

# **Our Children, Our Future, Our Responsibility**

## **Wireless Technologies – An Urgent National and Global Emergency**



### **REQUEST FOR MORATORIUM ON WIRELESS TECHNOLOGIES**

"The world is a dangerous place to live; not because of the people who are evil, but because of the people who don't do anything about it."

Albert Einstein

"Every minute of RF exposure to teachers or their students is a minute too long. In my opinion as a professional with Canadian national and pro AHM, other students, and school staff and faculty experience adverse health effects and should be discontinued immediately as this as a national and global emergency."

*Curtis Bennett – Expert Witness called to testify for Standing Committee on Health*

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## Beginning With the End in Mind

I am fully confident that governments and school boards around the world believe that current Wi-Fi systems in place are safe, but I must share that there is overwhelming evidence to the contrary and that the [wireless technologies](#) that we are using constitutes a public health emergency. These warnings have the support of over 100 000 [physicians and specialists](#) including the American Society of Pediatrics, 240,000 teachers in Canada, the [US](#) and the UK, and a parent group representing 500,000 students in BC alone. The dangers of wireless frequencies are offered as [CE credits](#) to in 50 States across North America. Though Health Canada, and other health agencies around the world are assuring you that WiFi is safe, as stewards of the public trust, I urge you to review the presented in this package including health effects, effects on student learning, potential legal liabilities, and damage to infrastructure and to impose an immediate moratorium on the use of Wi-Fi in public buildings and schools.

“Our great political leaders have on many occasions had to apologize for the institutional abuse of children in decades before, and they always say the same thing. They say, ‘Never again, not on my watch’. Well, it is happening again, and it's on your watch, and I hope that now that you know something you rise to your position and do what you're empowered to do to protect them.”

*Mr. Rodney Palmer Member Simcoe County Safe School Committee -  
In closing testimony presented to the Standing Committee on Health  
in the House of Commons on October 28, 2010*

## Introduction – Be Proactive With the Health of our Children

Though at first this may be difficult to imagine, there is overwhelming evidence that students across the country are in immediate danger from wireless technologies, and that the danger is so great that the effects will impact future generations. According to experts, if WiFi and wireless technologies continue to be used, many citizens will become ill to varying degrees, and some may die. In fact, though at first it might be hard to believe, I will provide evidence that demonstrates that , according to research, it is likely that some preventable deaths have already occurred and it is imperative for you to take action today to protect others that may be at risk. There is also evidence that wireless technologies are affecting our animals, birds, environment, and our pollinators which threaten our very existence as a species.

To support these strong claims, I have included an overabundance of links to documents and research which provide evidence that not only are these frequencies dangerous and life threatening to human and animal life, but illegal as well according to an error in Health Canada's Safety Code 6 (which is relied on to protect the public from dangerous electromagnetic frequency radiation.)

In light of the information contained in this document, I am respectfully urging you to implement an immediate moratorium on wireless technologies as some countries have already done around the world, in order to protect citizens and the future generations that will follow. In addition, I am asking that you examine the evidence provided on the effects of wireless technologies including cell phones, DECT phones, cell towers and Smart meters and to restrict their use and placement as well.

### **WiFi Can't Be Dangerous Or How Could It Be Allowed In Public Places?**

Though Health Agencies will tell you that WiFi is safe, the information that you have been provided about these frequencies is incomplete and incorrect. Most people assume that if something is in the marketplace, surely it must be safe. According to Dr. Devra Davis in her book "Disconnect, the Truth about Cell Phone Radiation, What the Industry has Done to Hide it, and How to Protect Your Family," shares that unlike prescription drugs, which must go through trials to see if they appear safe, you will be shocked to learn that, wireless technologies, that can pass through concrete and steel, have never had to go through any safety product testing whatsoever.

Based on the mistaken assumption that the technology must have gone through safety product testing, most government representatives, school boards, organizations and citizens are completely unaware that this technology has never been proven safe and as such, it has been allowed into our schools and homes. In a recent article in the Globe and Mail, the Auditor General, Mr. Wiersema warned that "We have found that poor information is a widespread, chronic problem in the federal government."

Barrie Trower shares that the harmful effects of microwave radiation sickness was first reported in 1932 and that by 1971 "The US Naval Medical Research Institute (NMRI) referenced 2300 articles listing in excess of 120 impairments and illnesses attributed to radiofrequency microwave radiation."([p.2-3](#)). With billions of dollars at stake, the telecommunications companies have skillfully created doubt, sponsoring studies to nullify independent research, and to discredit researchers, and restricting information that gets released to the media just as the tobacco and asbestos industries did postponing the truth to come out for almost 100 years. As such, I wanted to put together this package of vitally important information for you after doing several hundreds of hours of research to becoming educated in the area of electromagnetic frequency radiation and the surrounding issues.

## **World Health Organization Classifies Wireless Technologies as Class 2B Carcinogen**

On May 31 2011, the World Health Organization issued a [Press Release](#) re-classifying the radiation emitted from wireless technologies as a CLASS 2B CARCINOGEN in the same category as lead and DDT. This determination was made after 31 scientists in 14 countries found that there was sufficient evidence in human and animal studies to warrant such a warning after reviewing [studies of cancer in experimental animals](#), [studies of cancer in humans](#), mechanistic and other relevant data. In this same press release they stated that “it is important to take pragmatic measures to reduce exposure.”

## **Health Canada Issues Warning On Electromagnetic Radiation**

Health Canada has issued a [warning](#) about electromagnetic frequency radiation stating that “The International Agency for Research on Cancer's (IARC) recent classification of RF energy as ‘possibly carcinogenic to humans’ is an acknowledgement that limited data exists that suggests RF energy might cause cancer.” Health Canada reminds cell phone users “that they can take practical measures to reduce RF exposure. The department also encourages parents to reduce their children's RF exposure from cell phones since children are typically more sensitive to a variety of environmental agents.”

## **Danger of WiFi and Wireless Technologies Approved for Continuing Credits Doctors Need for Licensing in Universities across North America**

In my inquiry into the effects of electromagnetic frequency radiation, I have recently learned that the dangers of WiFi frequencies are approved course material for [Continuing Education](#) credits which medical professionals need for licensing **in 50 states across North America**. If physicians are learning that it is dangerous, how can we possibly justify the continued use of it in our schools?

## **Report of the Standing Committee of Health - Future Generations at Risk**

A [Report](#) of the Standing Committee, “An Examination of the Potential Health Impacts of Radiofrequency Electromagnetic Radiation”, studied the impact of microwaves on human health and upon hearing the [evidence](#) provided, made several recommendations related to the effects of electromagnetic frequency radiation.

The finding of the Committee stated that: (p.11)

“Some studies had found that there were negative health effects resulting from exposure to low levels of radiofrequency electromagnetic radiation. It also heard that there were **gaps in the scientific literature related to children’s exposure, effects on brain function and possible effects on reproductive capacity** (emphasis added). “

*Author’s Note: Effects on reproductive capacity includes damage to children’s’ eggs and sperm would affect future generations. Studies from the World Health Organization (WHO) mentioned earlier also showed in vitro effects which would affect the fetus of women that are pregnant.*

## **WiFi Causes Irreparable Damage to Young Girls Eggs and Sperm Affecting All Future Generations**

Children and all of their future offspring are at risk of damage in the form of mutations of their eggs according to world renowned experts [as testified](#) in US courts by Barrie Trower. In his testimony, Mr. Trower states that:

“72. The problem with young girls is that microwave radiation has been shown to damage the genetic structure in their ovaries. Girls are born with all of the eggs they need in their ovaries at birth. They are immature eggs, hence susceptible to damage during growth. Microwaves are genotoxic (experiments can be linked to children showing low-level mobile telephone radiation disrupts the biochemistry of follicle cells in a mammalian egg chamber), hence the microwave radiation could affect the genetic structure within the eggs. The problem here is that the mitochondrial DNA, the genes inside the ovaries, is irreparable [1][2][3] If you have a little girl in whom there is damage through this mechanism to the genetic structure in one of her eggs, and she has a daughter, that daughter will carry that genetic problem. It is irreparable. And her daughter in turn will carry that genetic problem, because it is irreparable. And every female *forever*, in that line, will carry that problem in perpetuity, because it is irreparable. See [Addendum ‘A’](#) for Trower’s diagram and explanation further detailing this process.” (p.20)

Trower goes on to cite additional research and evidence in support of this catastrophic damage:

73. I believe the most important research I have read is from Dr. Goldsworthy, [The Biological effects of weak electromagnetic fields](#) (2007), Dr. Goldsworthy not only shows the mechanism by which microwaves disrupt cells, but also predicts that a genetically damaged sperm and egg lead to mutant offspring. If you think of children



with these transmitters near their laps, the question must be, “Why do this for the sake of a piece of cable and a plug, which could replace WI-FI with no loss of performance, and in fact improved performance?”

Trower gives an excellent overview of the damage from WiFi throughout his [testimony](#) that should be read in its entirety with a particular focus on children on pages 19-22. Other world renowned experts concur that the health effects are catastrophic and their amended declarations can be found at the bottom of the [page](#) here.

The Evidence provided to the Standing Committee on Health also reported that the “American Society for Reproductive Medicine reported that only four hours of exposure from a laptop with Wi-Fi on can damage DNA in sperm.”

### **Electrohypersensitivity (EHS) – Recognized as Disability by Canadian Human Rights Commission**

Electrohypersensitivity, a condition in which some people experience neurological and immunological effects when exposed to electromagnetic frequency radiation, is classified by the Canadian Human Rights Commission as an environmental sensitivity and a disability. As such, people with electrohypersensitivity should be legally entitled to work in environments free from EMF's, including those from WiFi, which can be debilitating to their lives.

As described by “*The Canadian Initiative for Safe Wireless, Electric, and Electromagnetic Policy*,” *Electrohypersensitivity is:*

**Electrohypersensitivity** or EHS is a physiological condition. It is characterized by neurological and immunological symptoms that noticeably flare or intensify upon, or following exposure to:

- **electric and magnetic fields (EMF)**
- one or more of the types of **electromagnetic radiation (EMR)** found in the modern environment

Having Electromagnetic Field Sensitivity means experiencing recurring stress or illness when near active EMF sources or emitters of EMR. Symptoms normally diminish with distance from these sources but typically require considerable time to vanish after exposure. The World Health Organization identifies this collection of symptoms and triggers as Electrohypersensitivity, often referred to as Electrosensitivity. It is not recognized as a medical diagnosis. However, it is accepted

as a functional impairment in Sweden and the [Canadian](#) Human Rights Commission recognizes it as an environmental sensitivity and classifies it as a disability.

People that are electrohypersensitive (EHS) to wireless frequencies and experience a wide range of symptoms such as headaches, dizziness and chronic fatigue. Alarming, in Sweden who rolled out wireless 15 before we did in North America, about 270 000 out of 9 000 000 have now been diagnosed as AHS and the government now pays for radiation shielding ([slide 55](#)). Since exposure to wireless frequencies can cause EHS, we need be proactive to protect people from these frequencies or risk many people becoming electrohypersensitive.

### **WiFi in Schools and Public Places - Students and Staff May Die**

In an [open letter](#), Dr. Havas warns that WiFi is both negligent and dangerous. She cautions that based on the evidence that leading scientists have assembled, some students and teachers (an estimated 3-35% of the population) would have some type of WiFi related illness. Even worse, she warns that staff and students with undiagnosed heart problems may die.

Barrie Tower writes that:

“In Sweden, it is published that 3.15% of the population is medically recognized and registered as being handicapped from electro-hyper-sensitivity. This number is comparable in California and it is believed to be similar if Australia. The Irish Doctors’ Association believes this figure may be as high as 15%.”

### **Increase in Cardiac Arrest in Youth – Connecting the Dots**

Dr. Stephen T. Sinatra points out in [a letter](#) to Kawartha Pine Ridge District School Board, that cardiac arrest is increasing in patients less than 19 years of age and states that “these irregularities may be exacerbated by or due to microwave signals interfering with the autonomic nervous system that regulates the heart.” I personally have noticed heartbeat irregularity when exposed to industrial strength WiFi such as what is used in schools, as well as a number of other symptoms such as dizziness.

Recently, we were all touched by the tragedy of a young athlete who died suddenly while playing soccer. Livorno midfielder Piermario Morosini died Saturday April 24<sup>th</sup>, 2012 of cardiac arrest during a Series B match at Pescara, Italy. He was 25. Upon hearing this news, I had to ask myself whether he could have been a victim of these signals and/or electro hypersensitivity. I have seen many other reports of children dropping dead suddenly while playing basketball or engaged in various activities all too often and not enough people are connecting the dots.

Evidence provided in the House of Commons for the Standing Committee on Health warned that “The U.S. government's National Institutes of Health published a study this year showing that children's health is profoundly at risk from exposure to wireless devices. The *European Journal of Oncology* published an entire volume this month on the dangers of low-level radiation, and one of those studies showed that this exact heart problem, tachycardia, which is being reported in our schools, is agitated by the exact frequency of Wi-Fi. p.3”

Closer to home in the educational arena, in Simcoe County Schools, **the rate of taccachardia is 46 times higher since they installed the Wi-Fi** according to further evidence (p.3) provided to the Standing Committee on Health. According to the evidence presented, “Two more children have suffered cardiac arrest in Simcoe County schools in the last year. One of them was revived by a teacher with CPR; another one was revived by an attending police officer with a defibrillator. Now every school in Simcoe County has its own defibrillator, as though teenage cardiac arrest is the new normal. Outside of Simcoe County, it's actually less than one in a million. p.3”

This video, provided by Citizens for Safe Technology, Rodney Palmer of Simcoe Safe School Committee 1’05” to 20’10”, specifically talks about heart issues and young students deaths which have increased dramatically in 15-35 year olds <http://citizensforsafetechnology.org/WiFi-Health-Hazard-for-Students%2c55%2c1443> with regard to meshed Wi-Fi systems in schools.

### **SAM Method Inadequate**

The process Health Canada used to determine safe radiation exposure was based on exposing a SAM mannequin model of an approximately a 6-foot 2-inch tall, 220-pound man with a cell phone place 10 mm away from the head for **a single six minute period** determining when tissue would heat up. Measuring for this heat effect alone while ignoring other health effects, is like using a thermometer to the measure distance, completely ineffective. It does not account for multiple sources of radiation, cell towers, lap tops, routers, cell phones, DECT cordless phones, SmartMeters, baby monitors, power lines and so on. As well, humans are conductors with their own bioelectromagnetics. Children absorb 10 X the amount of radiation into their bone marrow as adults.

### **Error Makes Safety Code Illegal and Dangerous**

The Standing Committee on Health is a government body appointed under the Standing Orders of the House of Commons. The mandate of this organization is to “study and

report on all matters relating to the mandate, management, and operation of Health Canada.” A professional International Consulting Group (Thermografix Consulting Corporation) working for engineers, medicine, medical education, municipalities, industry and insurers for 32 years, was asked to report to the Standing Committee on Health regarding an error in Safety Code 6.

A serious [error in Health Canada’s Safety Code 6](#) was been reported to the Standing Committee of Health in which Health Canada failed to include multiple sources of RF energy or to include human beings as conductors with their own bioelectromagnetics. This error, or omission, means that the application of law has changed and that Safety Code 6 is unable to accomplish its objective to protect the public and is [completely illegal](#). Health Canada failed to include the electrical currents naturally occurring in the human body, nor factor in multiple sources of EMFR [as seen previously](#) in the SAM method, in their calculations of Safety Code 6. Because of the oversight in missing the frequency-to-frequency conflict in here, Safety Code 6 actually validates why Wi-Fi should not be in schools: it's causing the unintentional stimulation of tissue and the heat effect, which they call nerve and muscle depolarization.

The problem with Health Canada’s Safety Code 6 is that they based the Safety Code on measuring heat absorbed from a cell phone into a mannequin and did not consider human biological systems, or the interactions between routers and laptops, hot spots from metal objects or appliances inside children (such as braces, retainers or surgical pins). Nor did they consider the building structure such as closed classrooms with brick walls and no windows where the frequencies are stronger to pass through buildings.

### **Health Canada Fails To Investigate and Report to Provinces**

The Standing Committee of Health recommended that Health Canada investigate the error in Safety Code 6 and to report to the provinces [but they have failed to do so](#) leaving the provinces, municipalities, school boards, and parents to believe that the frequencies are safe and legal. Health Canada’s [response](#) to [the letter](#) about this issue demonstrate that they are providing inaccurate information to various organizations and are failing to act on urgent concerns that is putting students, staff and the public in danger.

The Committee asked for expert witness to testify on behalf of the Electrical Industry regarding an error in Safety Code 6. This is a professional International Consulting Group (Thermografix Consulting Corporation) working for engineers, medicine, medical education, municipalities, industry and insurers to provide them with the science within law related to their objectives.

In his testimony in the US courts regarding a WiFi injunction, M. Bennett warns “Every minute of RF exposure to teachers or their students is a minute too long. In my opinion as a professional with Canadian national and pro AHM, students, school staff and faculty experience adverse health effects and should be discontinued immediately as this as a national and global emergency.” Their Chief Science Officer, Mr. Bennett’s extensive credentials can be seen [here](#) along with the testimony that he provided for a current court case in Portland against the use of WiFi in schools.

To ignore multiple sources of radiation emitting devices and failing to include humans in these calculations was a tragic oversight, but to ignore this error and fail to adjust for the additional frequencies now that the error has been identified is simply gross negligence.

### **Other [Recommendations](#) of the Standing Committee on Health (p. 11-12)**

Were you aware that one of the recommendations from the Standing Committee on Health was to reconsider the EMFR limits currently allowed in Canada by examining the policies in other countries? The recommendation read as follows:

*Health Canada request that the Council of Canadian Academies or another appropriate independent institution conduct an assessment of the Canadian and international scientific literature regarding the potential health impacts of short and long-term exposure to radiofrequency electromagnetic radiation, which would include an examination of electromagnetic sensitivity and a comparison of public policies in other countries governing exposure to radiofrequency electromagnetic radiation and report on its findings.*

The Standing Committee on Health suggested the government should call for an independent group beyond Health Canada to take stock of the scientific literature available on the technology, likely because of alleged conflicts of interest with the telecommunications companies and the overwhelming amount of evidence from independent studies that show cause for alarm. Health Canada was asked to examine the policies in other countries for allowable exposure limits, to develop an awareness program about EMFR and to initiate a plan to report adverse reaction reports.

In their report, “An Examination of the Potential Health Impacts of Radiofrequency Electromagnetic Radiation,” the Standing Committee asked Health Canada to appoint an independent group to review all of the research which relates to the effects of electromagnetic frequency radiation, create a risk awareness program of these effects,

and to ensure that a system was in place to report such adverse effects. The recommendation contained in this report read as follows: (p.11-12)

*Recommendation #2:*

*Health Canada request that the Council of Canadian Academies or another appropriate independent institution conduct an assessment of the Canadian and international scientific literature regarding the potential health impacts of short and long-term exposure to radiofrequency electromagnetic radiation, which would include an examination of electromagnetic sensitivity and a comparison of public policies in other countries governing exposure to radiofrequency electromagnetic radiation; and report on its findings.*

*Recommendation #3:*

*Health Canada and Industry Canada develop a comprehensive risk awareness program for exposure to radiofrequency electromagnetic radiation, which would include Health Canada making public in an accessible and transparent way all the studies and analyses undertaken by the Department on the impact of radiofrequency electromagnetic radiation on human health, as well as the provision of information promoting the safe use of wireless technologies.*

*Recommendation # 4:*

*Health Canada ensure that it has a process in place to receive and respond to reports of adverse reactions to electromagnetic radiation emitting devices.*

## **Committee Report Warns Canadians Safety Only Theoretical**

The report stated that “It would also be appropriate to let Canadians know that the safety of this technology is not guaranteed, but only theoretical at this point, particularly in the case of children.” As well, they went on to urge “If the ‘unaccepted’ science is in fact correct, Canada will face larger health care costs for the treatment of biological effects including cancer and fertility problems. With this in mind, [children should not be forced to be exposed to this technology in their school until it is actually proven safe, not just theoretically acceptable. p.23](#)”

## Government Accused of Ignoring Radiation Recommendations

In an [article](#) from The Toronto Sun on November 14, 2011, the Government is accused of dragging their feet on radiation recommendations saying that “Government hasn't acted on recommendations made by a parliamentary committee before the last election” and has not implemented “advice issued by the Standing Committee on Health on microwave radiation.” Canada is far behind other countries in recognizing Electromagnetic Frequency Radiation as a danger to its citizens and is failing to act on radiation recommendations.

## Health Agencies Slow to Act to Protect Citizens - Auditor General

Health Canada has a proven track record for their inability to be proactive with regards to protecting the health of Canadians. According to the Auditor General, spoke out against Health Canada for failing to protect public in a timely manner. In an [article](#) in the Globe and Mail, November 22, 2011, Auditor General Jim Weiresma stated **that it took Health Canada 2 years to request that some manufacturers to change their labels to include a warning that their prescription drugs caused birth defects in babies.** He went on to state that “Health Canada is slow to act on potential safety issues related to drugs already on the market.” and asked that they “address the potential for conflict of interest.” If Health Canada takes two years to ensure that manufacturers include a warning on labels about birth defects, do we want to put our faith in the fact that they say Wi-Fi is safe when there is so much evidence to the contrary?

## Alleged Conflict of Interest between Health Agencies & Telecommunications Companies

A concerned citizen Sharon Nobel, suggested in a [petition](#) to the Auditor General that there is a possibility of serious conflicts of interest from Health Canada relating to studies related to electromagnetic frequency radiation being funded by the telecommunications companies while ignoring credible independently funded studies that demonstrate that EMR does pose health risks. Ms. Noble writes “In June, 2008, I and my husband submitted a petition (#255) to your Office alleging conflict of interest in Health Canada. It included many examples of scientists either having received funding from or being affiliated with telecommunications industries. Some of these scientists are responsible for determining the safety of devices sold by these industries or the electromagnetic radiation (EMR) emitted by these devices. Others are "experts" whose research is used by Health Canada's scientists as bases for decisions. I provided many examples of Health Canada scientists refusing to consider independent studies by



credible scientists which demonstrate that EMR can and does contribute to major health problems.” [15]

Sharon Noble suggests an intentional deception from Health Canada since they have had information about harmful effects from as far back as 1999. In response to a request from Health Canada, an expert panel report was prepared as directed by the Royal Society of Canada Report in March 1999, to deliver a [155 page document](#), “A Review of the Potential Health Risks of Radiofrequency Fields from Wireless Telecommunication Devices.”

This document demonstrates life threatening health effects far below the limits of Health Canada’s Safety Code 6 including leakage of the blood brain barrier, change in DNA, damage in vitro to name a few, See pages 63-75 for studies demonstrating proof of harmful effects in animals and humans that have been reported to Health Canada since 1999 at levels far below Health Canada’s Safety Code 6. Upon a quick review, I found countless examples such as a high increase in skin tumours in mice exposed to just 5 mW/cm<sup>2</sup> for 220 days. (Remember, our standards allow for 1000 W/cm whereas the ‘safe’ limit recommended in the [Bioinitiative Report](#), the most comprehensive report involving an international working group of scientists, researchers and public health policy professionals, considered by many as the “bible of EMF,” is 1mW/cm<sup>2</sup>.)

### **Health Effects Include Biological Health Effects at Levels 10 000 Times Less than Safety Code 6**

Health Canada states that “Exposure to radiofrequency energy in excess of the Safety Code 6 levels can cause negative health effects, primarily consisting of an increase in body temperature.” According to the Committee’s report noted above, there are major health effects that are much more significant than an increase in body temperature.

Health Canada states that “Wireless equipment used in Alberta schools operates far below the Health Canada limits and well within the limits of countries with more stringent guidelines.”

Dr. Havas points out that “other countries have more stringent guidelines than Canada. For example, in Russia, exposure to **1000 W/cm<sup>2</sup>** (SC6 Guideline for microwave radiation, which includes WiFi) is tolerated for only 15 minutes a day! In Canada, children are exposed **all day** to this level. Many scientists and doctors recommend an upper ‘safe’ limit of **0.1 microwatts per cm<sup>2</sup>** (Bioinitiative Report 2007)



The standards of Health Canada's Safety Code 6 guidelines allow up to 10 000 times higher levels of dangerous electromagnetic frequency radiation than many other countries as seen [here](#). Canadian standards to protect the public from EFMR are higher than New South Wales, Australia, Salzburg, Austria, Russia, Bulgaria, Hungary, Switzerland, China, Italy, Auckland, and Australia. In fact, as you will notice, the UK is the only country that has standards higher than Canada of those shown in the chart above. Adverse health effects are [seen at 1/100 millionth](#) of current levels.

### **European Community's Scientists Recommend Regular Medical Testing for Radiation Exposures 10 000 times lower than Canada's Guidelines**

"European Parliament expert analysis in 2000, which included World Health Organization, European Community and scientific peers recommended that average annual exposure near microwave emitters should not exceed 0.10  $\mu\text{Watt}/\text{cm}^2$  (compare: The Italian Government —quality target). Anyone exposed to higher fields should receive regular medical attention, including blood analysis, EEG and ECG tests. All zones with higher exposure rates should be posted with markings on pavement and with road signs." [\(p.9\)](#)

### **Canada's Allowable Microwave Exposure Level Shockingly High**

Country Exposure level (microW/cm<sup>2</sup>)

New South Wales, Australia 0.001

Salzburg, Austria (pulsed transmissions) 0.1

Russia / Bulgaria / Hungary / Switzerland 2–10

Belgium 3

China 7–10

Italy / Toronto 10

Auckland, New Zealand 50

Australia 200

New Zealand / Japan / Germany / US / **Canada 200–1,000**

United Kingdom 1,000–10,000

### **Devastating Health Effects at Much Lower Levels than Safety Code 6**

0.168 Irreversible **sterility** in mice

1.0 Headache, dizziness, irritability, fatigue, weakness, insomnia, chest pain, difficulty breathing, indigestion

0.2 to 8.0 **Childhood leukemia** near transmitters

0.3 Impaired motor function, reaction time, memory & attention of school children (fewer boys)

2.5 Breakdown of blood-brain barrier (from digital - pulsed - cell phone emissions) *Note: Blood Brain barrier keeps toxins from blood stream out of brain and prevents brain fluid from leaking into bloodstream.)*

5.0 Biochemical and histological changes in liver, heart, kidney, and brain tissue

10.0 Damaged mitochondria, nucleus of cells in hippocampus of brain

([See p.9](#) of Electromagnetic fields: High-level Microwave Technology Concerns, by Andrew Microwski Ph. D, for more detailed list)

Health Agencies claim “The radiofrequency levels that wireless networks operate are required to meet Health Canada’s exposure guidelines, which are well below the lowest level of exposure to radiofrequency at which potential harmful effects in humans may be seen.” Based on research from leading scientists, this information is in fact incorrect. Firstenberg has compiled a [list of studies](#) showing biological effects at much lower levels. Negative health effects have been demonstrated at 1/100 million<sup>th</sup> of Canada’s Safety Code 6 standards (which is the same standard used by the FCC in the United States). It is well documented in both human and animal studies that EMF is very dangerous to the public. Please watch this YouTube Video of [harmful effects on animals](#) from numerous cell towers being put up in the area. Keep in mind that WiFi is more powerful than being right next to a cell phone transmitter.

## Overall Health Implication and Related Disorders

In a [letter](#) to an Ontario school board expressing his concern with wireless technologies, Dr. Richard Nahas, from the Faculty of Medicine, University of Ottawa writes “reducing patients' exposure to potentially harmful, electromagnetic fields (EMF), including those that come from Wi-Fi routers, has been commonly reported as a very effective way to help [patients] return to health.” He states that he, along with other healthcare professionals “have case reports of major improvements in health problems that have occurred when people make an effort to reduce their EMF exposure. These include common childhood symptoms like asthma, eczema, attention-deficit hyperactivity disorder, Asperger's syndrome and autism spectrum disorders <sup>11</sup>.”

## Genetic Damage

Dr. Avendano *et al.* presented research that stated that “subjects exposed to a wireless laptop for just 4 hours damaged DNA” ([p.8](#)) and suggested this could lead to cancer. Obviously damage to DNA would affect future generations and this is something that should not be taken lightly. As published in the Journal of Integrative Neuroscience in June 2011, research from two new studies show “that Wi-Fi signals decrease a measure

of attention in young men whilst using their working memory 8.” and even more concerning that “altering the brain activity of children and young people by the presence of a Wi-Fi signal for prolonged periods of time may affect brain development 9.”

As outlined in a sample of peer reviewed studies on the biological effects from 2.45 GHz (Wi-Fi) range Radiofrequency on animals, researchers found “Single strand DNA breaks in rat brain cells exposed to microwave radiation” as well as “significant damage to the brain, which may be an indication of possible tumor promotion.” Some of the other research found here include behavioral effects, erythropoietic changes, general brain function, effects on the reproductive system and other serious health related concerns 13.

In a [letter](#) to the British Medical Journal, Kevin S O’Neil, a neurosurgeon at the Charing Cross Hospital discusses the “Council of Europe’s recommendation that children be protected from the electro-magnetic radiation emitted by wireless equipment in schools.” Dr. O’Neil warns that “the evidence for children’s particular vulnerability is accumulating” and goes on to state that “previous health threats (tobacco, asbestos, x-rays) indicate that the evidence of risk often increases as research progresses.” He expresses that we must act proactively in order to protect the children saying that “given a latency lag of up to 20 years for many tumors, we are in danger of repeating these health disasters.”

## **Documentation of Adverse Health Effects**

[Animal and human studies](#) have shown a range of health effects from EMFR from headaches to [cancer](#), [leukemia](#), [tumours](#), and [taccacardia](#) which many doctors are suggesting could lead to [cardiac arrest](#) and death. Doctors warn about other symptoms including [cognitive impairment](#), [fatigue](#), [muscle and joint pain](#), [headaches](#), [poor memory and concentration](#). (The most comprehensive report involving an international working group of scientists, researchers and public health policy professionals is called the Bioinitiative Report can be found [here](#).)

## **Additional Studies on Adverse Health Effects from WiFi: (Wireless Technologies and Young People p. 10)**

Some additional studies on a wide range of harmful effects from WiFi include tumors, genetic damage, decreased fertility, cognitive deficits and changes in brain activity, developmental abnormalities, changes to immune system and damage to wildlife. The

front pages to the studies below are available at:  
[www.wifiinschools.org.uk/resources//extracts.pdp](http://www.wifiinschools.org.uk/resources//extracts.pdp)

**Overall health implications:** Sage C. and Carpenter D.O. 2009, *Pathophysiology* 16(2-3): 233-246; Blank M. 2009, *Pathophysiology* 16(2-3): (67-69)

**Tumours:** Khurana V.G. et al., 2009, *Neurology* 72(3): 205-214 Hardell L. and Carlberg M. 2009, *International Journal of Oncology* 35: 5-17; Sadetzki S. *et al.* 2008, *American Journal of Epidemiology* 167: 457-467; Khurana V.G. *et al.* 2010, *International Journal of Occupational and Environmental Health* 16: 263-267.

**Genetic Damage:** Ruediger H.W. 2009, *Pathophysiology* 16 (2-3): 89-102; Gursatej Gandhi A. 2005, *Indian Journal of Human Genetics* 11(2): 99-104; De Iuliis G.N. *et al.* 2009, *PLoS One* 4:6446.

**Decreased Fertility:** Agarwal A., *et al.* 2008, *Fertility and Sterility* 92(4): 1318-1325; Eroglu O. *et al.*, 2006, *Archives of Medical Research* 37: 840-843; Avendano C. *et al.*, 2010, *American Society for Reproductive Medicine* 66<sup>th</sup> Annual Meeting; 0-249, Gul A., *et al.* 2009, *Archives Gynecol. Obstet.* 280: 729-733.

**Cognitive deficits and changes in brain activity:** Maier R. *et al.*, 2004, *Acta Neurologica Scandinavica* 110: 46-52; Fragopoulou A.F. *et al.*, 2009, *Pathophysiology* 17(3): 179-187; Nittby H. *et al.*, 2008, *Bioelectromagnetics* 29: 219-232; Narayanan S.N. *et al.*, 2009, *Clinics* 64: 231-234; Vecchio F. *et al.*, 2007, *European Journal of Neuroscience* 25: 1908-1913.

**Developmental Changes:** Divan H.A. *et al.*, 2008, *Epidemiology* 19: 523-529; Odaci E. *et al.*, 2008, *Brain Research* 1238: 224-229.

**Cardiovascular Abnormalities:** Havas M. *et al.*, 2010. *European Journal of Oncology Library* Vol. 5: 273-300; Mousavy S.J. *et al.*, 2009, *International Journal of Biological Macromolecules* 44: 278-285.

**Changes to the Immune System:** Johansson O. 2009, *Pathophysiology* 16(2-3): 157-177.

**Damage to Wildlife:** Balmori A. 2009, *Pathophysiology* 16(2-3) 191-199.

For additional information about any of these papers or for more examples please email: [contact@wifiinschools.org.uk](mailto:contact@wifiinschools.org.uk)

**Collapse of the Bee Colony:** In the report from the Standing Committee on Health ([p.23](#)), they stated:

“Reference was made to the decline in insect populations and we learned of research that showed wireless signals negatively affect the ability of insects to reproduce. This was mentioned in the testimony of Dr. Panagopoulos, Curtis Bennett and Dr. Goldsworthy. We are experiencing a world-wide decline in bee populations known as colony collapse. Given the economic importance of insect pollination, especially honey-bees, it would be negligent not to investigate the role that wireless technology may have in the decline.”

Einstein warned that “If the bee disappears from the surface of the earth, man would have no more than four years to live. No more bees, no more pollination ... no more men!” On a website, Global Climate Change they relate that “An article in the Independent discusses a theory that cell phone radiation seriously interferes with bees’ ability to navigate through the air. Regardless of the cause, the implications of this phenomenon are enormous – and it is alarming how rapidly this is occurring. From a NYT article on 2/27/07: “...one study says that honeybees annually pollinate more than \$14 billion worth of seeds and crops in US, mostly fruits, vegetables and nuts.”

### **WiFi Dangerous to Children and Pregnant Women**

From the Karolinska Institute (Nobel Prize Institute), Department of Neuroscience, Stockholm, Sweden [February 3, 2011](#).

Scientists Urge Halt of Wireless Rollout and Call for New Safety Standards: Warning Issued on Risks to Children and Pregnant Women:

"Scientists who study radiofrequency radiation from wireless technologies have issued a scientific statement warning that exposures may be harming the development of children at levels now commonly found in the environment. Pregnant women are cautioned to avoid using wireless devices themselves and distance themselves from other users..." [Full article](#)

Research shows that there is cause for concern with the use of wireless technologies for women that are pregnant. From the Karolinska Institute (Nobel Prize Institute), Department of Neuroscience, Stockholm, Sweden [February 3, 2011](#).

This finding was also found in the Bioinitiative report Section 19

[http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec19\\_2012\\_Fetal\\_neonatal\\_effects\\_EMF.pdf](http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec19_2012_Fetal_neonatal_effects_EMF.pdf)

### **Wireless Technologies Corroding Metal Infrastructure - (p.9-10) What's it doing to our kids?**

In his paper, [Electromagnetic Fields: High Level Microwave Concerns](#), Andrew Michroski Ph. D., states that "as the electric power system becomes more affected by the use of computers and wireless systems, radiofrequencies and microwaves penetrate the electric power system's ground via neutral wires. The ground in many populated areas now carries charges that are highly electronic with radiofrequency and microwave characteristics. This new phenomenon accelerates corrosion of materials – whether pipelines, rebars in buildings and transportation infrastructure or even nuclear power plant reactor rods." This conduction of charges has been observed with electrochemical impedance spectroscopy (EIS) and reported this year by scientists from Atomic Energy of Canada and the National Research Council of Canada.

### **Wireless Technologies Prevent Kids from Releasing Heavy Metals - Linked to Autism (p. 11)**

Michroski points out that "A study by Tamara Mariea and George Carlo indicates how wireless emissions can make cells incapable of releasing heavy metals (including mercury and aluminum), such as those used as stabilizers in the massive vaccination programs. Heavy metals in the body interfere with the distribution of dopamine, a hormone and a neurotransmitter which controls motor skills. In autistic children, such functions are inhibited. When autistic children are detoxified from heavy metals, and when they are no longer exposed to wireless emissions, they can recover. This situation has the potential for trans-generation toxic accumulation."

### **Massive Increase in Mortality Rates after Analog Cell Systems Implemented**

"The mortality rates of U.S. cities jumped from their usual levels as recorded for decades prior to the introduction of the analog cell-phone systems in 1996 – 1998. The additional estimated deaths in just 5 US cities is 10 000 people."(p. 2)

### **Medical Facilities Use Specialized Equipment to Protect Instruments from Electromagnetic Radiation - What's Protecting Our Kids?**

Here is a link for you to see the shielding that goes into an application where magnetism, EMFs and RF EMFs are considered. This is done whenever sensitive electronic instruments are used, except in this case humans are part of the sensitive device list inside buildings not being protected."

[http://www.universalshielding.com/files/112375/USC\\_RFI\\_EMI\\_Shielding\\_Brochure.pdf](http://www.universalshielding.com/files/112375/USC_RFI_EMI_Shielding_Brochure.pdf)

## **International Agencies Agree that Standards Exclude Health Effects of Electromagnetic Frequency Radiation and Therefore Do Not Protect People**

The International Commission for Electromagnetic Safety, The European Environment Agency and the European Parliament, "Consider the current guidelines to be obsolete and that lower values are needed to protect the public." The Irish Doctors' Environmental Association (IDEA) Position Paper on Electro-Magnetic Radiation agrees that "There is now a large body of evidence that clearly shows that this is not appropriate, as many of the effects of this type of radiation are not related to these thermal effects 21." Over 3000 doctors have signed the Frieburger Appeal 19 and Helsinki Appeal 20 stating that the current standards put the public at risk.

## **Growing Number of Doctors across the World Plea for Action to Protect Children**

A physicians group representing 60, 000 professionals [warn against the use of WiFi](#) in schools. The International Commission for Electromagnetic Safety, The European Environment Agency and the European Parliament, "Consider the current guidelines to be obsolete and that lower values are needed to protect the public." The Irish Doctors' Environmental Association (IDEA) [Position Paper](#) on Electro-Magnetic Radiation agrees that "There is now a large body of evidence that clearly shows that this is not appropriate, as many of the effects of this type of radiation are not related to these thermal effects 21. In the [Freiburger Appeal](#) 3000 doctors have desperately urged for world leaders called to protect children from the harmful effects for EMFR listing concerns such as learning and concentration problems, extreme fluctuations in blood pressure, heart rhythm disorders, heart attacks and stroke in younger populations, brain generative diseases, cancer, leukemia, brain tumours, headaches, migraines and chronic exhaustion.

Doctors from Italy, USA, Sweden, Austria, Germany, Jerusalem, Israel, Poland, and Sweden have synergize their knowledge and come together to sign the [Catania Resolution](#) to voice their concerns in order to protect children and adults from EFMR.

As well, there is the [Helsinki Appeal](#), and in addition, doctors from 13 countries have signed the [Benevento Resolution](#) to protect children from electromagnetic radiation.

## International Guidelines on WIFI Act to Protect Public Health

As set out in the "[A Resource for Schools Wireless Technologies and Schools](#)"(p. 8-9), International Guidelines on WIFI include:

- **Germany** – German Government in 2007 said that the use of WLAN in the workplace or home should be avoided, if possible. They have stated that conventional wired connections are preferred<sup>71</sup>.
- **Israel** – The Government's Environment and Health Committee recommended in 2010 that wired connections be preferred over wireless in schools<sup>7</sup>. The Israeli Government has banned the marketing of home WIFI products as a precautionary measure. The Environment Minister said that the health consideration comes before any economic consideration <sup>72</sup>.
- **Austria** – The Public Health Department in Salzburg has advised schools not to use WIFI or cordless phones <sup>73</sup>. The Austrian Medical Association is lobbying against WIFI in schools and recommends wired broadband <sup>73</sup>. The Vienna Doctor's Chamber recommends wired internet connections, as WLAN can lead to high radiation exposure <sup>31</sup>.
- **France** – The French Health and Security Agency recommended in 2009 that people reduce their exposure to mobile phones and other wireless devices. The time for inaction is past said the Director. Exposure to children should in particular be limited and Wi-Fi transmitters switched off whenever possible<sup>2</sup>.
- **International Bioinitiative Report, 2007** – We recommend that wired alternatives to Wi-Fi be implemented, particularly in schools and libraries so that children are not subjected to elevated RF (radio frequency) level until more is understood about possible health impacts<sup>74</sup>.
- **Scientific Panel on Electromagnetic Field Health Risks, 2010** – The Panel recommends wired internet access in schools, and strongly recommends that schools do not install wireless internet connections that create pervasive and prolonged EMF (electromagnetic field) exposures for children<sup>74</sup>.



## A Comprehensive World Concerns Summary Regarding Actions in Other Countries

<http://www.emfwise.com/blog/2013/02/10/2012-emf-year-in-review/>

[EMFR World Concerns Summary](#)

### Court Cases Support Removal of WIFI from Schools and Public Places

The following court cases support the removal of WIFI from schools and other places;

- People v. Pierson, 176 NY 201, 68 NE 243 (1903): Children have the right to be free from ill health and death,
- Meyer v. Nebraska, 262 US 390 (1923). In 1923: The Supreme Court first recognized family autonomy and the right of parents to control the upbringing of their children.
- Prince v. Massachusetts, 321 US 158, 15 (1944): In 1944, the Supreme Court recognized the custody, care and nurture of the child reside first in the parents, whose primary function and freedom include preparation for obligations the state can neither supply nor hinder (emphasis added). And it is in recognition of this that these decisions have respected the private realm of family life which the state cannot enter.
- Troxel v. Granvill, 530 US 75,66 (2000): In 2000, the Supreme Court held: In light of this extensive precedent, it cannot now be doubted that the Due Process Clause of the Fourteenth Amendment protects the fundamental right of parents to make decision concerning the care, custody and control of their children.

**United States District Court District of Oregon Portland Division** action against Portland School Board - Amended declarations can be found at the bottom of the [page](#) here.

### Parents Demand Choice and Precaution

The BC Confederation of Parent Advisory Councils (BCCPAC) passed two strong resolutions concerning microwave wireless radiation technology in schools at their May 26<sup>th</sup>, 2012 AGM, designed to protect children and support parental rights and choice.

BCCPAC represents a membership of 821, including Parent Advisory Councils and District Parent Advisory Councils from every school district in the province. Collectively,

BCCPAC represents the parents of over 500,000 students in BC.

**Resolution 17 "calls on each Board of Education to have one public school at each education level (elementary, middle, secondary) that is free of Wi-Fi, cordless phones and cell phones. This school will only be equipped with wired computers and wired telephones for personal, educational and administrative purposes."**

Resolution 18 calls on Boards of Education to **"cease to install Wi-Fi and other wireless networks in schools where other networking technology is feasible."** Both resolutions were passed with a clear majority (131-93; 130-77) and many attending members verbalized their support during the discussion period.

**Selling WiFi** - (Taken directly from the Safe School Website at [www.safeschools.ca/Selling\\_WiFi.htm](http://www.safeschools.ca/Selling_WiFi.htm))

A sales campaign called the "21st Century Learner" is putting microwave transmitters into classrooms across Canada. The sales job is so successful the systems are being bought by countless schools which already have safe cable internet connection.

It all began in 2002 with a group of technology companies dreaming up how to sell their stuff to schools. [Here is a link to the sales team](#) -- the corporations who came up with the "21st Century Learner" campaign that was soon disguised as an "education" campaign. Many school boards have been fooled.

[This is the Cisco sales document](#): "Equipping Every Learner for the 21st Century."

When you get to the board level the language of "21st Century Learner" and "new pedagogues" in teaching (which means wireless) are found across the country.

In Simcoe County, a vast area north of Toronto, three paragraphs from the CISCO sales material wound up in the Simcoe County Board of Education Technology document to justify the purchase of wireless even though the schools are already safely hard-wired. Further, zero per cent of parents wanted wireless according to the board's published survey in the same report.

Across the country, the sales campaign of the "21st Century Learner" is popping up in countless education reports. It always justifies the need for wireless microwave transmitters in the class.

Here is exactly the same language about the "21st Century Learner" and the new "pedagogues" in teaching from a school board in Alberta. Again, the bottom line is that children need microwave transmitters:

"The technological infrastructure needed to achieve this goal will be a top priority in the first year of this plan. Blueprints are already in the works to introduce a wireless environment by the end of year two." pg. 2. [Click here for full report](#)

Here is the same language by the Toronto District School Board, which currently has safe cable connections in all of its schools, but is planning a blanket coverage with microwave transmitters through all schools. [Click here for full report](#)

Educators in New Brunswick are also parroting the same slick sales campaign with documents about "21st Century Learning".

None of these documents consider the safety of the system. There is no known safe level of microwave radiation on children anywhere in the world. There are no safety studies on children and chronic exposure to microwave radiation from WiFi.

[Click the New York Times article](#) which shows no improvement in test scores despite huge investments in technology in school. September 2011.

[Click Los Angeles Times article](#) which suggests that businesses benefit the most from investments in technology in classrooms, not students. February 2012.

[Click](#) the Newsmagazine of the BC Teachers' Federation "**The Ministry's 21st Century Obsession**" (October 2010). The article gives many examples of provincial governments buying into and promoting the "21st Century" sales campaign.

### **Cell Phones in Schools and Public Places**

Leanord Hardell found that people who have used a cell phone 10 years or longer a 90% risk or Glioma (Side of the Head Cancer), 60% increase in Acoustic Neuroma (Ear Cancer) and a 320% increase in Uveal Melanoma (cancer of the eye). People who began using a cell phone before the age of 20 had 500% increase in brain cancer.

From my observation students are completely unaware of the potential risks from cell phones (and wireless technologies) and of ways to minimize the dangers which are far greater than most people imagine. Cell phone booklets come with warnings not to place the phone directly on your body though the warning is in such fine print and difficult to find that most of us have never heard this caution from the manufacturers. Distributors in California now need to provide customers with a warning about the health risks associated with cell phone use.

In the Resource [“Wireless Technologies and Young People, a Resource for Schools”](#) (p.6) Panagopoulos *et al* (2010)<sup>29</sup> reported:

Damage to DNA (genetic material in cells) from up to a metre away from a mobile phone in use. Salford *et al.* have found damage to cells in the brain at exposures found nearly two metres away from a mobile phone in use<sup>30</sup>. Staff could be advised to keep a distance of at least two meters between the phone and other people. The Vienna’s Doctor’s Chamber (Medical Association) recommends a distance of several metres from other people whilst speaking on a mobile phone<sup>31</sup>.

Though according to experts, texting is indeed a safer option, the British Medical Association has warned :( p.6)

“Texting may damage kidneys or reproductive organs<sup>43</sup>. The Vienna Doctor’s Chamber have drawn up a list of mobile phones guidelines which include: A mobile phone in the trouser pocket and also sending of SMS (text) messages under the school desk can influence fertility and should be completely avoided<sup>31</sup>.

In a brilliantly researched article funded by the Investigative Fund at The Nation Institute, Kristopher Ketcham shares:[GQWarning-Cell](#)

“results of the multinational Interphone study sponsored by the International Agency for Research on Cancer, in Lyon, France. (Scientists from thirteen countries took part in the study, the United States conspicuously not among them.) Interphone researchers reported in 2008 that after a decade of cell-phone use, the chance of getting a brain tumor—specifically on the side of the head where you use the phone—goes up as much as 40 percent for adults. Interphone researchers in Israel have found that cell phones can cause tumors of the parotid gland (the salivary gland in the cheek), and an independent study in Sweden last year concluded that people who started using a cell phone before the age of 20 were five times as likely to develop a brain tumor. Another Interphone study reported a nearly 300 percent increased risk of acoustic neuroma, a tumor of the acoustic nerve.”

He goes on to share that "In September 2007, the European Union's environmental watchdog, the European Environment Agency, warned that cell-phone technology "could lead to a health crisis similar to those caused by asbestos, smoking, and lead in petrol." Ketcham writes that "In a study published in 1975 in the *Annals of the New York Academy of Sciences*, Frey reported that microwaves pulsed at certain modulations could induce "leakage" in the barrier between the circulatory system and the brain. Breaching the blood-brain barrier is a serious matter: It means the brain's environment, which needs to be extremely stable for nerve cells to function properly, can be perturbed in all kinds of dangerous ways. Frey's method was rather simple: He injected a fluorescent dye into the circulatory system of white rats, then swept the microwave frequencies across their bodies. In a matter of minutes, the dye had leached into the confines of the rats' brains."

Salford found that microwave exposure killed rodents' brain cells and stimulated neurons associated with Alzheimer's. "A rat's brain is very much the same as a human's," he said in a 2003 interview with the BBC. "They have the same blood-brain barrier and neurons. We have good reason to believe that what happens in rats' brains also happens in humans'." His research, he said, suggests that "a whole generation of [cell-phone] users may suffer negative effects in middle age."

Since Health Canada has likely not shared information on the safe use of wireless technologies with you as a School Board, here is a 6 minute video on cell phones that is an example of something that we could share with students

<http://www.youtube.com/watch?v=XIPtEYlOupE> which demonstrates how easily we could support our students in the safe use of wireless technologies.

### **DECT Phone Dangers (Cordless Phones used in schools, homes and businesses)**

DECT phones emit radiation 24 hours a day, 7 days a week. The radiation from them can extend 300 feet. In Europe, these types of phones are specially designed not to emit radiation unless the handset is off the base. They are not available in Canada because Industry Canada says that the frequency that supports them, is currently being used by other devices and not available.

Dr. Havas published a double blind study which clearly demonstrated that some people (those who were likely electrohypersensitive) experienced tachcardia when next to a DECT cordless phone, which can be found here for your review: <http://www.magdahavas.com/new-study-radiation-from-cordless-phone-base-station->

[affects-the-heart](#). The study by Dr. Magda Havas and colleagues appeared in the peer-reviewed European Journal of Oncology Library Vol. 5, 2010.

Dr. Havas filed a petition against the use of DECT cordless phones demonstrating their harmful effects, though Industry Canada states that they are acceptable since they fall within their guidelines. Her research shows a **100% increase in the occurrence of leukemia in children and adults**, that spend time in close proximity to these phones, along with a host of other concerns including taccachardia which can be life threatening for people with undiagnosed heart conditions, pacemakers or for those that are electro-hyper-sensitive. A copy of her petition and findings along with the response from Industry Canada can be found [here](#).

The resource mentioned earlier, [Wireless Technologies and Young People](#) (p. 7) stated that:

“A court in Bresica, Italy has judged that the brain tumour of an employee was caused by his use of a cordless (DECT) and/or mobile phone in the workplace. The company had to pay court costs and a disability pension. Italian employees are being advised to insist on a written declaration regarding the use of telecommunication equipment stating that the employer take all responsibility for medium and long term consequences of their use.

### **Tumours**

The only research group to have so far to have studied the links between head tumours and long term cordless phone use (as opposed to mobile phones) found increased risks of astrocytoma (cancer of astrocyte cells in the brain), 5 fold increase after 10 years) and acoustic neuroma (cancers of the auditory nerve, 2.3 fold increase after 10 years) on the same side of the head as cordless phone use. The risks were similar to those for mobile phones (Hardell and Carlburg, 2009.)

The handbook went on to state that “The Israeli Government Environmental and Health Committee have recommended that schools in Israel provide wired phones for pupils to use (2010).

### **Liability Issues -Fire Hazard and Building Code Compliance**

The vibrations from WiFi create an issue with [building code compliance](#) and fire separations which poses a fire risk and create serious liability issues. The vibrations from WiFi pose a risk to the infrastructure of buildings and fire separations and as well could pose a fire risk.

Mr. Bennett writes, “The city requires the science behind any frequency problems and that requires a professional response from the right professionals. The frequencies will impact fire separations as well as Part 4 of the BC Building Code regarding vibrations. That impacts every aspect of safety including first responders as well as insurers; the buildings aren't designed for it.” The [issues](#) are far reaching with deadly implications. A Jewish lawyer tells Bennett, “The Holocaust pales in comparison. This is getting them all.”

### **Proposed Increase in Electromagnetic Pollution from Electrical Companies Harmful and Illegal**

To date, in British Columbia, [53 communities](#) have voted not to allow Smart Meters in their Communities due to health concerns after advice from electrical professionals. In Edmonton, ATCO is installing a new device, similar to Smart Meters, which emits a burst of radiofrequency energy ever 15 seconds so that they do not have to manually take a reading. That is 7200 bursts of radiofrequency radiation PER DAY that is now classified as a class 2B carcinogen per household. If we multiply this by the number of homes in a community, say 500, that totals 360 000 of potentially cancer causing EMF's per community per day because our utility companies want to cut costs by not sending someone to your door.

For additional information including testimony that has recently heard in the Texas Senate regarding this matter please read the following [link](#) contains additional information including information on the error in Safety Code 6. Another clear explanation can be found [here](#) with supporting documents in which Mr. Bennett provides testimony for the Michigan Opt Out Program explaining why it's a imperative to hardwire utilities since a few houses opting out will not protect them from the blanket of radiation and the level of electromagnetic pollution that will cover the entire coverage area.

I would prefer to see a real person at my door than to see the level of electromagnetic pollution in my neighbourhood rise by hundreds of thousands of time. ATCO claims that they are safe, yet I know of people that are already reporting adverse effects from the new meters installed on their homes. Mr. Bennett reports that again provinces and municipalities have not been made aware of the error in Safety Code 6 which makes the frequencies illegal and dangerous for [numerous reasons](#).

### **Cell Towers - [31 Cases of Cancer](#) on a Single Street [Read more...](#)**

Click [here](#) for Frequently Asked Questions on Cell Towers. For additional information, visit <http://www.c4st.org>.

## Summary – A Call for Action

The concern about Wi-Fi is being taken seriously in around the world. In April 2008, the national library of France, citing possible "genotoxic effects," announced it would shut down its Wi-Fi system, and the staff of the storied Library of Sainte-Geneviève in Paris followed up with a petition demanding the disconnection of Wi-Fi antennas and their replacement by wired connections. Several European governments are already moving to prohibit Wi-Fi in government buildings and on campuses, and the Austrian Medical Association is lobbying for a ban of all Wi-Fi systems in schools, citing the danger to children's thinner skulls and developing nervous systems. France recently passed a law in the lower house which favours hard wired connects over WiFi. The UK government announced that is NOT INDEMNIFYING schoolboards or headteachers from WIFI harm. The [news story](#) reports that "UK coalition Government has made a clear statement that they are not indemnifying Headteachers, Governors or Local Authorities from their personal and corporate duties to protect the health and well-being of the children in their care. That specifically includes the use of WiFi, wireless tablets and smart phones in school."

In light of the WHO/IARC classification of this radiation as a CLASS 2B CARCINOGEN and the failure of our federal government agencies to protect public health regarding non-ionizing radio frequency emissions, combined with all of the evidence that so many are at risk, I respectfully urge you to take action by mandating the immediate removal of WIFI from all schools and public buildings and to use a Best Practices approach with regards to the use of cell phones, DECT phones, and other wireless devices.

Governments and School Boards need follow a precautionary approach, as the dangers of wireless frequencies are now accepted medical education and medical groups have confirmed they are treating patients for exposure to wireless technologies. Failure to act could cost billions of dollars in health care, infrastructure upgrades, not to mention the catastrophic effect on individual students, teachers and their families. WiFi, is a matter of convenience, not necessity. Anything that can be done with WiFi can be done safely and more securely with hardwired computer connections. Utilities can be monitored manually, and people can become educated on the potential dangers of EMF's so that they can make informed decisions regarding the use of wireless technologies.

Thank you very much in advance for you time and consideration in this important matter. I look forward to hearing from you and to continued dialogue on this issue and invite you to contact me to discuss any of this information or if you require any additional details.



"Our lives begin to end the day we become silent about things that matter."

Dr. Martin Luther King J

### Further Information:

**Citizens for Safe Technology:** For additional information, visit *Citizens for Safe Technology's* website at [www.c4st.org](http://www.c4st.org), a not-for-profit, volunteer-based coalition of parents, citizens and experts whose mission is to educate and inform Canadians and their policy makers about the dangers of exposure to unsafe levels of radiation from technology, and to work with all levels of government to create healthier communities for children and families from coast to coast.

**Additional Information:** For information that includes an overview of the health risks from both wired and wireless technologies and dirty electricity that affects mortality in our homes and workplaces, please watch the following video, Dr. Havas: The Truth About Wired and Wireless Technologies: <http://vimeo.com/8283238>. As well, explore epidemiologist Sam Milham's book Dirty Electricity: Electrification and the Diseases of Civilization – New Book by Sam Milham, MD, MPH

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"Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it is the only thing that ever has."

Margaret Mead