

# Cellular Transmitter Concerns

## Frequently Asked Questions

# FAQ

### 1. We are being assured that Industry Canada/Health Canada Regulations are being followed ... why should we be concerned?

The industry regulations are outdated and are some of the most lax in the world. Health Canada has been wrong before - remember asbestos, tobacco, DDT or the tainted blood scandal? Canada's guidelines are based on Safety Code 6, which only deals with the heating of tissues (thermal effects), but does not consider biological or health effects. Yet many thousands of studies show there are biological effects that occur at levels far below levels that Health Canada currently deems safe, and many experts are appealing for changes. Health Canada's own scientists have identified that there are unknown risks with children and pregnant women, and that long-term studies are needed. Health Canada states it's unethical to experiment on children - yet children and our entire population continue to be experimented on constantly with the usage of this technology that is NOT proven safe.

### 2. Doesn't Canada have safe exposure limits that protect us?

No, Canada's allowable exposure limits are 1000s of times higher than most other countries, including Russia and China. According to researcher Magda Havas, PhD, BSc, RFR exposure guidelines, used in our wireless communications, range 5 orders of magnitude in countries around the world. Salzburg, Austria recommends that RFR levels be kept to: Outside  $0.001 \mu\text{W}/\text{cm}^2$  and Inside  $0.0001 \mu\text{W}/\text{cm}^2$ . The Canada and U.S. exposure guideline is  $1000 \mu\text{W}/\text{cm}^2$ . In China and in Russia the guideline is  $10 \mu\text{W}/\text{cm}^2$ .

### 3. What are the dangers?

Canada's guidelines are based on a short-term (6-minute) heating effect called the Specific Absorption Rate (SAR). It is assumed that if this radiation does not heat your tissue it is safe. This is not correct. Effects are documented at levels well below those that are able to heat body tissue. These biological effects include increased permeability of the blood brain barrier, increased calcium flux, increase in cancer and double-strand DNA breaks, induced stress proteins, and nerve damage<sup>1</sup>. Exposure to this energy is associated with altered white blood cells in children; childhood leukemia; impaired motor function, reaction time, and memory; headaches, dizziness, fatigue, weakness, and insomnia. While most people want wireless communications, the siting of transmitters needs to be based on minimizing harm. If there will be children or homes close to the antennas these people are more susceptible to harm from RFR exposure as chronic long-term exposure leads to cumulative damage and the development of electrohypersensitivity (EHS).

### 4. Why isn't Canada protecting its citizens, like other countries are?

Some countries have adopted recommendations laid out in The BioInitiative Report, published in 2007. It provides detailed scientific information on health impacts when people are exposed to EMF/RFR hundreds or even thousands of times below limits currently established by the FCC and Industry Canada. The authors reviewed more than 2000 peer-reviewed scientific studies and reviews, and **concluded that the existing public safety limits are inadequate to protect public health**. Their conclusion is that: From a public health policy standpoint, new public safety limits, and limits on further deployment of risky technologies are warranted based on the total weight of evidence. Their recommendation is to set an exposure standard of 0.1 micro-watt per centimeter squared ( $\mu\text{W}/\text{cm}^2$ ) limit. This is 10,000 times lower than the Safety Code 6 standard of  $1,000 \mu\text{W}/\text{cm}^2$ .

We also need to question some of the obvious conflicts of interest. Health Canada says it bases its guidelines on a "weight of evidence" approach (if 25 of 100 studies show biological harm, and 75 out of 100 show NO harm, then they conclude there is NO HARM AT ALL. What they don't make clear is that most of the studies finding no harm are funded by the telecom industry). The same Federal Government that sets the non-protective guidelines is the same government that brings in billions of dollars every year in selling off the RF spectrum and collection of licencing fees from the telecom companies.

### 5. What is the "Precautionary Principle?"

The Precautionary Principle states when there are indications of possible adverse effects, though they remain uncertain, the risks from doing nothing may be far greater than the risks of taking action to control these exposures. The Precautionary Principle shifts the burden of proof from those suspecting a risk to those who discount it — as some nations have already done. Precautionary strategies should be based on design and performance standards and may not necessarily define numerical thresholds because such thresholds may erroneously be interpreted as levels below which no adverse effect can occur.

*(Olle Johansson, Assoc. Prof., Department of Neuroscience, Karolinska Institute, Sweden)*

<sup>1</sup>Royal Society Panel Report 1999 on Health Effects of RF Frequency: <http://www.rsc.ca/documents/RFRreport-en.pdf>



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## 6. Cellular technology has been around for a while now, why haven't we seen a problem?

We have, there is an increase the population of Electromagnetic Hypersensitivity (EHS). Right now it is estimated that 5% of the population has EHS and it's expected to rise to 40% in the next 6 years. There has been a marked increase in the last decade in brain cancers, neurological disorders and immune dysfunction. People affected by EMF exposure report symptoms such as headaches, heart irregularities, sleep difficulties, tinnitus, shortness of breath, chest discomfort, muscular weakness, gastric problems, visual disturbances, skin alterations, concentration/focus issues and short-term memory loss. According to the Canadian Human Rights Commission and the Americans with Disabilities Act, EHS is an environmental sensitivity requiring accommodation.

## 7. What does the World Health Organization say?

On May 31, 2011, the International Agency for Research on Cancer (IARC) of the World Health Organization (WHO) reclassified RF radiation like that emitted from cellular towers and mobile devices such as cell phones, cordless phones, wifi routers and Smart Meters as **2B, Possibly Carcinogenic** to Humans.

## 8. What about WorkSafeBC regulations?

According to Work Safe BC, the 1996 Workers Compensation Act Occupational Health and Safety Regulation 5.57 (1) states:

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 (see #5, above)**;

## 9. What about liability and insurance?

Some insurance analysts have stated that "EMF exposure could be our next Asbestos". In fact lawsuits are taking place all over the world. Companies like Lloyd's of London are no longer covering long term health issues for telecom companies. Cellular companies have been indemnified from any health related claims. Industry Canada won't let health be discussed when debating siting of a cell transmitter – they use Safety Code 6 as shielding. They insist that as long as the total emissions are below Safety Code 6, everything is fine, but that is not turning out to be the case, as more and more agencies, scientists, etc are acknowledging that in fact SC 6 applies to thermal levels of radiation only.

## 10. Why do the Telecom Companies infer or state that there is NO DANGER?

Good question! They cannot prove that the EMR/RF microwave emissions from their transmitters are safe, so they like to create confusion and deviate from the concern at hand, and hide behind lax government/industry guidelines.

Research to date has not looked at the impact beyond 10 -15 years for pulsed microwaves. Cancers can take 20+ years to materialise. **NOT showing definitive causal/proof linking wireless RF with cancer is NOT the same as proof of safety.** Wireless communication is a >1 trillion dollar industry. It is significantly doubtful that we can expect to get truthful answers on wireless affects given the amount of investment and the value of the industry. In fact, a great deal of energy is spent on attempting to slander the credible scientists who have found biological effects.

It is a deviation tactic to steer the public away from asking the important, main questions.

Ask the Telecom Representatives:

**"Can you prove and guarantee that RF radiation from cellular transmitters is safe?**

**Will you put it in writing?"**

*Rest assured, they can't and they won't.*

## Find more information at:

[www.citizensforsafetechnology.org](http://www.citizensforsafetechnology.org)

[www.magdahavas.com](http://www.magdahavas.com)

<http://assembly.coe.int/mainf.asp?link=/documents/adoptedtext/ta11/eres1815.htm> (2011)

[www.bioinitiative.org/freeaccess/report/index.htm](http://www.bioinitiative.org/freeaccess/report/index.htm) (Updated April, 2011)

[www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4834477&Language=E&Mode=1&Parl=40&Ses=3](http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4834477&Language=E&Mode=1&Parl=40&Ses=3) (Dec 2010)