

## 5G 5 FACTS IS 5G SAFE?

1. **RF can cause serious biological effects: cancer, nervous system disruption, reproductive impairment** and many more serious biological effects have been demonstrated from Radiofrequency (RF) Radiation in peer-reviewed publications, below present safety levels
2. **Children are more vulnerable**, as are the elderly, pregnant, infirm and hypersensitive
3. **Animals and plants** can also be affected by RF induced biological damage
4. **No informed consent** to irradiation with RF has been generally given by the public
5. **No Safety Limits** are being used to protect against non-thermal effects in the UK.

**1. Cancer:** RF was classified as a Group 2B Possible Human Carcinogen (IARC/WHO) in 2011. This was based on higher brain tumour rates (glioma and acoustic neuroma - a type of Schwannoma) found in longer term mobile phone users. Since then, the evidence for cancer from RF has elevated.



The US National Toxicology Program (2018) found '**Clear Evidence**' for heart Schwannoma in animals exposed to RF and 'some evidence' of several other cancers including glioma. Compounding this, the Ramazzini Institute found Schwannomas again even though they used lower intensity far-field radiation like that produced by base stations. Together these multiple forms of evidence elevate the carcinogenic status of RF but IARC have not yet reconvened to reclassify it. **Experts are calling for it now to be a Group 1 Known Human Carcinogen like tobacco, asbestos or x-rays**

**2. Children:** suffer higher exposures and are more vulnerable to negative effects due to their smaller size, developing systems, higher number of stem cells and longer time ahead for latent disease.



**3. Animals and Plants:** can be affected by the same processes via the same mechanisms as implicated in human disease. Many of the research findings were determined first using these groups. This adds further damage to the already deeply concerning impact of climate change on the environment.



**4. No informed consent:** is a breach of human rights and the Nuremburg Code (see 5GAppeal.eu from over 200 medical doctors and scientists). The UK population has never been informed of the 1000s of peer-reviewed published scientific papers demonstrating biological damage at non-thermal levels. Perhaps this is because advisory groups tasked specifically to inform the public have conflicts of interest and their published information is usually substantially out of date.



**5. No safety limits:** Current safety limits used in the UK (ICNIRP) are set a million times too high for biological protection. They were set in the 90s to protect only from thermal heating effects and fail to protect from copiously documented, non-thermal effects. Other countries have safety limits orders of magnitude below ours in the UK. Cities in the US, Switzerland, Belgium and Italy are slowing, halting and/or issuing resolutions to halt 5G and wireless towers near homes.



## What can I do?

1. **Educate** yourself with factual independent resources (see opposite). Use this info to:
2. **Raise awareness** in your local community and join PHIRE
3. **If you think you may have symptoms related to RF exposures**, discuss these with your medical doctor. Offer independent resources to educate as it is unlikely they've been trained in this area of health. PHIRE offers free factual, evidence-based advice to medical doctors. Lower your personal exposures (hardwiring of devices and flight mode will help).
4. **Write to your MP** making clear that you do not consent to further involuntary RF radiation polluting your environment.
5. **Get legal advice (if you can):** PHIRE have experts able to give legal testimony .

## What is different about 5G?

RF in our environment has been rising exponentially since the 70s despite credible scientific evidence of harm that precedes this time. This is due to the unprecedented industrial demand for this technology. **Existing RF exposures are already damaging health**, but the voices of global experts in this field have not been heard (**see emfscientist.org Appeal**). For many years these experts have demanded lower safety limits to protect health but this has not been granted in the UK. In order to support faster data transfer of larger volume, **5G uses higher RF frequencies and different modulation, with higher amplitude, rapid data bursts** which are expected to cause even greater cellular damage than noted with previous emissions.

### A Note on Millimetre Waves:

It is currently denied that very high frequency mm waves (30-300GHz) will be used in the UK, however much online literature refers to potential future UK auctions of this part of the spectrum (and 28GHz is sold), so the position is not clear and the public have not been consulted. There is very little literature regarding effects on health of mm waves, but there is evidence of relevant biological harm to humans, animals and plants. This wavelength is **especially damaging to insects including**

**pollinators**. Effects on human **skin, eyes and testes** are of particular concern as mm waves are maximally absorbed superficially. Due to the easy absorption, they cannot penetrate the environment very efficiently, so high intensity emissions will be necessary and a denser network of antennae potentially every few metres to achieve coverage. Trees may also need to be felled to allow better coverage



## INDEPENDENT SCIENTIFIC RESOURCES

[appel-de-paris.com](http://appel-de-paris.com)  
[5gappeal.eu](http://5gappeal.eu)  
[bioinitiative.org](http://bioinitiative.org)  
[ehtrust.org](http://ehtrust.org)  
[emfcall.org](http://emfcall.org)  
[emfscientist.org](http://emfscientist.org)  
[mdsafetech.org](http://mdsafetech.org)  
[orsaa.org](http://orsaa.org)  
[phiremedical.org](http://phiremedical.org)  
[radiationresearch.org](http://radiationresearch.org)  
[saferemr.com](http://saferemr.com)  
[wirelessriskassessment.org](http://wirelessriskassessment.org)

**Thank you for your attention, please take action to protect your health and environment – Physicians' Health Initiative for Radiation and Environment (PHIRE): PHIREmedical.org See website events for 5G medical conference 27<sup>th</sup> - 28<sup>th</sup> Sept 2019**