

My response does not have to be confidential but my name and email should be confidential.

I have just read your Summary of consultation responses from individual and groups with health concerns about 5G mobile and related technologies.

I have spent many years researching EMF's and I wholeheartedly agree with everything which has been said. Particularly in relation to the inadequacies of the ICNIRP guidelines, use of the Precautionary Principle, PHE's catastrophic failure to protect the public from EMF's, conflict of interests of both PHE and Ofcom, monitoring of EMF exposure etc

There is great deal of peer reviewed literature demonstrating adverse biological harm, which I am sure the other respondents have quoted. I will be sending some up to date information to you this week.

I will also be supporting the two upcoming legal challenges in progress at this time.

These recommendations should be considered by Ofcom.

For more detail see link below.

In Summary-

1. All 5G apparatus e.g. masts, small cells and antenna should have warnings stating radio frequency radiation is being emitted.
2. Educate the public in the proper use of a mobile phone and how to minimize RF radiation.
3. Broadcast warnings to the public of health risks of radiation exposures.
4. Schools to be hardwired.
5. Signal strength measurements collected at all wireless facilities as part of commissioning process and this information made publicly accessible.
6. Measurements to be taken by independent contractor.
7. New protocols for pulsed radiation, which is more detrimental to health than continuous radiation.
8. All wireless antenna to be a specified distance away from houses, businesses, schools, hospital etc and should be enforced.
9. Home inspectors to take measurements and keep updated map of RF exposure levels. Availability of RF power intensity on a property to rent or purchase.
10. Introduction of RF radiation free zones.

<http://www.gencourt.state.nh.us/statstudcomm/committees/1474/reports/5G%20final%20report.pdf>

I did not respond to your first consultation as I was unaware of it. But I do know the MHCLG 5G consultation received over 1000 responses from those concerned with health impacts.

I agree with all the other respondents in your 38 page consultation summary, in relation to the health concerns arising from 5G. The fact is PHE fails to protect the public from non ionising radiation and the ICNIRP guidelines are inadequate. This has all been thoroughly documented and supported by numerous scientific studies.

Ofcom must legally listen to public opinion received via the consultation and give adequate consideration to the views of those concerned, including Doctors, Scientists and the public.

Ofcom have a duty enshrined in UK legislation to protect the public from harm arising from EMF exposures including 5G which has not been proven to be safe.

Ofcom should not rely on PHE advice to bypass their own responsibilities. It is up to Ofcom, as a public body to independently ascertain the health consequences of 5G. Ofcom should be reviewing all the scientific evidence and take health advice from a committee of independent scientists and Doctors who understand EMF exposure and its biological effects. Ofcom should not be relying on industry self regulation and monitoring of emissions by the telecommunications industry. Ofcom should be enforcing safety guidelines and an independent contractor should be monitoring emissions, particularly at peak times and making the measurements public. How can the public mitigate against exposures if they do not know the levels and where those exposures are?

There is a growing body of published peer reviewed scientific evidence and it is unclear why Ofcom is clearly ignoring it. Ofcom should be following the example set by the US State of New Hampshire and setting up a Committee to independently review the science and make safety recommendations to protect the public. Other countries take the health of their citizens much more seriously, where the exposure safety limits are set much lower.

I strongly object to the new provisions, following the publication of the consultation, they clearly demonstrate the lack of priority Ofcom is giving to public health and safety. Ofcom are putting their own financial gain and telecommunications companies above public welfare, They are not considering the vulnerable members of society such as children, the sick, unborn foetuses and pregnant women.

The new provisions are basically giving licensees a free reign to exceed guidelines, which are inadequate in the first place. It will allow licensees to emit exposures way beyond anything we have experienced and without fear of enforcement. This is disgraceful. Any breaches of safety limits by mobile operators can take place without any action taken against them. Ofcom freely admit this but will carry on regardless, issuing licences with higher and higher frequencies. Hopefully, at some point redress will happen in the courts.

We are all being cumulatively exposed from conception in the womb, then in our nurseries and schools where youngsters are given ipads and laptops, at our places of work, in hospitals where all are vulnerable, in shops, by Smart technology in homes. Enough is enough.

Ofcom should be asking, why does the insurance industry recognise wireless radiation as an emerging risk, why mobile phone manufacturers (in their legal section) advice to keep the phone away from the body, why Russia has banned distance learning with mobile phones.

If antennas, small cells and masts are erected on land owned by the local authorities (such as lampposts), on school or hospital grounds. They will be responsible for any claims made for illnesses arising from this radiation. As previously stated the major insurers have excluded this cover and additional cover will have to be purchased. Local authorities will be open to legal challenges and may not have the necessary insurance to cover any claims. They are also legally obliged to take health into account despite their National Planning Policy Framework, as health takes precedent.

Ofcom stated-

“At every site, emissions were a small fraction of the levels included in international guidelines. These guidelines are set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The maximum measured at any mobile site was approximately 1.5% of those levels – including signals from other mobile technologies such as 3G and 4G. The highest level from 5G signals specifically was 0.039% of the maximum set out in the international guidelines.”

The maximum level set out by the ICNIRP is: 10,000,000 W/m². This means that the highest level at any 5G mobile site which consists of 3G, 4G & 5G would be 150,000 W/m² and the highest level from 5G signals specifically would be 3,900 W/m². The ‘No Concern / Within Normal Limits’ level for the BB and AMA standards is <1 W/m² and the Extreme Concern / Far Above Normal Limit’ level is 1000 W/m². Therefore, the level for 3-5G at 5G sites is 150,000 fold higher than what is considered normal by the BB and AMA standards. The level for 5G only is 3900 fold higher than what is considered normal by the BB and AMA standards. This is deeply alarming as low level EMR negative biological effects occur in rats at only 1 mW/cm² (cognitive impairment) (Tang et al 2015) and in adolescents at between 2-10 W/cm² (spatial working memory and attention impairment, delayed motor skills) (Meo et al 2018).

Ofcom cannot just avoid their responsibilities by citing PHE advice. Public Health England’s stance is:

“A public body must determine how much weight to put on the PHE guidance. Equally that body must determine what other evidence from your client or other members of the public or interested parties to consider in making any decision. If it be alleged that a public body now or in the future acted unlawfully in placing reliance on the guidance, that cannot retrospectively taint the guidance with illegality.”

Please read the following, published very recently. It would be great if these recommendations could be considered (as a minimum) by the UK Government in order to protect the public.

[US’s State of New Hampshire Commission makes recommendations on 5G and associated electromagnetic radiation](#)

The State of New Hampshire in the US set up a Commission to consider the scientific evidence on health impacts of 5G and related electromagnetic radiation. Its report can be seen here:

<http://www.gencourt.state.nh.us/statstudcomm/committees/1474/reports/5G%20final%20report.pdf>

In the report are the following 15 recommendations.

Here are the 15 recommendations on pages 9 - 17 of the report:

RECOMMENDATION 1 - Propose a resolution of the House to the US Congress and Executive Branch to require the Federal Communication Commission (FCC) to commission an independent review of the current radiofrequency (RF) standards of the electromagnetic radiation in the 300MHz to 300GHz microwave spectrum as well as a health study to assess and recommend mitigation for the health risks associated with the use of cellular communications and data transmittal.....

RECOMMENDATION 2 - Require that the most appropriate agency (agencies) of the State of New Hampshire include links on its (their) website(s) that contain information and warnings about RF-radiation from all sources, but specifically from 5G small cells deployed on public rights-of-way as well as showing the proper use of cell phones to minimize exposure to RF-radiation, with adequate funding granted by the Legislature. In addition, public service announcements on radio, television, print media, and internet should periodically appear, warning of the health risks associated with radiation exposure. Of significant importance are warnings concerning the newborn and young as well as pregnant women.....

RECOMMENDATION 3 - Require every pole or other structure in the public rights-of-way that holds a 5G antenna be labeled indicating RF-radiation being emitted above. This label should be at eye level and legible from nine feet away.....

RECOMMENDATION 4 - Schools and public libraries should migrate from RF wireless connections for computers, laptops, pads, and other devices, to hardwired or optical connections within a five-year period starting when funding becomes available.....

RECOMMENDATION 5 - Signal strength measurements must be collected at all wireless facilities as part of the commissioning process and as mandated by state or municipal ordinances. Measurements are also to be collected when changes are made to the system that might affect its radiation, such as changes in the software controlling it. Signal strength is to be assessed under worst-case 12 conditions in regions surrounding the tower that either are occupied or are accessible to the public, and the results of the data collection effort is to be made available to the public via a website. In the event that the measured power for a wireless facility exceeds radiation thresholds, the municipality is empowered to immediately have the facility taken offline. The measurements are to be carried out by an independent contractor and the cost of the measurements will be borne by the site installer.....

Recommendation 6 - Establish new protocols for performing signal strength measurements in areas around wireless facilities to better evaluate signal characteristics known to be deleterious to human health as has been documented through peer-reviewed research efforts. Those new protocols are to take into account the impulsive nature of high-data-rate radiation that a growing body of evidence shows as having a significantly greater negative impact on human health than does continuous radiation. The protocols will also enable the summative effects of multiple radiation sources to be measured.....

RECOMMENDATION 7 - Require that any new wireless antennae located on a state or municipal right-of-way or on private property be set back from residences, businesses, and schools. This should be enforceable by the municipality during the

permitting process unless the owners of residences, businesses, or school districts waive this restriction.....

RECOMMENDATION 8 - Upgrade the educational offerings by the NH Office of Professional Licensure and Certification (OPLC) for home inspectors to include RF intensity measurements.....

RECOMMENDATION 9 - The State of New Hampshire should begin an effort to measure RF intensities within frequency ranges throughout the state, with the aim of developing and refining a continually updated map of RF exposure levels across the state using data submitted by state-trained home inspectors.....

RECOMMENDATION 10 - Strongly recommend all new cell phones and all other wireless devices sold come equipped with updated software that can stop the phone from radiating when positioned against the body.....

RECOMMENDATION 11 - Promote and adopt a statewide position that would strongly encourage moving forward with the deployment of fiber optic cable connectivity, internal wired connections, and optical wireless to serve all commercial and public properties statewide.....

RECOMMENDATION 12 - Further basic science studies are needed in conjunction with the medical community outlining the characteristics of expressed clinical symptoms related to radio frequency radiation exposure.....

RECOMMENDATION 13 - Recommend the use of exposure warning signs to be posted in commercial and public buildings. In addition, encourage commercial and public buildings, especially healthcare facilities, to establish RF-radiation free zones where employees and visitors can seek refuge from the effects of wireless RF emissions.....

RECOMMENDATION 14 - The State of New Hampshire should engage agencies with appropriate scientific expertise, including ecological knowledge, to develop RF-radiation safety limits that will protect the trees, plants, birds, insects, and pollinators.....

RECOMMENDATION 15 - The State of New Hampshire should engage our Federal Delegation to legislate that under the National Environmental Policy Act (NEPA) the FCC do an environmental impact statement as to the effect on New Hampshire and the country as a whole from the expansion of RF wireless technologies...

Insurance Companies Exclude Illnesses Caused by EMFs from Mobile Phones

Lloyds of London and leading insurers Swiss Re have exclusion clauses for illnesses caused by EMFS.

Lloyds

In 2010, Lloyds published an Emerging Risk Teams Report called "[Electro-magnetic Fields from Mobile Phones: Recent Developments](#)" which identified the need to take a precautionary approach, the need for more research on long term effects from EMFs (particularly on children) and concluded that EMF cases could be more complex than asbestos claims.

On 7 February, 2019, Lloyds added an exclusion clause to their policies:

The clause excludes any compensation for claims:

"directly or indirectly arising out of, resulting from or contributed to by electromagnetic fields, electro-magnetic radiation, electromagnetism, radio waves or noise."

It is important that "radio waves" are explicitly included as they, specifically the microwave zone, are what enable wireless communications devices like cell phones, wi-fi, cordless phones etc.

A [commercial policy holder](#) made an inquiry seeking clarification about the exclusion language, CFC Underwriting LTD in London, the UK agent for Lloyd's, sent the following:

"The Electromagnetic Fields Exclusion (Exclusion 32) is a General Insurance Exclusion and is applied across the market as standard. The purpose of the exclusion is to exclude cover for illnesses caused by continuous long-term non-ionising radiation exposure i.e. through mobile phone usage."

Lloyds is a coalition of insurance companies that buy insurance for themselves so that no company has too much exposure to a large event or disaster (called 'reinsurance'.) [CFC is the British agents of Lloyds](#). "CFC is a specialist insurance provider and a pioneer in emerging risk...Headquartered in London and backed by Lloyds".

In short, anyone who has a mast on their land, their office or school is responsible for any ill health effects caused by it and cannot be insured against any claims. This has huge potential power in terms of influencing those in positions of authority – head teachers, company owners etc about the dangers of 5G technology.

Swiss Re

From the Swiss Re [SONAR 2019: New emerging risk insights](#) report:

"The top five emerging risks in our SONAR 2019 report are digital technology's clash with legacy hardware, potential threats from the spread of 5G mobile networks, increasingly limited fiscal and monetary flexibility by central banks, genetic testing's implications on life insurers, and the impact of climate change on the life and health sector."

From Swiss Re's "[Off the leash – 5G mobile networks](#)":

"To allow for a functional network coverage and increased capacity overall, more antennas will be needed, including acceptance of higher levels of electromagnetic radiation. In some jurisdictions, the rise of threshold values will require legal adaptation. Existing concerns regarding potential negative health effects from electromagnetic fields (EMF) are only likely to increase. An uptick in liability claims could be a potential long-term consequence."