Updated 2018 information relating to the safety of wireless radiation

Brought forward for wider publication Sept. 2023

Some scientists now debate that it is the erratic and irregular wireless radiation pulse (properties of signals from a power source such as a tower) that determines if mobile phones and similar wireless units such as WiFi are safe to regularly use or not. This is why contemporary information about wireless radiation might be misleading. What follows is a range of my thoughts on the topic.

An open letter to whom it may concern

12th of December 2018

Electromagnetic fields and public health: Mobile phones

My name is John. I am not a scientist nor a medical professional. I see myself as being political-history investigator. I have two grandchildren. I am concerned about the possible harmful effects that electromagnetic field radiation might be having in the public arena, especially with respect to mobile phones and allied WiFi electromagnetic transmissions emanating from wireless computer modems.

I know that this is not a new debate. I also know that it is a divisive topic amongst international scientists. Whilst I am concerned about how radiation might be harmfully impinging on all or our health right now, and possibly animals as well, I am more concerned about the welfare of later generations in respect to radiation. I have in mind the quality of male sperm and DNA as I write these words. I acknowledge these possible adverse radiation effects probably extend much wider and deeper than this.

The story I care to share with you now has unfolded merely over the last few weeks. Each day that has passed has provoked me to further explore what I now see as being an issue that probably deserves greater attention and concern amongst citizens than has ever been considered before. Contemporary literature with respect to possible radiation pollution within the community at every conceivable level seems to be suggesting that this should be the case.

I am neither qualified or competent to talk about the relationship between radiation and public health at a scientifically accurate level. It is likely that you might know more about the subject than I do. What I feel that I can do, however, is to share with you information that I have found on this subject that might stir you to be just as concerned and passionate about the issue as I am.

I have decided to separate the information into four parts. Each of these parts pretty well reflects the chronological sequence in which I assembled and attempted to

fathom over the last few weeks. Some parts are in a staccato and ill-considered form, and there are overlaps. The contents of this presentation are principally references. These references are derived mostly from internationally respected sources such as the Council of Europe

I am not seeking to prove anything to you. Only you can decide if my information is worthy of further consideration or not. Furthermore if you feel sufficiently moved by this information to share it amongst your family, friends and perhaps other individuals and groups that you feel might be interested in the material as well, I would be grateful.

I now present my information to you in the manner that I have just described. There are numerous articles and videos for you to consider. I strongly urge you to conduct your own further research in order to check if my line of thinking with respect to this matter has merit or not. I am concerned.

Thank you

Abstract

The debate about wireless radiation is not new. This is more especially so with respect to mobile phones and WiFi wireless systems. Contemporary scientific evidence suggests that a new scientific approach needs to be taken in order to more accurately determine what new safety guidelines are most appropriate with respect to life form exposure to wireless radiation. This is more especially so in respect to young children. Brain cancers amongst children are internationally on the rise. My references seem to demonstrate that it is the non-thermal biological effect beyond one degree C that is responsible for non-thermal DNA, skin and body cell damage. It seems that this type of biological effect may have thus far been overlooked some by international radiation safety authorities.

Prologue

When I came up with the idea of compiling a bundle of contemporary information that demonstrates that wireless radiation emanating from mobile phones and WiFi sources is probably harmful to life forms, I was not then aware of the wider range of information with respect to this issue than I am today. I have decided not to significantly re-adjust my presentation at this time. In due course I will create a newer and more inclusive range of material and ideas that is more accurately reflective of

the scientifically perceived risks of wireless radiation to the condition of all life forms.

What I feel that you should know at this time is that, for all intents and purposes, there is merely a single entity in the world that shapes the recommendations for maximum threshold values for the different frequencies of electromagnetic fields. This body finally decides which frequencies and power levels of electromagnetic fields are dangerous to life forms or not. This privately run and funded organisation is located in Munich in Germany. Its name is the International Committee on Non-Ionisation Radiation Protection [ICNIRP]. The ICNIRP has been shown by researchers to have close links with the international *electrical science* industry. The ICNIRP effectively sets the safety policies of most government safety agencies around the world. This includes the World Health Organisation. It sets the international maximum threshold values for determining the safe different frequencies of electromagnetic fields.

I quote from an article entitled “The potential dangers of electromagnetic fields and their effect on the environment” by the respected Council of Europe in order to justify my words. I have underlined what I consider to be the most important information in the quotation. The paper was published in 2011. However, I have included more contemporary information in the references at the rear of this presentation.

Quote:

“28. Indeed, it is in this connection that the Committee on the Environment, Agriculture and Local and Regional Affairs is currently working on the question of conflicts of interest and the urgent need for real independence of scientists involved in the official agencies tasked with evaluating the risks of products prior to licensing.

29. The rapporteur underlines in this context that it is most curious, to say the least, that the applicable official threshold values for limiting the health impact of extremely low frequency electromagnetic fields and high frequency waves were drawn up and proposed to international political institutions (WHO, European Commission, governments) by the ICNIRP, an NGO whose origin and structure are none too clear and which is furthermore suspected of having rather close links with the industries whose expansion is shaped by recommendations for maximum threshold values for the different frequencies of electromagnetic fields.

30. If most governments and safety agencies have merely contented themselves with replicating and adopting the safety recommendations advocated by the ICNIRP, this has essentially been for two reasons:

- in order not to impede the expansion of these new technologies with their promise of economic growth, technological progress and job creation;
- and also because the political decision-makers unfortunately still have little involvement in matters of assessing technological risks for the environment and health.

31. With regard to the frequently inconclusive if not contradictory findings of scientific research and studies on the possible risks of products, medicines or, in this case, electromagnetic fields**,** a number of comparative studies do seem to suggest a fairly strong correlation between the origin of their funding – private or public – and the findings of risk assessments, a manifestly unacceptable situation pointing to conflicts of interest which undermine the integrity, the genuine independence and the objectivity of scientific research.

32. Concerning the assessment of health risks resulting from mobile telephone radio frequencies, for example, in 2006 Swiss researchers from Bern University presented the findings of a systematic analysis of all research results and concluded that there was a strong correlation between how the research was funded and the results obtained: 33% of studies funded by industrial concerns conclude that exposure to mobile telephone radio frequencies has an effect on our organism. That figure rises to over 80% in studies carried out with public funding.

33. Accordingly, in this field and in others, one should call for genuine independence on the part of the expert appraisal agencies and for independent, multidisciplinary and properly balanced expert input. There must no longer be situations where whistle-blowers are discriminated against and renowned scientists with critical opinions are excluded when experts are selected to sit on expert committees or no longer receive funding for their research."

Please remember these words as I progress. It is the harmful biological effects of mobile phones and WiFi radiation with respect to children that we all should be the most concerned about.

From my limited cursory readings of different science journals it seems to me that cross disciplinary studies should be considered by scientists in order to determine at what level wireless radiation waves are safe or not. This might help to standardise the ways of safety evaluation if this were to occur. It would also help to determine whether the recommendations of the ICNIRP could be regarded as universally acceptable as it seems to be in most western countries today.

Part one.

The beginning.

With respect to items one, two and three of this first part that immediately follows, I originally thought I had sufficient evidence to demonstrate that there was a serious problem with radiation emanating from mobile phones, and to a lesser extent, WiFi radiation transmission. I was wrong. This is why I have constructed this wider four-part presentation as you find it today. I have entitled this first part of the extended work:

Three items with respect to Cell Phone Radiofrequency Radiation

1.

National Toxicology Program

Peer Review of the Draft NTP Technical Reports on Cell Phone Radiofrequency Radiation

March 26-28 2018

National Institute of Environmental Health Sciences

Research Triangle Park, NC

Peer-Review Report

https://ntp.niehs.nih.gov/ntp/about_ntp/trpanel/2018/march/peerreview20180328_508.pdf

2.

Video “The truth about mobile phone and wireless radiation” – Dr Devra Davis

The University of Melbourne Lecture

Published on Dec 2, 2015

https://www.youtube.com/watch?v=BwyDCHf5iCY

Note: I have provided you with a guide to the subject types and their time location in this video in reference 1 on page 15 of this document.

3.

Video WiFi Radiation – Dangers of WiFi – See It Measured – How To Remediate WiFi Radiation

https://www.youtube.com/watch?v=ICA19oKPi5I

Note: With respect to item three of this series I acknowledge that this video has been recorded in a domestic home environment. I do not think that this compromises the presenter's argument. He has gone to considerable effort in filming and presenting his viewers what appears to be sound evidence of a potential health threat. I believe that this is strengthened by the information included in items one and two above.

The presenter has filmed the readings of his measuring instruments at every step of the way. He has also provided constructive commentary where he felt it was needed. I also note that the information within this document relating to mobile phone and wireless radiation seems to be at odds with many other on-line commentaries on the same subject.

I proceeded to investigate potential new references and support material. I copied and pasted a segmented over view of the interim WHO 2014 report in section two and commented on different parts of it that I felt needed further clarification or challenging as follows. [It is important that you keep in mind the contents of section one as you read this. You will probably notice the extensive variations between the different lines of thinking with respect to the contents of each of these two sections]

Part Two.

Electromagnetic fields and public health: mobile phones

WHO Report

8 October 2014

Quote:

"Key facts

2. *Mobile phone use is ubiquitous with an estimated 6.9 billion subscriptions globally*
3. *The electromagnetic fields produced by mobile phones are classified by the International Agency for Research on Cancer as possibly carcinogenic to humans.*
4. *Studies are ongoing to more fully assess potential long-term effects of mobile phone use.*

…. *WHO will conduct a formal risk assessment of all studied health outcomes from radiofrequency fields' exposure by 2016. (I italicised)

Mobile or cellular phones are now an integral part of modern telecommunications. In many countries, over half the population use mobile phones and the market is growing rapidly. In 2014, there are an estimated 6.9 billion subscriptions globally. In some parts of the world, mobile phones are the most reliable or the only phones available.

Given the large number of mobile phone users, it is important to investigate, detect and monitor any potential public health impact.

Mobile phones communicate by transmitting radio waves through a network of fixed antennas called base stations. Radiofrequency waves are electromagnetic fields, and unlike ionizing radiation such as X-rays or gamma rays, can neither break chemical bonds nor cause ionization in the human body.

ME: It is the width and strength of the electromagnetic wavebands with respect to this argument that is important to understand. It is the non-thermal biological effects beyond one degree C that causes damage to DNA. This is an atheric biological effect that does damage to skin tissue and body cells. This seems to be rarely discussed in the mainstream literature. It is the lower risk acute thermal effects that seem to dominate the debate. This area of debate is further advanced in section three.

Exposure levels

Mobile phones are low-powered radiofrequency transmitters, operating at frequencies between 450 and 2700 MHz with peak powers in the range of 0.1 to 2 watts. The handset only transmits power when it is turned on. The power (and hence the radiofrequency exposure to a user) falls off rapidly with increasing distance from the handset. A person using a mobile phone 30–40 cm away from their body – for example when text messaging, accessing the Internet, or using a “hands free” device – will therefore have a much lower exposure to radiofrequency fields than someone holding the handset against their head.

In addition to using “hands-free” devices, which keep mobile phones away from the head and body during phone calls, exposure is also reduced by limiting the number and length of calls. Using the phone in areas of good reception also decreases exposure as it allows the phone to transmit at reduced power. The use of commercial devices for reducing radiofrequency field exposure has not been shown to be effective.

Mobile phones are often prohibited in hospitals and on airplanes, as the radiofrequency signals may interfere with certain electro-medical devices and navigation systems.

Are there any health effects?

A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use.

ME: This is probably not the case as my references throughout this paper indicate.

Short-term effects

Tissue heating is the principal mechanism of interaction between radiofrequency energy and the human body. At the frequencies used by mobile phones, most of the energy is absorbed by the skin and other superficial tissues, resulting in negligible temperature rise in the brain or any other organs of the body.

A number of studies have investigated the effects of radiofrequency fields on brain electrical activity, cognitive function, sleep, heart rate and blood pressure in volunteers. To date, research does not suggest any consistent evidence of adverse health effects from exposure to radiofrequency fields at levels below those that cause tissue heating. Further, research has not been able to provide support for a causal relationship between exposure to electromagnetic fields and self-reported symptoms, or "electromagnetic hypersensitivity"".

ME: This reference from the Council of Europe demonstrates that this is not the case, http://assembly.coe.int/nw/xml/Xref/Xref-XML2HTML-en.asp?fileid=13137.

Also what about effects on children, late term unborn babies, people with sensitive skin and animals?

"Long-term effects"

Epidemiological research examining potential long-term risks from radiofrequency exposure has mostly looked for an association between brain tumours and mobile phone use. *However, because many cancers are not detectable until many years after the interactions that led to the tumour, and since mobile phones were not widely used until the early 1990s, epidemiological studies at present can only assess those cancers that become evident within shorter time periods* *. However, results of animal studies consistently show no increased cancer risk for long-term exposure to radiofrequency fields".

2. My italics

ME: It is the longer-term consequences that arguably should be of much greater concern. This is why precautionary principles should apply with respect to wireless radiation danger rather than absolute proof of causation as seems to apply now.

“Several large multinational epidemiological studies have been completed or are continuing, including case-control studies and prospective cohort studies examining a number of health endpoints in adults. The largest retrospective case-control study to date on adults, Interphone, coordinated by the International Agency for Research on Cancer (IARC), was designed to determine whether there are links between use of mobile phones and head and neck cancers in adults.

The international pooled analysis of data gathered from 13 participating countries found no increased risk of glioma or meningioma* with mobile phone *use* of more than 10 years. There are some indications of an increased risk of glioma for those who reported the highest 10% of cumulative hours of cell phone use, although there was no consistent trend of increasing risk with greater duration of use. The researchers concluded that biases and errors limit the strength of these conclusions and prevent a causal interpretation”.

2. Tumour

ME: This seems to have been scientifically demonstrated that this is not the case.

Also, what does ‘*use*’ mean? Does it mean every time a call is made or received when the power input and outgoing radiation is greatest? Or does it include when the phone is switched on (on stand by) as well. If the latter is the case, then the degree of radiation absorbed by the skin of a person (or the thinner skin of a baby) is proportional to the distance between the skin of that individual and the phone that is on an adjacent nearby stand by mode. Causal interpretation for brain cancer has been determined to be around forty years (determined from atomic bomb victims in Japan following WW2). Also the input radiation power is also proportional to the distance between the phone and the transmitting control tower. **It is the cumulative effect of all these variables that determines the degree of risk involved**. This includes the length of time of each phone call as well as an individual exposure to the WiFi radiation from their computer modems.

“Based largely on these data, IARC has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B), a category used when a causal association is considered credible, but when chance, bias or confounding cannot be ruled out with reasonable confidence.

ME: How can this be true when based upon the earlier text?

While an increased risk of brain tumours is not established, the increasing use of mobile phones and the lack of data for mobile phone use over time periods longer than 15 years warrant further research of mobile phone use and brain cancer risk. In particular, with the recent popularity of mobile phone use among younger people, and therefore a potentially longer lifetime of exposure, WHO has promoted further research on this group. Several studies investigating potential health effects in children and adolescents are underway".

Younger people are far more at risk because of their more sensitive skin tissue.

"Exposure limit guidelines"

Radiofrequency exposure limits for mobile phone users are given in terms of Specific Absorption Rate (SAR) – the rate of radiofrequency energy absorption per unit mass of the body. Currently, two international bodies have developed exposure guidelines for workers and for the general public, except patients undergoing medical diagnosis or treatment. These guidelines are based on a detailed assessment of the available scientific evidence.

WHO response

In response to public and governmental concern, WHO established the International Electromagnetic Fields (EMF) Project in 1996 to assess the scientific evidence of possible adverse health effects from electromagnetic fields. WHO will conduct a formal risk assessment of all studied health outcomes from radiofrequency fields exposure by 2016. In addition, and as noted above, the International Agency for Research on carcinogenic potential of radiofrequency fields, as from mobile phones in May 2011.

WHO also identifies and promotes research priorities for radiofrequency fields and health to fill gaps in knowledge through its research agendas.

WHO develops public information materials and promotes dialogue among scientists, governments, industry and the public to raise the level of understanding about potential adverse health risks of mobile phones.

2. International Commission on Non-Ionizing Radiation Protection (ICNIRP). Statement on the "Guidelines for limiting exposure to time-varying electric, magnetic and electromagetic fields (up to 300 GHz)", 2009.

(2) Institute of Electrical and Electronics Engineers (IEEE). IEEE standard for safety levels with respect to human exposure to radio frequency electromagnetic fields, 3 kHz to 300 GHz, IEEE Std C95.1, 2005".

ME: Why were there no Government instrumentalities incorporated is such important international endeavours as well? It is Govt's that must pick up the bills if things go wrong.

https://www.who.int/news-room/fact-sheets/detail/electromagnetic-fields-and-public-health-mobile-phones

What you need to consider with respect to the ICNIRP organisation cited in references one and two shown above:

1] What the ICNIRP is.

2] What the operational guidelins of ICNIRP are.

3] What the Council of Europe thinks about ICNIRP.

4] What might be the most important criticisms of ICNIRP.

Additional complementary information is contained in part three that follows. Also see page 16 in section four (reference two) where I cite further ideas that support this area of discussion.

Part Three

The World Health Organization, radiofrequency radiation and health

This item was originally published in the International Journal of Oncology. It currently appears in The US National Library of Medicine, National Institute of Health. It was first published June 21st 2017. I have little doubt that this authoritative publication is one of the most important reference inclusions in my presentation today. This is why I have treated it as a part unto itself. If you are engaged in the medical profession I feel that you will probably agree with my opinion.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5504984/

Part Four

Various complimentary references and statements relating to parts 1-3

Reference 1.

The truth about mobile phones and wireless radiation.

(Speech by Dr D. Davis. Visiting Professor of Medicine at the Hebrew University, Israel)

Abbreviated points from a video recording at a Melbourne University Lecture 2015. Treat as a guide to contents only! Times shown in relation to the video are approximate.

1. Is an emergent risk. It is a pulse problem. **Is an erratic and irregular pulse that is of greatest concern**. Is biologically important. It is the properties of signals related to power that is critical. When phones ring, the radiation is most powerful and at highest risk. Microwave ovens not at risk. Pulse fluctuations are not the same

2. Skin types determine the radiation intake (absorption). Absorption of small heads is proportionally greater for small children because the power is the same (17 mins).

3. Testicles and groin area are vulnerable if phone is worn in pockets (18 -19 mins). Keep away from abdomen when women near the end of pregnancy. Children at schools are exposed to danger (21 mins). It is the fast growing tissue that is most at risk with children. It is the cumulative impact that do damage. It is difficult to discover and measure because there are no test controls.

4. Wireless radiation conclusively negatively impacts on male sperm, it lowers sperm counts (30 – 32 mins). Discovered in sperm clinics (33 mins). It found to lower testosterone in rats as well as causes DNA damage. Offspring have lower sperm fertility.

5. Relating to breasts keep antenna away from abdomen. Under the antenna is the most important problem area (35 -37 mins).

6. Affects memory of mice, engenders hyperactivity and anxiousness with little fear (38 mins).

7. Contents of earlier related IRAC. RE Radiation research in France 2011 (39 mins).

8. Study shows brain cancer at three times greater risk (40 mins)

9. Brain cancer takes a long time to develop. Japan atomic bomb explosions showed it takes up to 40 years. It is thought that the most at risk are those following heavy exposure after ten years. Even one call per week for six months can have an impact (42 mins).

10. Example is honey bees. Workers do not come back to hive after ten days when phones are left on. It is thought to be related to electromagnetic radiation (45 mins).

11. Test results always tend to vary. The research is not simple because of lack of test controls. For this reason the call for more research can be seen as being like a smoke screen. There should be an interim policy response like to wear head phones (49 mins). There needs to be a standardisation of the types of tests to get more accurate results. It is a serious health problem

Reference 2.

This reference compliments the text in part two entitled “Electromagnetic fields and public health: mobile phones”

Quotes:

1. “What Is WiFi ?

WiFi is a registered trademark owned by the WiFi Alliance. The WiFi Alliance defines WiFi as any wireless local area network (WLAN). By definition definition WiFi does not use any wires it uses radio frequency technology.

Webopedia defines radio-frequency as any frequency within the electromagnetic spectrum associated with radio wave propagation and gives the following analysis of the frequencies that make up the electromagnetic radiation spectrum

Ultra-low frequency (ULF) — 0-3 Hz

Extremely low frequency (ELF) — 3 Hz – 3 kHz

Very low frequency (VLF) — 3kHz – 30 kHz

Low frequency (LF) — 30 kHz – 300 kHz

Medium frequency (MF) — 300 kHz – 3 MHz

High frequency (HF) — 3MHz – 30 MHz

Very high frequency (VHF) — 30 MHz – 300 MHz

Ultra-high frequency (UHF)– 300MHz – 3 GHz

Super high frequency (SHF) — 3GHz – 30 GHz

Extremely high frequency (EHF) — 30GHz – 300 GHz

Power lines operate at 50 to 60 Hz are located in the **extremely low frequency** range, ELF. An FM radio for instance operates in the VHF range, usually between 88 and 110 MHz. Analog TV operates in the 400 – 600MHz range, Digital TV is in the 600 – 1000MHz range. Cell phones operate in the range of 850 to 1900 MHz (0.8-1.9GHz), UHF, depending where you live in the world.

WiFi has a carrier signal in the 2.4 GHz range (which is nearly S HF) with some more recent devices operating in the **5-6 GHz range** AND a digital pulsed signal of **10-250Hz** which penetrates walls, ceilings, floors and not to mention humans.

WiFi radiation is commonly termed **RF (radio frequency) radiation** because it operates within the range 3kHz-300GHz. It is also called microwave radiation. **Microwave radiation** is in fact a subset of RF radiation, it operates in the range 300 MHz to 300 GHz.

Is WiFi More Dangerous Than Cell Phones?

So cell phones and digital TV are operating broadly in the same frequency. The reason why we don't hear any alarming reports about cancer and digital TV usage is probably because your digital TV is not positioned a few centimeters from your head.

But WiFi is operating much higher up the spectrum than these other devices, more energy is in play. Fortunately WiFi modems and transmitters are not held in such close proximity to the human body as cell phones, or are they? Many cell phones also offer a WiFi functionality.

WiFi Pollution Is Non Stop

The biggest problem with WiFi is that the majority of WiFi modem/routers emit radio frequency radiation 24/7. It's pulsed microwave radiation just like cell phones.

You may have a cell phone but is your cell phone switched on all the time? If you have a WiFi router at home this generally operates 7 days a week, 365 days a year. Many people sit in offices completely oblivious to the fact that they are exposing themselves to WiFi radiation"

Source: https://www.electricsense.com/198/is-wifi-safe/

2. Dangers of cumulative effects

Wi-Fi Dangers Made Worse by Cumulative Effect

Wireless routers – as well as Bluetooth and similar wireless systems – give off electromagnetic radiation in the low-gigahertz frequency. This level is considered potentially dangerous to people. And the danger is compounded by several factors:

Just like the wireless signals themselves, the EMFs can pass through walls.

Most routers are not turned off at night, so you are exposed 24/7.

You are not only exposed to EMFs from your own router. Did you ever search for a wireless signal and see not only your wireless network, but also your neighbor's and the one from the business down the street? All of them emit EMFs.

Source: https://www.safespaceprotection.com/emf-health-risks/emf-health-effects/wi-fi-router-dangers/

Reference 3

Guardian article re mobile phone cancer. It's a complicated argument

https://www.theguardian.com/commentisfree/2016/feb/16/the-debate-about-mobile-phones-brain-cancer-and-artificial-electrosmog-its-complicated

Reference 4.

Supporting Videos

4.1 Professor Olle Johannson Dept. of Neuroscience Karolinska Institute Sweden

Infertilité - Prof Olle Johansson – A video entitled "WiFi Irreversible sterility within five generations"

https://www.youtube.com/watch?v=uINs9fofTOg

4.2 Face to Face with Dr. Magda Havas: The title of the video is "The Dangers of Wireless Technology"

https://www.youtube.com/watch?v=dBkb1WbuzvI

4.3Another video presentation featuring Magda Havas entitled "Cell Tower Microwave Radiation"

https://www.youtube.com/watch?v=AEOcB7Svhvw

Reference 5

The politics of the debate.

The advocates saying mobile phones are a health hazard.

5.1 Guardian article 2018
https://www.theguardian.com/technology/2018/jul/14/mobile-phones-cancer-inconvenient-truths

5.2 Supported by the Investigative Fund at The Nation Institute. Author Christopher Ketcham 2010

https://www.gq.com/story/warning-cell-phone-radiation

5.3 US National Library of Medicine 2011

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3184892/

The defenders denying that mobile phones are a health hazard.

5.4 Guardian article 2018

https://www.theguardian.com/technology/2018/jul/21/mobile-phones-are-not-a-health-hazard

5.5 Forbes article 2013

https://www.forbes.com/sites/geoffreykabat/2013/03/10/do-cellphones-cause-brain-cancer-the-conspiracy-theorists-say-yes/#5ae2e5a4645c

5.6 Sydney Morning Herald article 2016

https://www.smh.com.au/opinion/its-undeniable-mobile-phones-are-killing-us-20161124-gswjhy.html

There are numerous others that you may care to choose from to compare on line.

Reference 6.

Introductory words with respect to a diverse range of medical papers associated with mobile phone and WiFi radiation contamination in reference to human beings and animals.

http://wifiinschools.org.uk/resources/Wi-Fi+papers.pdf

Reference 7

References to numerous Studies Showing Adverse Biological Effects From Wi-Fi RadiationSource: http://wifiinschools.org.uk/30.html

The following quotations have been derived from this source

Quote:

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Chaturvedi C.M. et al., 2011. 2.45GHz (CW) microwave irradiation alters circadian organization, spatial memory, DNA structure in the brain cells and blood cell counts of male mice, Mus musculus. Prog Electromag Res B 29: 23-42.

Chou C.K. et al., 1992. Long-term, low-level microwave irradiation of rats. Bioelectromagnetics 13(6): 469–496.

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I see this document as being for the benefit of my two grandchildren and their descendents. It is my hope that the wider public might also identify with the message that I am attempting to convey today. I apologise if any of the links are no longer operative.