



24 October 2019




For the Attention of Torbay Council

Lady Mayor, Counsellors and other honourable members,

Thank you for allowing me to speak this evening.

I would like to draw your attention to the subject of 5G frequency emissions, and its potential adverse health effects on our community in which I've lived for 55 years.

5G technology, which uses the "pulsed millimetre frequency spectrum" has had no adequate or credible long term health testing on anything organic that has life force energy. This, of course, includes human beings, and I urge you to very seriously consider whether you will allow the installation and operation of 5G in our towns until there is further testing, and much more clarity and truth about its consequential health effects on human beings, especially children and the environment including trees, pollinators, animals, birds and insects. There is a massive worldwide resistance to the prospect of exposure to this unprecedented level of debilitating frequency emissions that has never had any finite health assurances from either the providers or from central government.

Other towns in the UK, Glastonbury and Frome, Shepton Mallet have invoked the "Precautionary Principle" and Totnes Council and Kingsbridge Council have opted to declare a "Moratorium". There are also many other UK towns and cities that are currently and imminently deliberating to "press the pause button" in order to first fully understand and comprehend the ramifications of 5G in order to make a  informed decision. It would be commendable, and correct for this  to be proactive by demonstrating a 'duty of environmental care' to your community by at least taking the precautionary route. The subject of 5G has been, and is still a current debate in the "parliamentary halls" due to lack of health assurances, more and more  MPs are expressing their concerns.

At some point in the near future, as a Council, you will be approached by government endorsed contractors to begin the process of 5G hardware and street furniture installation, (they no longer need planning consents or permissions for this work) I suggest and urge you to begin to formulate a policy and a stance for this eventuality, preferably, no to 5G is a good choice for health and wellbeing, especially for our current generations children who are certainly the most at risk from from the effects of this particular type of radiation.

In my own experience so far, the preliminary installation process will not be [REDACTED] with indiscriminate and selective tree felling, as trees inhibit the 5G signal [REDACTED] maybe a compulsory directive for you to upgrade your street lighting and street furniture in order to host 5G urban aerials every 100 metres. You may [REDACTED] be asked to contribute to this cost of installation.

I was appalled to see the recent tree felling in Italy, of avenues of ancient trees in a semi-rural town reduced to stumps to make way for 5G. This is a typical and ongoing procedure worldwide, are you prepared to endorse this?

I would emphatically implore all of you here, who serve the community as their responsible representatives, to be proactive in this matter, and do please look at and read the information folders that I have left for each you.

Please do consult with the residents and listen to their wishes, fears and health concerns, because you as a council have the immediate responsibility for community health and wellbeing, and also the responsibility if you are negligent in not being proactive to address these concerns especially if there are then later consequences to be answered. A number of concerned individuals have collected over thousand signatures of Torbay residents who are very worried and who want to press the pause button.

I am concerned enough to put myself at your disposal to explain 5G further at your leisure, or to arrange a presentation with peer-reviewed evidence and/or expert witnesses on the subject (both medical and scientific) to help you to have a better overview and understanding of 5G in order to make an informed and balanced decision of what this council should do next.

Yours sincerely

[REDACTED]

Julie Harrison

[REDACTED]

Harmful effects of radio frequency radiation are already proven

Even before 5G was proposed, dozens of petitions and appeals[7] by international scientists, including the Freiburger Appeal signed by over 3,000 physicians, called for a halt to the expansion of wireless technology and a moratorium on new base stations.[8]

In 2015, 215 scientists from 41 countries communicated their alarm to the United Nations (UN) and World Health Organization (WHO).[9] They stated that "numerous recent scientific publications have shown that EMF [electromagnetic fields] affects living organisms at levels well below most international and national guidelines". **More than 10,000 peer-reviewed scientific studies demonstrate harm to human health from RF radiation.**[10] [11] **Effects include:**

Alteration of heart rhythm[12]
Altered gene expression[13]
Altered metabolism[14]
Altered stem cell development[15]
Cancers[16]
Cardiovascular disease[17]
Cognitive impairment[18]
DNA damage[19]
Impacts on general well-being[20]
Increased free radicals[21]
Learning and memory deficits[22]
Impaired sperm function and quality[23]
Miscarriage[24]
Neurological damage[25]
Obesity and diabetes[26]
Oxidative stress[27]
Effects in children include autism,[28] attention deficit hyperactivity disorder (ADHD)[29][30] and asthma.[31]

Damage goes well beyond the human race, as there is abundant evidence of harm to diverse plant- and wildlife[32][33] and laboratory animals, including:

Ants[34]
Birds[35][36]
Forests[37]
Frogs[38]
Fruit flies[39]
Honey bees[40]
Insects[41]
Mammals[42]
Mice[43][44]
Plants[45]
Rats[46]
Trees[47]

Negative microbiological effects[48] have also been recorded.

The WHO's International Agency for Research on Cancer (IARC) concluded in 2011 that RF radiation of frequencies 30 kHz - 300 GHz are possibly carcinogenic to humans (Group 2B).[49] However, recent evidence, including the latest studies on cell phone use and brain cancer risks, indicate that **RF radiation is proven carcinogenic to humans[50] and should now be classified as a "Group 1 carcinogen" along with tobacco smoke and asbestos.**

Most contemporary wireless signals are pulse-modulated. Harm is caused by both the high-frequency carrier wave and the low-frequency pulsations.[51]

Information from <https://www.5gspaceappeal.org/the-appeal> and Alliance for Natural Health ANHC[2019] aninternational.org

For full article and full references please see: <https://www.5gspaceappeal.org/the-appeal>

References

- [7] Governments and organizations that ban or warn against wireless technology. Cellular Phone Task Force website. <http://www.cellphonetaskforce.org/governments-and-organizations-that-ban-or-warn-against-wireless-technology/> Accessed June 10, 2018. Continually updated.
- [8] The International Doctors' Appeal (Freiburger Appeal). <http://freiburger-appeal-2012.info/en/home.php?lang=EN>. Published in 2012. Accessed June 10, 2018.
- [9] International appeal: scientists call for protection from non-ionizing electromagnetic field exposure. International EMF Scientist Appeal website. <https://emfscientist.org/index.php/emf-scientist-appeal>. Published May 11, 2015. Accessed June 10, 2018. As of March 2018, 237 EMF scientists from 41 nations had signed the Appeal.
- [10] Glaser Z. Cumulated index to the bibliography of reported biological phenomena (effects) and clinical manifestations attributed to microwave and radio-frequency radiation. report, supplements (no. 1-9). BEMS newsletter (8-1 through 8-64). 1971-1981. <http://www.cellphonetaskforce.org/wp-content/uploads/2018/06/Z-Glaser-index.pdf>. Accessed June 26, 2018. Report and 9 supplements issued by Naval Medical Research Institute, Bethesda, MD, Research Division, Bureau of Medicine & Surgery, Dept. of the Navy, Washington, DC; Electromagnetic Radiation Project Office, Naval Medical Research & Development Command, Bethesda, MD; Naval Surface Weapons Center, Dahlgren, VA; and National Institute for Occupational Safety and Health, Rockville, MD. Index by Julie Moore and Associates, Riverside, CA, 1984. Lt. Zorach Glaser, PhD, catalogued 5,083 studies, books and conference reports for the US Navy through 1981.
- [11] Sage C, Carpenter D, eds. *BioInitiative Report: A Rationale for a Biologically-Based Public Exposure Standard for Electromagnetic Radiation*. Sage Associates; 2012. www.bioinitiative.org. Accessed June 10, 2018. The 1,470-page *BioInitiative Report*, authored by an international group of 29 experts, has reviewed more than 1,800 new studies and is continually updated.
- [12] Gngoriev Y. Bioeffects of modulated electromagnetic fields in the acute experiments (results of Russian research). *Annu Russ Natl Comm Non-Ionising Radiat Protect*. 2004;16-73. <http://berni.org/publications/biological-effects-of-non-ionizing-radiation/78-gngoriev-bioeffects07file.html>. Accessed June 17, 2018.
- [13] Obajulwa AO, Akinyemi AJ, Afolabi OB, et al. Exposure to radio-frequency electromagnetic waves alters acetylcholinesterase gene expression, exploratory and motor coordination-linked behaviour in male rats. *Toxicol Rep*. 2017;4:530-534. <https://www.sciencedirect.com/science/article/pii/S2214750017300633>. Accessed June 17, 2018.
- [14] Volkow ND, Tomasi D, Wang G-I, et al. Effects of cell phone radiofrequency signal exposure on brain glucose metabolism. *JAMA*. 2012;305(8):808-813. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3184892>. Accessed June 17, 2018.
- [15] Eghlidospour M, Ghanbari A, Mortazavi S, Azari H. Effects of radiofrequency exposure emitted from a GSM mobile phone on proliferation, differentiation, and apoptosis of neural stem cells. *Anat Cell Biol*. 2017;50(2):115-123. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5509895>. Accessed June 17, 2018.
- [16] Hardell L, Carlberg C. Mobile phones, cordless phones and the risk for brain tumors. *Int J Oncol*. 2009;35(1):5-17. <https://www.spandidos-publications.com/ijv/35/1/5/download>. Accessed June 17, 2018.
- [17] Bandara P, Wawer L. Cardiovascular disease: Time to identify emerging environmental risk factors. *Eur J Prev Cardiol*. 2017;24(17):1819-1823. <http://journals.sagepub.com/doi/10.1177/2047487317734898>. Accessed June 17, 2018.
- [18] Deshmukh P, et al. Cognitive impairment and neurogenotoxic effects in rats exposed to low-intensity microwave radiation. *Int J Toxicol*. 2015;34(3):284-290. doi: 10.1177/1091581815574348.
- [19] Zohtanslama, Zsanzsuzali M, Lajramdipui M, Jageta GC. Impact of radiofrequency radiation on DNA damage and antioxidants in peripheral blood lymphocytes of humans residing in the vicinity of mobile phone base stations. *Electromagn Biol Med*. 2017;36(3):295-305. doi: 10.1080/15368378.2017.1350584.
- [20] Zwamborn A, Vossen S, van Leersum B, Ouwers M, Mäkelä W. Effects of Global Communication system radiofrequency fields on Well Being and Cognitive Functions of human subjects with and without subjective complaints. *TNO Report FEL-03-C148*. The Hague: TNO Physics and Electronics Laboratory; 2003. http://www.mlieuegeontheed.be/dossiers/gsv/TNO_rapport_Nederland_sept_2003.pdf. Accessed June 16, 2018.
- [21] Havas M. When theory and observation collide: Can non-ionizing radiation cause cancer? *Environ Pollut*. 2017;221:501-505. doi: 10.1016/j.envpol.2016.10.018.
- [22] Narayanan SH, Kumar RS, Potu BK, Nayak S, Malankoti M. Spatial memory performance of Wistar rats exposed to mobile phone. *Clinics*. 2009;64(3):231-234. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2666459>. Accessed June 17, 2018.
- [23] Houston BJ, Nixon B, King BV, De Lids GM, Arltén RU. The effects of radiofrequency electromagnetic radiation on sperm function. *Reproduction*. 2016;152(6):R263-R266. <http://www.reproduction-online.org/content/152/6/R263.long>. Accessed June 17, 2018.
- [24] Han J, Cao Z, Liu X, Zhang W, Zhang S. Effect of early pregnancy electromagnetic field exposure on embryo growth ceasing. *Wei Sheng Yan Jiu*. 2010;39(3):349-52 (in Chinese). <https://www.ncbi.nlm.nih.gov/pubmed/20568468>.
- [25] Salford LG, Brun AE, Eberhardt JL, Malmgren L, Persson BRR. Nerve cell damage in mammalian brain after exposure to microwaves from GSM mobile phones. *Environ Health Perspect*. 2003;111(7):881-883. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241519/pdf/ehp0111-000881.pdf>. Accessed June 17, 2018.
- [26] Mithras S. Evidence that dirty electricity is causing the worldwide epidemics of obesity and diabetes. *Electromagn Biol Med*. 2014;33(1):75-78. doi: 10.3109/15368378.2013.783853.
- [27] Yakymerku I, Tyubidin O, Sidoni E, Henshel D, Krylenko O, Krylenko S. Oxidative mechanisms of biological activity of low-intensity radiofrequency radiation. *Electromagn Biol Med*. 2016;35(2):186-202. doi: 10.3109/15368378.2015.1043557.
- [28] Herbert M, Sage C. Findings in autism (ASD) consistent with electromagnetic fields (EMF) and radiofrequency radiation (RFR). In: Sage C, Carpenter D, eds. *BioInitiative Report: A Rationale for a Biologically-Based Public Exposure Standard for Electromagnetic Radiation*. Sec. 20. Sage Associates; 2012. http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec20_2012_findings_in_Autism.pdf. Accessed June 29, 2018.
- [29] Divan HA, Kheifets L, Obel C, Olsen J. Prenatal and postnatal exposure to cell phone use and behavioral problems in children. *Epidemiology* 2008;19: 523-529. http://www.wfninchools.com/uploads/3/0/4/2/304222/divan_08_prenatal_postnatal.
- [30] Divan HA, Kheifets L, Obel C, Olsen J. Cell phone use and behavioral problems in young children. *J Epidemiol Community Health*. 2010;64(6):524-529. doi: 10.1136/jech.2010.115402. Accessed July 16, 2018.
- [31] Li D-K, Chen H, Odouf R. Maternal exposure to magnetic fields during pregnancy in relation to the risk of asthma in offspring. *Arch Pediatr Adolesc Med*. 2011;165(10):945-950. <https://jamanetwork.com/journals/jama/pediatrics/fullarticle/1107612>. Accessed June 29, 2018.
- [32] Warnke U. Bees, Birds and Mankind: Destroying Nature by 'Electrosmog'. Competence Initiative for the Protection of Humanity, Environment and Democracy; 2009. www.naturalsciences.org/wp-content/uploads/2015/01/kompetenzinitiative-ev_study_bees-birds-and-mankind_04-08_english.pdf. Accessed June 10, 2018.
- [33] Balmori A. Electromagnetic pollution from phone masts. Effects on wildlife. *Pathophysiology*. 2009;16:191-199. doi:10.1016/j.pathophys.2009.01.007. Accessed June 10, 2018.
- [34] Cammaerts MC, Johansson O. Ants can be used as bio-indicators to reveal biological effects of electromagnetic waves from some wireless apparatus. *Electromagn Biol Med*. 2014;33(4):282-288. doi: 10.3109/15368378.2013.817336.
- [35] Broomhall M. Report detailing the exodus of species from the Mt. Nardi area of the Nightcap National Park World Heritage Area during a 15-year period (2000-2015). Report for the United Nations Educational Scientific and Cultural Organization (UNESCO). <https://ehtrust.org/wp-content/uploads/Mt-Nardi-Wildlife-Report-to-UNESCO-FINAL.pdf>. Accessed June 17, 2018.
- [36] Kordas D. Birds and Trees of Northern Greece: Changes since the Advent of 4G Wireless. 2017. <https://emarfnydal.files.wordpress.com/2017/08/kordas-birds-and-trees-of-northern-greece-2017-final.pdf>. Accessed June 29, 2018.
- [37] Waldmann-Selsam C, Balmori-de la Puente A, Breung H, Balmori A. Radiofrequency radiation injures trees around mobile phone base stations. *Sci Total Environ*. 2016;572:554-569. doi: 10.1016/j.scitotenv.2016.08.045.
- [38] Balmori A. Mobile phone mast effects on common frog (*Rana temporaria*) tadpoles: The city turned into a laboratory. *Electromagn Biol Med*. 2010(1-2):31-35. doi: 10.3109/15368378.2013.800102.
- [39] Margantis LH, Mantia AK, Kokkalis KD, et al. *Drosophila* oogenesis as a bio-marker responding to EMF sources. *Electromagn Biol Med*. 2014;33(3):165-189. doi: 10.3109/15368378.2013.800102.
- [40] Kumar NR, Sangwan S, Badotra P. Exposure to cell phone radiations produces biochemical changes in worker honey bees. *Toxicol Int J*. 2011;18(1):70-72. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3052591>. Accessed June 17, 2018.
- [41] Balmori A. Efectos de las radiaciones electromagnéticas de la telefonía móvil sobre los insectos. *Ecosistemas*. 2006;15(1):87-95. <https://www.revistaecosistemas.net/index.php/vecosistemas/articledownload/520495>. Accessed June 17, 2018.
- [42] Balmori A. The incidence of electromagnetic pollution on wild mammals: A new "poison" with a sloweffect on nature? *Environmentalist*. 2010;30(1):90-97. doi: 10.1007/s10669-009-9248-y.
- [43] Magras IN, Xenos D. RF radiation-induced changes in the prenatal development of mice. *Bioelectromagnetics*. 1997;18(6):455-461. http://collectiveactionquebec.com/uploads/0/0/9/7/00976394/eshb10r-g2_magras_mice_study.pdf. Accessed June 17, 2018.
- [44] Oritolovo AA, Osunkalu VO, Oduwale R, et al. Haematological effects of radiofrequency radiation from GSM base stations on four successive generations (F1 - F4) of albino mice, *Mus Musculus*. *J Environ Occup Sci*. 2012;1(1):17-22. <https://www.epmanager.com/mstemp/62/62-1332160631.pdf?1=1532966199>. Accessed June 30, 2018.
- [45] Maggione I. The effect of electromagnetic radiation from the Skrunnda Radio Location Station on *Spodoptera polyrhiza* (L.) Schlieffen cultures. *Sci Total Environ*. 1996;180(1):75-80. doi: 0048-9699(95)04922-3.
- [46] Nitby H, Brna A, Störöblad S, et al. Nonthermal GSM RF and ELF EMF effects upon rat BBB permeability. *Environmentalist*. 2011;31(2):140-148. doi: 10.1007/s10669-011-9307-z.
- [47] Haggerty K. Adverse influence of radio frequency background on trembling aspen seedlings: Preliminary observations. *International Journal of Forestry Research*. 2010. Article ID 836278. <http://downloads.hindawi.com/journals/ijfr/2010/836278.pdf>. Accessed June 17, 2018.
- [48] Taheri M, Mortazavi SM, Moradi M, et al. Evaluation of the effect of radiofrequency radiation emitted from Wi-Fi router and mobile phone simulator on the antibacterial susceptibility of pathogenic bacteria *Listeria monocytogenes* and *Escherichia coli*. *Dose Response*. 2017;15(1):1559325816688527. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5298474>. Accessed June 18, 2018.
- [49] International Agency for Research on Cancer. Non-ionizing radiation, part 2: radiofrequency electromagnetic fields. In: *IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans*. Vol 102. Lyon, France: WHO Press; 2013. <http://monographs.iarc.fr/NOG/Monographs/vol102/mno102.pdf>. Accessed July 2, 2018.
- [50] Carlberg M, Hardell L. Evaluation of mobile phone and cordless phone use and glioma risk using the Bradford Hill viewpoints from 1965 on association and causation. *Biomed Res Int*. 2017;9218486. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5376454>. Accessed June 17, 2018.
- [51] Blackman CF. Evidence for disruption by the modulating signal. In: Sage C, Carpenter D, eds. *BioInitiative Report: A Rationale for a Biologically-Based Public Exposure Standard for Electromagnetic Radiation*. Sec. 15. Sage Associates; 2012. http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec15_2007_Modulation_blackman.pdf. Accessed June 19, 2018. http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec15_2007_Modulation_blackman.pdf. Accessed June 29, 2018.



**Headaches or Migraines? Brain Fog? ADHD?
Memory Loss? Poor Concentration? Dizziness?
Skin Problems? Muscle Aches and Pains?
Depression? Anxiety? Numbness? Tingling?
Tinnitus? Muscle Aches and Pains? Insomnia?
Digestive Issues? Infertility? Asthma?
Heart Palpitations? Light Sensitivity?
Chronic Fatigue? Cancers?
Or other symptoms from unexplained causes?**

**If you or any family member are affected,
be aware that Electro-Magnetic Frequencies
(EMFs) might be to blame.**

- There are medical links between EMF pollution and 'unexplainable' chronic symptoms.
- Over-stimulation by technology, modern processed diets and a sedentary lifestyle are causing adolescents to show dementia-like symptoms.
- Find out the different types of EMF and why you should avoid them.
- People are ignoring this threat - you need to act to halt the roll-out of 5G until independent safety studies conclude safety to all life.

The roll-out of 5G, the fifth generation of telecommunication technology will substantially increase exposure to radiofrequency radiation. Thus, in addition to the urgent need for new guidelines on current exposure, a moratorium on the roll-out of 5G should be implemented.

Dr. Lennart Hardell,
Swedish oncologist with long-term research in this area.

Find out more: Youtube - 5gawareness info@5gawareness.com

5GAwareness.com

Useful Links: takebackyourpower.net saferemr.com awareuk.info ehtrust.org 5gappeal.eu ignir.org phiremedical.org safenotsmart.co.uk inpowermovement.com saveusnow.org.uk 5gexposed.com emfscientist.org powerwatch.org.uk es-uk.info emfsurveys.co.uk