

Dear Mr. Ambeault,

My name is Michael Dodd and I am a teacher at Campus View Elementary. I would like to speak on the following topic at the Wi-Fi Committee on Monday, January 24th.

I support taking a precautionary approach towards the use of wireless technologies in our school district. I am not opposed to using new technologies in schools providing they're safe. I encourage using proven and safe scientific practices to incorporate all technologies safely.

Fourteen years ago our teenage son Graham developed a glioblastoma brain tumour which eventually proved fatal. The Cancer Society sent an investigator to our home when they discovered through a written survey, that the teenage daughter of the former occupants had also had a brain tumour while living on the premises. The investigator was interested in the electrical wiring of the house and particularly in the electrical circuit breaker which was located in our son's bedroom. While we were never able to prove a correlation between our son's brain tumour and exposure to EMF's, it certainly got us thinking. In retrospect, I really wish someone then had told me then that having a bed parked next to a circuit breaker was unsafe.

Four year's later, my wife developed symptoms of a racing heart and dizzy spells. She was hospitalized after collapsing and was diagnosed with tachycardia. The current treatment of ablation did not find the expected misfiring cells. We later concluded that her tachycardia began when we switched from a land line to a portable phone. Since switching back to a land line telephone, there have been no further symptoms. It became apparent that one could not rely on established Federal regulators such as Health Canada to ensure safe EMF limits. We began to ask ourselves, 'If these household standards are lax what about standards that govern the location of cellular towers and the use of wireless systems in our schools?'

“Guidelines for microwave radiation (which is what is used in Wi-Fi) range 5 orders of magnitude in countries around the world. The lowest guidelines are in Salzburg, Austria and now in Liechtenstein. The guidelines in these countries is 0.1 microW/cm².... In Switzerland the guideline is 1 and in both Canada and the U.S. it is 1000 microW/cm². (8)

In my quest to understand the issues around installing wi-fi routers in our schools, I came upon references about the potential dangers of cellular towers in residential areas on the lower island. On November 5, 2010, the Times Colonist Newspaper published an article entitled, “Keep Cell Towers Far From People”. According to this article, The National Research Council Press, published research in their journal, Environmental Reviews, stating that “cellphone towers have the potential to hurt us.” The NRC went on to say that, “Radio-frequency radiation is a form of energetic air pollution and it should be controlled as such.” And that, “cell towers should be kept 450 metres from people's homes, and made nearly 50 metres tall.” (2)

On November 8th, A News, on Vancouver Island, ran an article about concerns that Triangle Mountain residents had regarding the impact of nearby cellular towers on their health. Houses were located well within the recommended 450 metre distance as recommended by the National Research Council.

**Cell towers, according to local homeowner Sharon Noble are...
“taking a toll on their (resident’s) health with more than a dozen people
living in the immediate area, suffering from cancer... breast cancer,
prostate cancer, thyroid cancer. There are also some children with
leukemia. That’s ridiculous! There are people with memory problems, skin
rashes, sleeping disorders, all sorts of health issues!” (3)**

Of particular concern is the fact that, Campus View Elementary, where I am presently working, is also within the recommended limits established by the National Research Council, and is situated approx. 350 metres from University of Victoria’s cellular tower installations. (4) The UVIC cellular tower consists of 10 – 11 separate antennae attached to the upright supports of the university stadium. Mt. Douglas Senior Secondary is in a similar proximity and three staff members have developed a form of cancer known as multiple myeloma.

Samuel Milham, an esteemed physician and epidemiologist, tracks what he calls ‘the electrification of America,’ and its impact on our health, in his book entitled, Dirty Electricity. In his book he says that...

“Because of the recent proliferation of radio frequency radiation from cell phones and towers, terrestrial antennas, Wi-Fi and Wi-max systems, broadband internet over power lines, and personal electronic equipment, we may be facing a looming epidemic of morbidity and mortality. (5)

Milham has more than 100 scientific publications to his credit many of which deal with the health effects of electricity. In his epidemiological investigations he has tied many twentieth century diseases such as cancer, cardiovascular disease, diabetes, asthma, even suicide to electromagnetic field exposures. (6)

Plans are being considered to install wireless systems in our district’s schools. At Arbutus Middle School for example, a technology plan to install 18 industrial strength routers was recently proposed to a small gathering of Arbutus parent’s. How can we proceed with such plans knowing that the effects of wi-fi microwaves on children have never been properly investigated? Are we willing to subject our students to this grand experiment? How do we know what the long term effects of even low doses of non-thermal EMF’s might be?

Milham observed that it sometimes takes years after an initial radiation exposure before a disease may actualize. (For example; It was 40 years, after a nuclear bomb

was Dropped on Hiroshima, before brain tumours began to develop in those exposed to the atomic detonation). We have no way of knowing how the exposure to EMF's and microwaves from wi-fi routers, cell phones, smart meters, etc, today, at even mild levels, will manifest itself in the future. Some will argue that it is only the thermal radiation that is of concern, but even in 1982, Becker and Marino, argued in their book, Electromagnetism and Life, that...

“The conclusion that electromagnetic energy can produce varied and nontrivial biological effects is inescapable. Furthermore, the evidence that such interactions can occur well below the thermal level is similarly inescapable.” (7)

Health Canada's Safety Code 6, (p.11) recognizes that “certain members of the general public may be more susceptible to harm from RF and microwave exposure.” Dr. Megda Havas, describes a condition called Electrohypersensitivity (EHS) or Radio Wave Sickness and associates a range of symptoms such as , “sleep disorders, chronic fatigue, chronic pain, cognitive dysfunction, dizziness, skin disorders, among others. (1) This begs the question. What provisions or protocols will the district establish to accommodate district 61 employees who may have a negative response to the wireless systems or to EMF's generally should Wi-Fi systems be installed? It is recognized that between 3 -5% of the population may be hypersensitive to EMF's in their environments.

It is a curious that, prior to Oct. 2009, Health Canada's Safety Code 6, also stated on page 11 that, “WiFi should never be used in public schools because some children will be more harmed than others suffering headaches, nausea, radically altered heart rates, rashes and weaknesses.” This warning has since been erased from the safety code.

In our unwillingness to acknowledge the potential biological impact that non-thermal electromagnetic energy can have on us we have failed to effectively assess and regulate many of the already existing electricity-based technologies. How can we continue on the path of implementing wi-fi technologies in our schools when have failed to safely regulate many of the technologies that are we have already in place.

In Canada and the US, as was stated earlier, the allowable limits for microwave radiation are 1000 times greater that in Europe. Add 18 industrial strength wi-fi routers and do the math!

Is wi-fi an experiment we want to subject our children to or would a precautionary approach be more prudent? I believe that we need to irrefutably prove that wi-fi systems are harmless to children before giving them any consideration. How is it that we have we gotten so far off-track that we would consider otherwise? I'm certain too, that the teachers, support staff and many administrators in our district do not want to be part of a grand experiment which could be detrimental to the health of our students, for the sake of lofty technology goals, profiteering corporations and/or revenue hungry governments.

SOURCES

1. Health Canada; Safety Code Six; <http://dsp-psd.pwgsc.gc.ca/Collection/H46-2-99-237E.pdf>

2. Times Colonist: Keep Cell Towers Far From People; <http://www.timescolonist.com/news/Keep+cell+towers+from+people+study/3781536/story.html#ixzz1AanCOGet>

3. Source: Youtube; A News; VanIsland, Triangle Mountain Cell Phone Tower Protest; Nov. 8, 2010

4. Canadian Cellular Towers Map http://www.ertyu.org/steven_nikkel/cancellsites.html).

5 and 6. Milham, Samuel; Dirty Electricity; iUniverse Books; Bloomington IN, USA; 2010

7. Becker, R. and Marino, A; Electromagnetism and Life; The University of New York Press, Albany; 1982

8. Havas, Magda; Open Letter to Parents, Teachers, School Boards. Regarding Wi-Fi Networks in Schools; Environmental and Resource Studies; Trent University; Peterborough, ON, Canada; May 28, 2009

Mr. Dodd:

Thank you for your interest in our committee.

Our web site (<http://www.sd61.bc.ca/wifi.aspx>) explains the process that the committee is going to use throughout this process. The desire is to have the time to review the information provided and not react to a presentation. We are requesting, therefore that all presentations be sent 2 weeks in advance of the meeting to allow this to happen. At the meeting the presenter will have 3 minutes to give brief high lights/overview of the presentation. Questions asked by committee members are outside of the time line so you should be prepared to answer any questions that may be raised.

The information you provided, will be given to our committee. At this time you have been scheduled to appear on the 24th for the time allocated.

If you have further information, please contact me.

George J. Ambeault

Secretary-Treasurer

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