

SCIENTISTS' CONCERNS ABOUT WIRELESS IN SCHOOLS

Open Letter to Parents, Teachers, School Boards. Regarding Wi-Fi Networks in Schools - May 5, 2009

by Dr. Magda Havas, Associate Professor, Trent University

FACTS:

1. GUIDELINES

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 guideline in these countries is 0.1 microW/cm². In Canada it is 1,000 microW/cm²! Why does Canada have guidelines that are so much higher than other countries?

Canada's guidelines are based on a short-term (6-minute) heating effect. 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 (Analysis of Health and Environmental Effects of Proposed San Francisco Earthlink Wi-Fi Network, 2007). These biological effects include increased permeability of the blood-brain barrier, increased calcium flux, increase in cancer and DNA breaks, induced stress proteins, and nerve damage. Exposure to this energy is associated with altered white blood cells in school children; childhood leukemia; impaired motor function, reaction time, and memory; headaches, dizziness, fatigue, weakness, and insomnia.

2. ELECTRO-HYPER-SENSITIVITY

A growing population is adversely affected by these electromagnetic frequencies. The illness is referred to as "electro-hyper-sensitivity" (EHS) and is recognized as a disability in Sweden. The World Health Organization defines EHS as: ". . . a phenomenon where individuals experience adverse health effects while using or being in the vicinity of devices emanating electric, magnetic, or electromagnetic fields (EMFs). . . EHS is a real and sometimes a debilitating problem for the affected persons, while the level of EMF in their neighborhood is no greater than is encountered in normal living environments. Their exposures are generally several orders of magnitude under the limits in internationally accepted standards."