doubt that individuals experience physical symptoms as a result of environmental agents. Even if environmental sensitivities were triggered by a psychiatric condition, the Act’s guarantee of accommodation to the point of undue hardship and non-discrimination would be equally applicable, albeit potentially with different forms of accommodation. While this paper uses the term ‘environmental sensitivities,’ numerous other terms refer to the same or similar conditions, including ‘multiple chemical sensitivity (MCS),’ ‘chemical injury,’ ‘sick building syndrome,’ ‘environmental illness,’ **‘environmental hypersensitivity,’ ‘electromagnetic field (EMF) sensitivity,’** ‘Gulf War syndrome,’ ‘environmental sensitivity disorder,’ ‘20th century disease’ and ‘environmental allergies.’ Because of the variation in triggers and symptoms, it is preferable to refer to sensitivities in the plural, rather than the singular.

“[In Canada] complainants are required to provide minimal medical evidence to establish that they qualify as persons with a disability, **and individuals with environmental sensitivities do not need to prove the veracity of their condition. In fact, the courts have specifically held that the inability of the medical community to diagnose a condition or identify its cause does not affect whether an individual has a disability, so long as its triggers can be identified.** Instead, the analysis is meant to focus on the individual’s accommodation needs and the behaviour of the employer or service provider.”