

What are the concerns about WiFi in our children's schools?



Feelings of anxiety, tiredness, headaches, poor concentration... these are just a few of the symptoms researchers believe exposure to WiFi radiation can cause in our children. But researchers advise it is the chronic long term exposure that needs to be considered.

HOC the Wifi has been created to provide a combined voice for parents to raise concerns with their children's schools use of WiFi (Radio Frequency Electromagnetic Radiation) connections in schools.

Our increasing exposure to Radio Frequency Radiation from our wireless devices is of great concern to independent researchers, particularly where children are concerned. Researchers urge a precautionary principal be applied. It is the chronic long-term exposure that needs to be considered, and this is not addressed in the current Australian Standard.

The schools use of WiFi and Radio Frequency Electromagnetic Radiation (RF EMFs) meet the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Standard, set in 2002. This follows the International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines, set in 1998. These standards have been superseded by current scientific research that RF EMFs inducing Biological Effects (changes in the human body) impact on development and health.

Why should we be concerned about WiFi in our children's classrooms?

40% of the worlds' population is protected by much lower exposure limits than Australia (Jamieson 2014). Australia still follows the international exposure limit (3 500- 10000mW/m²). A 2014 investigation by Noel Arnold and Associates into Radio Frequency Radiation levels at a NSW High School and Primary School reported the highest reading as 254 mW/m². While a fraction the Australian Exposure limit, compared to other countries it is:

- 10 times the allowable exposure limit in Luxembourg;
- 6 times the allowable exposure limit in Switzerland;
- 4 times the allowable exposure limit in China; and
- Double the exposure limit in France, Russia, Italy, Poland and Bulgaria.

Read the Research

THE INTERNATIONAL EMF SCIENTIST APPEAL TO THE UNITED NATIONS (2015)

Scientists who work and research in the EMF field have jointly appealed to the United Nations (UN) urgently calling upon the UN and its sub-organizations, the World Health Organisation and United Nations Environment Programme, and all United Nation Member States, for greater health protection on EMF exposure. They note the weight-of-evidence strongly supports greater precaution. Scientific research has shown that EMF affects living organisms at levels well below most international and national guidelines. The Appeal points out the various agencies setting safety standards have failed to impose sufficient guidelines to protect the general public, particularly children who are more vulnerable to the effects of EMF. Collectively they have a number of requests including; children and pregnant women be protected; and the public be fully informed about the potential health risks from electromagnetic energy and taught harm reduction strategies. In August 2018, 244 scientists from 41 nations had signed the Appeal.

<https://emfscientist.org/>

REVIEW OF WIFI SPECIFIC STUDIES (PALL 2018)

Repeated Wi-Fi studies show that Wi-Fi causes oxidative stress, sperm/testicular damage, lowered male fertility, neuropsychiatric effects including EEG changes, apoptosis (cell death) with a role in neurodegenerative disease. Cellular DNA damage (a process which may lead to germ line mutations and development of cancer), endocrine changes, and calcium overload. Due to the disruptive impact of EMF on stem cells, young children may be uniquely susceptible to exposure during a critical window of brain development. EMF exposure during this time is potentially a caustic factor for autism. Exposures over a period of 1-2 months produce relatively modest changes in the neurons and structure of the brain and when exposures ceased, most of the structural changes disappeared – the changes were largely reversible. However extended months of exposure produced more severe impacts on brain and neuronal structure and these were irreversible. The introduction of Wi-Fi into schools may well be a high level threat to the health of our children as well being a threat to teachers and any fetuses teachers may be carrying.

<https://www.sciencedirect.com/science/article/pii/S0013935118300355?via%3Dihub>

NATIONAL TOXICOLOGY PROGRAM RECOMMENDED A RECLASSIFICATION TO 'CLEAR EVIDENCE OF CARCINOGENIC ACTIVITY' 2018

NTP conducted a 10-year and \$25 million study of research into cell phones or mobile telephones. In conclusion a panel of external scientific experts recommended a reclassification of RF EMFs. This independent panel found 'clear evidence of carcinogenic activity' caused by RF EMFs and recommended this reclassification to reflect the seriousness of their findings.

https://ntp.niehs.nih.gov/ntp/about_ntp/trpanel/2018/march/actions20180328_508.pdf

The World Health Organisation International Agency for Research for Cancer (WHO IARC) classified RF EMF as 'possibly carcinogenic' in 2011.

WHAT ARE OTHER COUNTRIES DOING? (MARY REDMAYNE 2015)

Many countries are taking a 'precautionary approach' and have set a 'precautionary' standard. That is a low but technically manageable level that excludes a wide range of exposures demonstrated as being biologically active. As the exposure circumstances under which biological effects begin to occur are still being investigated, this approach is usually based on a fixed percentage of the ICNIRP guidelines. Typically, this is 1% of the reference level (100mw/m²) or less. The countries include Greece, Hong Kong, Slovenia, Italy, Luxembourg, Lithuania, Bulgaria, Belgium, Israel, India, Peru, Switzerland, and regions including Plenum and Catalonia in Spain; Brussels, Wallonia and Flanders in Belgium; various regions in Brazil; and the city state of Monaco and the Principality of Liechtenstein, cities include Paris and Salzburg. The Toronto Health Board has also established this lower reference level.

In addition to lowering the exposure standard, other precautions have been taken, such as removing WIFI from schools; and providing an education program on how to minimise exposure to RF EMFs. France and Israel have passed legislation to remove WIFI and restrict exposure in schools, formally adopting the precautionary approach as a legal standard. Israel restricted WIFI usage if wired connections are not yet possible. WIFI in schools is limited to 3 hours per week, and the Wireless Access Point must be turned off when not in use.

http://www.abc.net.au/catalyst/download/Redmayne_2015_Policy_paper_WITH_HIGHLIGHTS_EBM.pdf

How to request that your school Principal takes a precautionary approach to minimise children's exposure to Radio Frequency Electromagnetic Fields at your child's school.



HOC the WiFi has prepared a letter and research document for parents to submit to their School Principal. The letter requests that your School Principal takes a precautionary approach to WiFi radiation and also contains the research to back your request.

To download the document, visit www.hocthewifi.com/registeryourconcern and download the document. The registration process is outlined on our website. Please follow the instructions carefully to ensure your request has been registered with HOC the WiFi.