

# Medical Advisory: Wi-Fi & Children's Health

## International Agency for Research on Cancer (IARC) of the World Health Organization (WHO)

Classified "Radiofrequency Electromagnetic Fields" "emitted by wireless communication devices" as Type **2B Possible Carcinogen (possible cancer risk to humans)**. The WHO report concluded that "additional research is important"; and advised the public, particularly young adults and children, to "take pragmatic measures to reduce exposure". As affirmed by Dr. Robert Baan of IARC, this classification 2B, possibly carcinogenic, is not limited to cellphone radiation, it "holds for all types of radiation within the radiofrequency part of the electromagnetic spectrum, including the radiation emitted by base-station antennas, radio/TV towers, radar, **Wi-Fi**, smart meters, etc."

Other commonly-known carcinogens under 2B classification include Lead, DDT, HIV, Methyl Mercury, Chloroform, Diesel Engine Exhaust etc.

Group 1	Carcinogenic to humans
Group 2A	Probably carcinogenic to humans
<b>Group 2B</b>	<b>Possibly carcinogenic to humans</b>
Group 3	Not classifiable as to its carcinogenicity to humans
Group 4	Probably not carcinogenic to humans

[http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208\\_E.pdf](http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf)  
<http://monographs.iarc.fr/ENG/Classification/index.php>  
<http://tinyurl.com/7fync2w> <http://goo.gl/77zt>

## Workers Compensation Act Occupational Health and 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](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/296_97_03)

**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."  
<http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2011/13548a-eng.php>

## The Council of Europe (47 Countries) Adopted Resolution 1815 (2011):

- 8.1.2. reconsider the scientific basis for the present standards on exposure...
- 8.1.4. pay particular attention to "electrosensitive" people...
- 8.1.1. take all reasonable measures to reduce exposure to electromagnetic fields, especially to radio

frequencies from mobile phones, and particularly the exposure to children and young people who seem to be most at risk from head tumours;

8.3.1 develop within different ministries (education, environment and health) targeted information campaigns aimed at teachers, parents and children to alert them to the **specific risks of early, ill-considered and prolonged use of mobiles and other devices emitting microwaves**;

8.3.2 for children in general, and particularly in **schools and classrooms, give preference to wired Internet connections**, and strictly regulate the use of mobile phones by schoolchildren on school premises;  
<http://www.assembly.coe.int/ASP/XRef/X2H-DW-XSL.asp?fileid=17994&lang=EN>

## The European Union Parliament (EU) Resolutions: 2008/2211(INI) & 2007/2252(INI) *\*Both adopted with near-unanimous votes among 500+ parliamentarians*

"wireless technology (mobile phones, Wi-Fi / WiMAX, Bluetooth, DECT landline telephones) emits EMFs that may have adverse effects on human health... particularly to young people whose brains are still developing... **the limits on exposure to electromagnetic fields which have been set for the general public are obsolete. They do not take account of developments in information and communication technologies or vulnerable groups, such as pregnant women, newborn babies and children...** the EU Parliament "calls on the Member States to follow the example of Sweden and to **recognize persons that suffer from electrohypersensitivity** as being disabled so as to grant them **adequate protection as well as equal opportunities.**"

<http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P6-TA-2008-410>  
<http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P6-TA-2009-216>  
<http://www.europarl.europa.eu/oeil/popups/summary.do?id=1046703&t=d&l=en>  
<http://www.europarl.europa.eu/oeil/popups/summary.do?id=1074023&t=d&l=en>

## The American Academy of Pediatrics (AAP) - 60,000 Pediatricians and Pediatric Surgeons

"The differences in bone density and the amount of fluid in a child's brain compared to an adult's brain could allow children to absorb greater quantities of RF energy deeper into their brains than adults... the current exposure limits may not reflect the latest research on RF energy".

<http://citizensforsafetechnology.org/Letter-from-the-American-Academy-of-Pediatrics-to-US-Congress.24.2818>

## The Austrian Medical Chamber (Österreichische Ärztelkammer, ÖÄK ) - 40,000 doctors:

"Wi-Fi environments will lead to high microwave exposure for students and teachers which might

increase the burden of oxidative stress. Oxidative stress might slow down the energy production especially in brain cells and may lead e.g. to concentration difficulties and memory problems in certain individuals. The Austrian Medical Association recommends Wi-Fi free school environments."

<http://wifiinschools.org.uk/resources/safeschools2012.pdf>

### **Swiss Physicians for the Environment (MfE)**

"the risk of cancer for this type of [wireless] radiation is similar to that of the insecticide DDT, rightfully banned... From the medical point of view, it is urgent to apply the precautionary principle for mobile telephony, Wi-Fi, power lines, etc."

[http://www.aefu.ch/fileadmin/user\\_upload/aefu-data/b\\_documents/Aktuell/120316\\_Brief\\_NIS.pdf](http://www.aefu.ch/fileadmin/user_upload/aefu-data/b_documents/Aktuell/120316_Brief_NIS.pdf)

### **The American Academy of Environmental Medicine(AAEM)**

"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."

"In September 2010, the Journal of the American Society for Reproductive Medicine - Fertility and Sterility reported that only four hours of exposure to a standard laptop using WiFi caused DNA damage to human sperm."

"Multiple studies correlate radiofrequency exposure with diseases such as cancer, neurological disease, reproductive disorders, immune dysfunction, and electromagnetic hypersensitivity... The fact that radiofrequency exposure causes neurological damage has been documented repeatedly... Other neurological and cognitive disorders such as headaches, dizziness, tremors, decreased memory and attention, autonomic nervous system dysfunction, decreased reaction times, sleep disturbances and visual disruptions have been reported to be statistically significant in multiple epidemiological studies with radiofrequency exposure occurring non-locally."

<http://aaemonline.org/wifischool.html>

<http://aaemonline.org/images/LettertoLAUSD.pdf>

[http://aaemonline.org/emf\\_rf\\_position.html](http://aaemonline.org/emf_rf_position.html)

### **International Society (17 countries) of Doctors for the Environment (ISDE) and Irish Doctors Environmental Association (IDEA) recommendations:**

# Avoid Wi-Fi in home or work if possible, particularly in schools or hospitals.

# Use wired technology whenever possible.

"Because of the potentially increased risks for the foetus, infants and young children due to their thinner more permeable skulls and developing systems, particularly the immune and neurological systems, based on the precautionary principal and on the mounting evidence for harm at the sub-cellular level, we recommend that EMR exposure should be kept to a minimum." <http://www.env-health.org/news/members-news/article/isde-idea-statement-on>

### **Interdisciplinary Society for Environmental Medicine (Interdisziplinäre Gesellschaft für Umweltmedizin e. V.) Germany**

"In the Freiburger Appeal in 2002, medical doctors in Germany requested:

Ban on mobile telephone use and digital cordless (DECT) telephones in preschools and schools." DECT phone uses the same frequencies as WiFi.

Appeal in full: [www.planningsanity.co.uk/reports/md341.doc](http://www.planningsanity.co.uk/reports/md341.doc)

### **Israel's Deputy Health Minister Yaakov**

**Litzman** implored Education Minister Gideon Sa'ar to immediately suspend the installation of wireless Internet in schools due to the hazards of electromagnetic radiation.

<http://www.timesofisrael.com/stop-wi-fi-in-schools-deputy-health-minister-implores/>

### **BCCPAC - The BC Confederation of Parent Advisory Councils**

- 800 Public School PACs & DPACs in BC

- Studied WiFi issue for THREE years

### **2012 AGM Resolutions adopted for Parent Choice and Precaution:**

#18 calls on Boards of Education to "**cease to install Wi-Fi** and other wireless networks in schools where other networking technology is feasible."

#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."

<http://www.bccpac.bc.ca>

### **United Teachers of Los Angeles (UTLA)**

- **40,000 teachers & staff**

#### **2013 Resolution:**

"UTLA will abide by current National NEA Policy for Environmentally Safe Schools which states that all employees and stakeholders should be informed when there are changes in their exposure to environmental hazards including electromagnetic radiation and that all stakeholders and the public should be notified of any actual and potential hazards. UTLA will advocate for technological solutions that maintain technology upgrades while not increasing employees exposure to electromagnetic radiation."

### **BC Teachers' Federation (BCTF)**

- **40,000 teachers**

#### **2013 Resolution:**

"The BCTF supports members who are suffering from Electromagnetic Hypersensitivity by ensuring that their medical needs are accommodated in the workplace."

For further info, see: [safeinschool.org](http://safeinschool.org)  
[citizensforsafetechnology.org](http://citizensforsafetechnology.org)  
[wifiinschools.org.uk](http://wifiinschools.org.uk) [wifi-in-schools-australia.org](http://wifi-in-schools-australia.org)