

SUBMISSION NO 119

Re: electromagnetic sensitivity: microwave radiation and health effects

Thomas Kerns (2001) in his book *Environmentally Induced Illnesses: Ethics, Risk Assessment and Human Rights* reports "Cancers are probably the pathologies most commonly recognized as associated with exposure to environmental toxicants. "WHO [the World Health Organization] has concluded that at least 80% of all cancer is attributable to environmental influences" (page 29). Environmentally induced illnesses compromise the immune system and the integrity of the Blood-Brain Barrier (BBB) "to such an extent that it no longer adequately protects the brain from toxins" (page 40).

Electromagnetically sensitivity (EHS) <http://phiremedical.org/electromagnetic-hypersensitivity-summary-s-dr-erica-mallery-blythe-december-2014-working-draft-version-1/> is now an accepted diagnosis in many countries including France. One of the documented symptoms that occurs with this condition is a compromise of the Blood Brain Barrier. Australia does not have any designated "white spots" where those people affected by Electromagnetic sensitivity can find some relief from symptoms as do countries such as France where EHS is acknowledged as a disability. In Australia the general public may be exposed to wi-fi radiation in their own homes 24/7 as they are often providing a commercial wi-fi service to anyone utilizing roaming wi-fi services such as Telstra Air through their personal residential modem and wi-fi system as described on the Telstra crowd support website <https://crowdsupport.telstra.com.au/t5/Telstra-Air/stop-mobile-selecting-telstra-air-when-in-my-own-network-area/td-p/483538>

The health impacts and dangers of microwave radiation and wi-fi are well known (since the use of radar in surveillance during WWII) and well documented. Telstra on their own website <https://www.telstra.com.au/consumer-advice/eme/eme-research> under IARC RF Classification Announcement - 2011 states: "*The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B), based on an increased risk for glioma, a malignant type of brain cancer 1, associated with wireless phone use*" and includes the results of one study that "*cell phone use (up to the year 2004), showed a 40% increased risk for gliomas in the highest category of heavy users (reported average: 30 minutes per day over a 10-year period)*". Under Health Agency Responses to the IARC announcement your Telstra consumer advice concludes that: "*The WHO also notes that further study into the long term use of mobile phones and cancer, and the effect of mobile phone use on young people should be undertaken.*"

Such further study has been undertaken since 2011 and in July, 2017 Anthony Miller an expert cancer researcher and advisor to the World Health Organization International Agency for Research on Cancer (WHO/IARC) has issued his scientific opinion that *“radio-frequency (RF) radiation from any source – such as the signals emitted by cell phones, other wireless and cordless and sensor devices, and wireless networks – **fully meets criteria to be classified as a Group 1 carcinogenic to humans agent**, based on scientific evidence associating RF exposure to cancer development and cancer promotion.”* <https://www.rfsafe.com/cancer-expert-says-science-merits-need-reclassify-phone-radiation-group-1-carcinogenic-humans/>

In January 2018 an article reviewing 100 further studies titled: *Biological and pathological effects of 2.45 GHz radiation on cells, fertility, brain and behaviour* by Isabel Wilke summarizes the results as: *“The available studies document damage to the reproductive system, impacts on the EEG and brain functions, as well as effects on the heart, liver, thyroid, gene expression, cell cycle, cell membranes, bacteria, and plants”* (page 1). This study concluded: *“The potential health impact of Wi-Fi, even at low exposure levels, can no longer be called into question or relativized away, not even by those studies that found no effects ... Health risks are a reality. It would be particularly important to carry out further research regarding the effects on the brain and young people. The application of the precautionary principle, which is recognized in all European countries, only allows for one conclusion: Wi-Fi must not be used continuously and close to the human body”* (page 19). http://kompetenzinitiative.net/KIT/wp-content/uploads/2018/06/Wilke_2018_Review_2_45_GHz_Eng_df_END1.pdf

The Environmental Health Trust of Medical Doctors and Public Health Organizations Consensus Statements and Doctors' Recommendations on Cell Phones/Wireless states that: *“It is a fact that **not a single medical organization** states that cell phone/wireless radiation is safe. There is no proof of safety.”* https://ehtrust.org/wp-content/uploads/Doctors_Consensus_Statements_Recommendations_EMF.pdf

Do we really have to wait another 30-40 years like we did with cigarettes before the true devastation of cancers and infant genetic mutations are so evident it is undeniable. There seems to be no stopping the 5G networks placing mobile phone masts outside our homes, schools, and hospitals, which will exponentially increase the microwave exposure to all. The community cost will far outweigh the profits made by the telecommunications companies who have already embedded disclaimers within their websites. This is a Human Rights issue. Thank you so much for championing this situation.

I am happy to forward further information if it will assist your platform in any way.

With best wishes

Yours sincerely

Jane Refshauge