

Concern Regarding the Safety of Wi-Fi in Schools

*A Presentation to the Limestone District School Board's
Property & Operations Committee*

By:
The Kingstonians for Safe Technology (K4ST) Group
October 28, 2015

Kingstonians for Safe Technology

A local, volunteer group comprised of:

- Concerned Parents & Grandparents
- Health Care Professionals
- Elementary & Secondary School Teachers
- College & University Professors, Former Dean of Science (RMC)
- PhD Scientists & Researchers
- Nuclear, Electrical, Mechanical & Aerospace Engineers
- Physicists
- Local Artists
- Small Business Owners
- Former VP, Consumer Association of Canada

Kingstonians for Safe Technology

We are not the tin hat society.

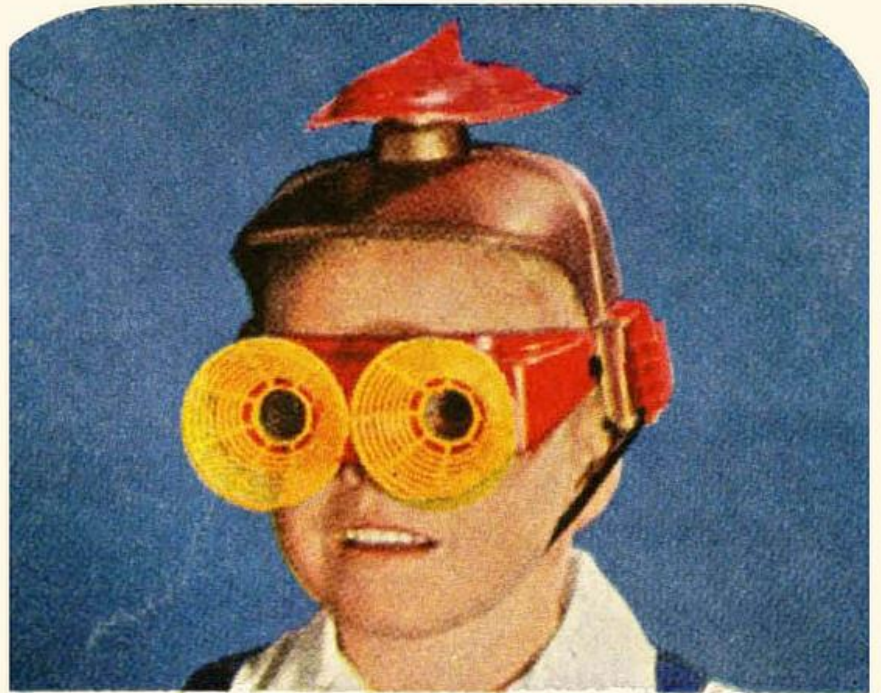
We are:

PRO Technology!

PRO Internet!

Important Distinction:

Wi-Fi vs. the Internet



Our Concern

The continuous exposure of students and staff to microwave radiation from Wi-Fi in schools.

6 hours per day x 195 days per year
= 1200 hr/year for 14 years of their life



NO studies showing that long-term exposure to microwave radiation is safe for children.

In fact, increasing **evidence of harm.**

www.bioinitiative.org, <http://tinyurl.com/kukx5zp>

Why Should we be Concerned?

Bioinitiative Report 2012

- A review of >4,000 studies looking at health risks of radio/microwave frequency radiation.
- Reviewed by **29 independent scientists and health experts.**
- See www.bioinitiative.org for full report and references

Health Effects Shown in Research:

- Damage to DNA
- Immune system suppression
- Leakage of blood brain barrier
- Disruption to neurological, endocrine, cardiovascular systems
- Impaired cognitive function
- Irreversible infertility
- ↑ Agitation
- Sleep disturbances
- Altered cellular function
- Changes to electrical activity in brain
- Links to Parkinson's & Alzheimer's
- ↑ rates of cancer

www.bioinitiative.org, <http://tinyurl.com/kukx5zp>



World Health Organization (WHO)

Classified EMF emissions (*including Wi-Fi*) as a Class 2B Possible Carcinogen (2011)

Same category as lead, DDT, gasoline, chloroform, engine exhaust.

European Environment Agency

Has warned that a delay in reducing exposure from wireless radiation may result in a health crisis **greater than** those caused by AIDS, smoking, pesticides, asbestos and leaded gasoline combined.





AMERICAN
ACADEMY OF
ENVIRONMENTAL
MEDICINE

The American Academy of Environmental Medicine

Adverse health effects, such as learning disabilities, altered immune responses, headaches, etc. from wireless radio frequency fields **do exist** and are **well documented in the scientific literature**.

“Statistics show that we can expect to see an immediate reaction in 3% and delayed effects in **30% of children and teachers**” from Wi-Fi.

(April, 2013)



The American Academy of Pediatrics

An organization of 60,000 pediatric doctors.

Recommends the reassessment of radiation standards for wireless devices and the **adoption of standards that are protective of children** and reflect current use patterns. (2013)

Children absorb more radiation than adults



3x some parts of the brain

10x bone marrow of the skull

Gandhi et al, 2012
www.ehtrust.org

Safety Code 6

- Created in 1979 to protect federal workers on federal jobsites, not children in schools
- For a 6 min exposure for a 6", 200lb male
- One of the least protective standards in the world
- Does not have the force of law or legislation
- Not mandatory for school boards to adopt

Safety Code 6 Called into Question

- >50 Canadians MDs supported by >50 international scientists- *Letter to Minister of Health (July 2014)*
- **Canadian Medical Association Journal (May 7, 2015):**
 - *“Scientists decry Canada’s outdated Wi-Fi safety rules”*
 - *Dr. Hardell quoted as saying these guidelines are “a disaster to public health”*
- **190 scientists from 39 countries** made an appeal to the United Nations to protect humans and wildlife from wireless technology saying some current international guidelines are not protective enough (May 12, 2015)

Safety Code 6 Called into Question

Canadian Parliamentary Standing Committee on Health Hearings

March 24, April 23, 28, 2015

<http://www.c4st.org/HESA2015>

Strong scientific evidence that adverse health effects occur well below Safety Code 6:

Strongest evidence: cancer and sperm abnormalities/DNA damage

Health Canada Warning - 2011

Health Canada “encourages parents to reduce children's RF (radiofrequency radiation) exposure... since children are typically more sensitive" and "there is currently a lack of scientific information regarding the potential health impacts of cell phones on children.”

www.healthy Canadians.gc.ca/recall-alert-rappel-avis/hc-sc/2011/13548a-eng.php

Workers Compensation Act

Occupational Health & Safety Regulation

- 5.57 (1) If a substance identified as any of the following is present in the workplace, **the employer must replace it, if practicable, with a material which reduces the risk to workers:**
 - (a) ACGIH A1 or A2, or IARC 1, 2A or **2B carcinogen;**

http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/296_97_03

Canadian Human Rights Commission

Recognizes **Electrohypersensitivity (EHS)** as a disability on par with sightlessness, being constrained to a wheelchair or any other more recognized form of disability.



CANADIAN HUMAN RIGHTS COMMISSION
COMMISSION CANADIENNE DES DROITS DE LA PERSONNE

What Does the Wireless Industry Have to Say?

“The influence of electrosmog on the human body is a known problem”

“...clear damage to hereditary material has been demonstrated and there have been indications of an increased cancer risk”

... “the DNA itself is damaged and the number of chromosomes changed”

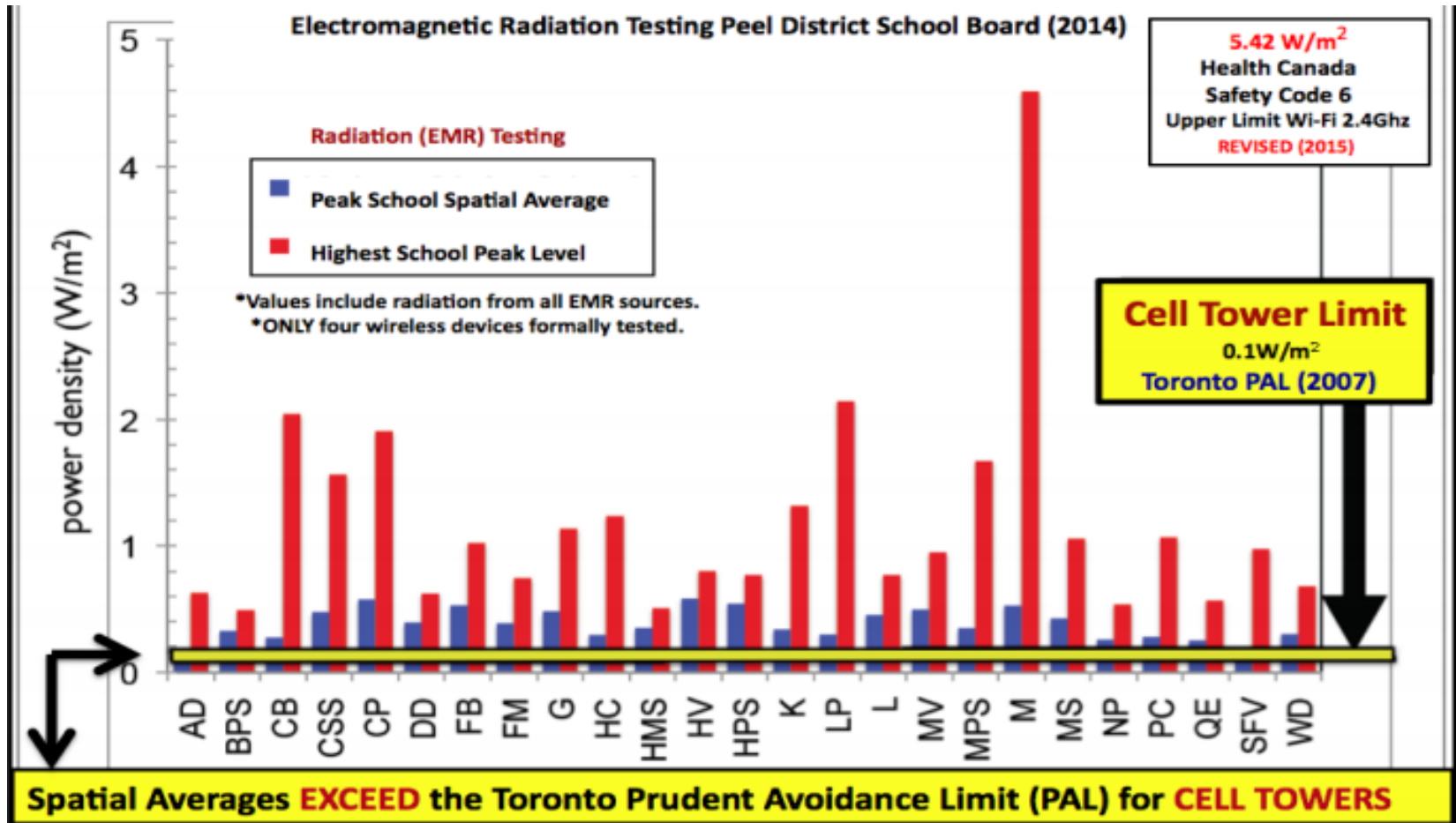
Swisscom Patent Application, 2004

www.safeschool.ca

What do Insurers Have to Say?

- **Lloyd's of London** - **Stopped insuring** wireless & cell companies in the late 1990's (*Exclusion 32*).
- **Aviva** – **Will not insure** against liability from electromagnetic fields
- **Ontario School Board Insurance Exchange (OSBIE)** – **Unknown**

Wi-Fi Values in Peel District School Board



Frank Clegg

Former President of Microsoft Canada



CEO of non-profit
**Canadians for Safe
Technology (C4ST)**

www.c4st.org

“A proper evaluation would clearly show that Health Canada is not taking the appropriate action to safeguard the health of Canadians”

Canadian Schools Without Wi-Fi

- **Saanich District School Board, BC**
- **Winlaw Elementary School, BC**
- **St. Vincent Euphrasia Elementary School , Meaford ON**
- **Kootenay Lakes District School Board, BC (1 school without)**
- Aurora Monterssori School, ON
- North Cariboo Christian School, BC
- Pretty River Academy, ON
- Wayside Academy, ON
- BC Roots and Wings Montessori, BC
- Locally – Mulberry Waldorf School, Frontenac Club Daycare
- Plus many in the US and abroad.

• <http://ehtrust.org/cell-phones-radiation-3/international-policy-actions-on-wireless/>



Alternatives to Wi-Fi

There are faster, more reliable and safer ways to access the internet using ALL of the mobile devices employed in schools today:

- Smart Boards
- Laptops
- I-Pads
- I-Phones
- I-Pods etc.



Redpark.com

Wi-Fi in Schools - Summary

The Limestone District School Board is committed to providing a safe and healthy learning environment for our children.

The long-term, continuous exposure to wireless networks and communication devices in school may present a potential health and safety risk or hazard for children and staff.

The Precautionary Principle should be applied.

Consideration should be given to a moratorium on Wi-Fi in schools.

Helpful Sites

www.c4st.org

www.magdahavas.com

www.weepinitiative.org

www.citizensforsafetechnology.org/

www.safeschool.ca

www.kawarthasafetechnology.org/doctors-speak-out.html

www.ehtrust.org

www.wifiinschools.org.uk

www.doctorsforsaferschools.org

www.emfacts.com

www.powerwatch.org.uk