

From: XXX PHE
Sent: 11 January 2018 11:23
To: XXX PHE
Subject: FW: Your email to Public Health England

Hi Team

Please see our response to XXX

PHE

From: XXX PHE
Sent: 11 January 2018 11:22
To: XXX Enquirer
Subject: Your email to Public Health England

Dear XXX Enquirer

Thank you for your further email to Mr Selbie.

PHE does not have anything further to add to the advice we have already provided. However, we will continue to read any messages that you send and we will reply if those messages raise new issues on which we can provide advice.

Yours sincerely,

PHE

From: XXX Enquirer
Sent: 20 December 2017 20:58
To: XXX PHE
Cc: XXX Third Party
Subject: that PHE is unfit for purpose

DECEMBER 20 2017

TO: PUBLIC HEALTH ENGLAND

Dear Mr Selbie,

Thank you for the letter. At the moment the public believes that P H E has thoroughly investigated microwave effects. It believes they pose no threat to children, to their health or cognitive development or genetic stability. If the public came to believe otherwise and that P H E might be actually in breach of its fundamental duty and could be, therefore, an agency "unfit for purpose" - I am sure you would be grieved and eager to rebut the aspersion? In order, therefore, to reassure us and Greenwich Authorities - **who are worried about dangers to children** - could you please answer the following questions?

1) In 2003 Santini and colleagues published research which indicated that mobile phone masts were adversely affecting the health of people living in their proximity and suggested a protection threshold of 300 metres.

www.emrpolicy.org/science/research/docs/santini_ebm_2003.pdf

The research was corroborated by other investigations some of which were also certified as legitimate by the WHO and logged in its data base.

<http://wiredchild.org/component/content/article/46-hidden/77-phone-mast-studies.html>

Could you tell us what P H E has done since 2003 in real world inquiries to verify or discount the evidence of grievous harm from mast transmissions?

2) PHE must be aware of the Glaser catalogue – a library of research documents given to the US by Soviet bloc authorities – in which numerous descriptions of injury from microwave exposure are tabulated?

<http://www.stetzerizer-us.com/research-Naval-Medical-Research-Institute-Outline.html>

Can you assure us that P H E has investigated the Glaser catalogue and established that it can be discounted?

3) PHE must be aware of Project Pandora – an exhaustive inquiry by the US authorities into microwave effects -

http://media.wix.com/ugd/86579e_cd32f0b5b17c4ecf84dc722f1f1a18e5.pdf

We would be grateful, if you could share with us your reasons for discounting the view reached by US experts that

“Subjects exposed to microwave radiation exhibited a variety of neurasthenic disorders against a background of angiodystonia (abnormal changes in tonicity of the blood vessels). The most common subjective complaints were headache, fatigue, perspiring, dizziness, menstrual disorders, irritability, agitation, tension, drowsiness, sleeplessness, depression, anxiety, forgetfulness, a lack of concentration.”

4) I have referred Greenwich Authorities to the work of xxxxxxxxxxxxxxxx, formerly of Imperial College. We believe you must be aware of the evidence presented by the Professor of grievous harms from microwave irradiation and - in the paper referenced below - of dangers in particular from smart meters -

http://www.foodsmatter.com/es/dect_smart_meters/articles/smart_meters_autism_2011_goldsworthy.pdf

What is most alarming from xxxxxxxxxxxxxxxx's analysis is the obvious risk both to sanity and to genetic integrity implied by microwave penetration of cells. Could you please share your evaluation of the paper above – and show us your proofs that smart meter irradiation is safe?

If you recall the Stewart reports (200-2005) recommended that the Authorities be proactive in meeting valid public concerns about microwave exposure. Since these official reports have not been rescinded, we would be grateful for a substantive response to the questions posed above.

Sincerely

XXX

Dear XXX

Thank you for your emails of 27 November and 13 December.

I have attached our letter to you that was sent on 15 May, which covers the issues raised. PHE continues to keep new emerging technology under review, and remains committed to updating and revising its advice as and when necessary.

I hope you find this information helpful.

Yours Sincerely

PHE

From: XXX Enquirer

Sent: 13 December 2017 14:47

To: XXX PHE

Cc: XXX Third Party

Subject: cell phone effects - progress

December 13 2017

XXX

<http://www.collective-evolution.com/2015/09/11/new-study-reveals-what-15-minutes-on-your-cell-phone-actually-does-to-your-brain/>

Dear XXX + Politicians representing the people of Greenwich - please spare me 2 minutes to read the article above. Now the other day I was on the DLR and throughout the journey beside me a mother was holding up a smart phone to her toddler's face. She didn't know she was harming her baby by subjecting it to radiation or that because of phone gawking large numbers of children are now suffering damage to eyesight. I warned the mother out of pity for the child.

I believe this little story concerns all of you - as humans if not as politicians. Parents like this lady need to be informed through public agencies of the risks to their children from using microwave devices. PHE's warnings regarding psychiatric damage need to be publicized and acted upon by the NHS, schools and nurseries. The arguments for precaution found in the Stewart Report and the Council of Europe/EU Parliament resolution (2011) need to be recalled and acted upon – before the situation is made much worse by the 5G roll-out. PHE - I am sorry to say, Public Health England, is an organization "not fit for purpose".

Could I bring to your attentions events elsewhere where progress is occurring – in California where the Authorities are now publishing guidance about dangers from cell phones + how to use them to minimize risk.

<http://www.sfchronicle.com/file/198/6/1986-Cell%20Phones%201-26-15.pdf>

<https://www.ewg.org/enviroblog/2017/03/california-cautions-cell-phone-users-keep-your-distance#.WjErKHnLjcs>

and in France where the law is being changed to limit the use of phones by school children.

<http://www.independent.co.uk/news/world/europe/france-school-mobile-phone-ban-use-smartphones-students-study-learn-class-a8105856.html>

Could I appeal to you all again to use the power you have to help protect children and everyone else from danger? One can only wonder why all of you are so timid and frightened to speak up for the People? When you are ready, I remain always willing to talk to you and share knowledge.

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Enquirer

<http://www.collective-evolution.com/2015/09/11/new-study-reveals-what-15-minutes-on-your-cell-phone-actually-does-to-your-brain/>

From: XXX PHE

Sent: 11 January 2018 16:27

To: XXX Enquirer

Cc: XXX Third Party

Subject: RE: that PHE is unfit for purpose

Hi XXX

This letter was sent to us via email on the 20th December, I have attached the response that was sent today.

Kind Regards

PHE

From: XXX Enquirer

Sent: 11 January 2018 16:15

To: XXX PHE

Cc: XXX Third Party

Subject: RE: that PHE is unfit for purpose

Please find attached a scanned copy of the letter sent by email in December 2017 for your file. This has been received in the Chief Executive's office today.

Thank you. With best wishes

XXX PHE

From: XXX PHE

Sent: 02 January 2018 09:18

To: XXX PHE

Cc: XXX PHE

Subject: RE: that PHE is unfit for purpose We don't have anything new to add, but please continue to copy us in to any of XXX's correspondence.

Best Regards,

PHE

From: XXX PHE

Sent: 29 December 2017 10:19

To: XXX PHE

Cc: XXX PHE

Subject: RE: that PHE is unfit for purpose

Hi Team,

As requested I've attached our last reply to XXX. Do you have anything to add to his latest correspondence.

XXX – I'm copying you in for information as the email is addressed to Duncan.

Kind regards,

PHE

From: XXX Enquirer

Sent: 20 December 2017 20:58

To: XXX PHE

Cc: XXX Third Party

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DECEMBER 20 2017

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Sincerely

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<http://www.collective-evolution.com/2015/09/11/new-study-reveals-what-15-minutes-on-your-cell-phone-actually-does-to-your-brain/>

2018

From: XXX PHE

Sent: 06 November 2018 13:38

To: XXX PHE

Subject: 5G networks

Dear XXX,

Thank you for seeking our assistance in dealing with this e-mail.

Having reviewed the correspondence we have nothing further to add as some of the questions are rhetorical and others have already been answered in the briefing summaries sent previously (attached here for clarity).

I assume these have already been sent to the enquirer, in which case a simple reply is suggested stating that PHE has been consulted and it stands by its position. It will continue to monitor the scientific evidence on this subject and will issue new advice when necessary to do so.

Kind regards,

PHE

From: XXX Scottish Government

Sent: 05 November 2018 11:50

To: XXX PHE

Subject: 5G networks

Hi,

You very helpfully supplied some information for a letter I was responding to on the effects of 5G networks and I was hoping you could provide some further advice on answering the below query from the same correspondent:

'The Stewart Report stipulated a requirement upon telecoms to minimize power density to levels necessary to ensure workable connections, no such requirement is now mentioned and so discipline is removed entirely from the industry and they can do what they like as cheaply as they like.

The PHE statement says 'While a small increase in overall exposure to radio waves is possible when 5G is added to the existing network, the overall exposure is expected to remain low. Shouldn't PHE be more precise and quantify more exactly what the increase of EMF exposure will amount to? As PHE knows, EMF exposure from cell towers, wi-fi, smart meters, DECT phones etc. is already billions of times in excess of natural levels, so 10s +100s times more electrical traffic would, of course, correspond to "a small increase" relatively?

EU Parliament Resolution 1815 recommended the goal of reducing public living space electrification to 0.2 volts per meter. What exposure levels can we expect when 5G transmitters are everywhere? Shouldn't PHE provide to the public its scientific assessments of the compound effects of 5G frequency exposure added to current telephony traffic, wi-fi, smart meters. DECT phone + other EMF sources?

Shouldn't PHE reassure everyone that it is monitoring conceivable adverse effects from current microwave exposures and has discounted that the mental health crisis affecting especially children + young people, that the male fertility crisis now with us, that the Autism crisis also escalating and that the numerous new mystery diseases emerging are not all related to RF/MW inundation + penetration either by direct causation or by synergy with other contaminants? Could we see some document of proof of monitoring and of proofs excluding microwave detriments at below thermal levels?

Further to give reassurance to the public, shouldn't PHE experts declare what percentage of the total available scientific research on RF/MW effects it has studied?

For example, the Glaser catalogue (<https://ehtrust.org/wp-content/uploads/Naval-MRIGlaser-Report-1976.pdf>) contains several thousand research documents concerned

mainly with adverse effects from microwave radiation below the thermal threshold considered by ICNIRP. Shouldn't PHE experts state whether they have or have not studied the Glaser catalogue?

As you will know the EU Parliament on September 2nd 2008 declared that: "the limits on exposure to electromagnetic fields [0Hz to 30 GHz] which have been set for the general public are obsolete" and that "the existing standards do not address the issue of vulnerable groups, such as pregnant women, newborn babies and children?.

People everywhere are likely to be shocked to find out that ICNIRP/PHE safety thresholds don't cover children. The conceivable danger to pregnant women, babies and children must arouse extreme concern and deserves far more than this completely inadequate statement and signs in their eyes unfortunately.

The correspondent has also written to PHE on this matter and I am conscious of not saying anything that might be contradictory.

Thanks

XXX



PHE 5G Lines 17
April 2018CIn.pdf



PHE RF Advice
Summary 28 Feb 201

From: XXX PHE

Sent: 23 October 2018 10:26

To: XXX PHE

Subject: Enquiry on 5G

Dear colleagues,

Please could you respond to the above enquiry in the first instance, as the nature of some of the questions are about PHE's responsibility for health.

Our suggested reply for the EMF aspect of the enquiry is as follows:

[Public Health England (PHE) advises the UK Government on the public health aspects of exposure to electromagnetic fields (EMFs) including those associated with radio waves, used in telecommunications and other radio transmitters in the environment. In relation to the implementation of the 5th generation (5G) of cellular mobile communications, please find attached a briefing note which summarises our position on the subject. A summary of PHE advice on EMFs is also available at:

<https://www.gov.uk/government/collections/electromagnetic-fields>

Questions about the rollout of 5G technology across the UK are best directed to the Department for Digital, Culture, Media & Sport (DCMS).]

Thank you

Best Regards

PHE



PHE 5G Lines 17
April 2018CIn.pdf

To whom it may concern

I hope you can answer my questions I am concerned about 5G technology. Please share with me the studies you have done relating to the long term effects of 5G technology on the human being. I have been researching your website and can not find reference to any of these studies?

Who is responsible for allowing this to be rolled out in the UK?

Most importantly what makes it more important to roll this out than to give people a choice? As I am a human being I should have a choice as to how much emf I am forced to have... both in the work place and at home. You are making both my home and work place unsafe and hazardous to my wellbeing therefore How do I opt out from being bombarded by this technology?

Have you considered that many people will suffer as a result of this technology?

Which studies have you looked into of all of the following studies that you have chosen to ignore? On what grounds have you ignored this research? On what grounds do you assume to know the safety levels of 5G technology on humans? Please Show me your evidence and your extensive studies proving it is not harmful to human health in the long term and how you came to this conclusion?

I would like to know who created public health England? Is it funded by the EU? Who is responsible for the 5G funding and which companies and agencies are being paid for this?

<https://drive.google.com/file/d/0B14R6QNkmaXueIFrNWRQcThNV0U/view>

I look forward to your prompt and detailed reply

Best Regards

XXX

From: XXX PHE

Sent: 01 May 2018 13:47

To: XXX Council

Subject: RE: 5G in Greenwich

Dear XXX

Public Health England (PHE) advises the UK Government on the public health aspects of exposure to radio waves, including those from mobile phone base stations and other radio transmitters in the environment.

PHE's advice about exposure to radio waves can be accessed in the following link:

<https://www.gov.uk/government/collections/electromagnetic-fields#radio-waves>

In relation to the implementation of 5G user devices and networks, this technology is at an early stage and reflects the latest evolution in mobile communications technology. Current technical standards that draw on the International Commission on Non-Ionizing Radiation Protection (ICNIRP) exposure guidelines will apply to the products that are developed.

Further information about the position of PHE and other authoritative bodies on exposures to radiofrequency radiation can be found in the attached advice summary document. I believe this answers the central points raised in the letter from Mr Rowland.

PHE is committed to monitoring the evidence applicable to this and other radio technologies, and to revising its advice, should that be necessary.

I hope this information is helpful.

Best Regards

PHE

-----Original Message-----

From: XXX PHE

Sent: 12 April 2018 21:02

To: XXX Council

Cc: XXX PHE

Subject: 5G in Greenwich

Please see attached letter. I've also pasted it below in case you can't open it.

Thank you.

Sincerely,

XXX

5G Deployment in The Royal Borough of Greenwich

The issue:

I have become aware that The Royal Borough of Greenwich, in the guise of Digital Greenwich, have formed a partnership with Surrey University to develop 5G technology and its implementation, to help speed us into a, brave new, connected world.

Below I present two areas of concern in relation to 5G technology, concerns which I don't believe Greenwich Council has considered and definitely not with public consultation. Certainly my MP appears oblivious to the issues, as I have asked him. 5G is more than just an upgraded 4G and I fear we are sleep walking into a dangerous situation from which it will be impossible to extricate ourselves. Remember, no one will have a choice to opt out, to not take part. We will all be exposed, 24/7, in our homes, at work, in the street and even in the countryside.

Danger to Health:

The exposure limits (Specific Absorption Rates, SARs) and precautions relating to microwave fields were derived some years ago using inadequate methodologies. Only the heating effects of this non-ionising form of radiation, were tested. The resonant and other biological interactions were ignored. Also most tests have been performed using constant frequency fields, rather than the significantly more virulent, pulsed, shaped and mixed waveforms used in telecommunication practice. No long term studies of the biological effects have been performed to inform legislation. Something to note is that mobile/cell phone instruction manuals warn us not to carry or use the device closer than 1.5cm to the body due to RF radiation effects.

The international bio-medical research community has made it quite clear that radio frequency radiation, and specifically cellular/mobile microwave radiation, can harm people in many ways. Most recently the National Institutes of Health linked cellular microwave radiation to brain cancer (glioma) which is usually fatal, and to a nerve cancer (schwannoma) that can be fatal. That is, the scientific evidence suggests that we must treat radio frequency radiation, and in particular microwave radiation, not only as dangerous to health generally, but also as a POTENTIAL CARCINOGEN (a category shared with DDT).

Reference: http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf

In fact micro wave radiation has already been weaponised by the US military:

https://en.wikipedia.org/wiki/Active_Denial_System

Consider this:

If you don't believe that cellular microwave radiation is harmful, then I ask you to consider these questions:

On which sources of information are you relying for assurances of safety? Do those sources have extensive backgrounds in the biological effects of radio frequency radiation? Are those sources free from vested interests in the communications industry?

Are those sources more authoritative on health issues than the International Agency for Research on Cancer of the World Health Organization? That organization linked radio frequency radiation, and in

particular cellular microwave radiation to cancer, back in 2011.

Are those sources more authoritative on health issues than the National Toxicology Program (NTP) at the National Institutes of Health? The NTP confirmed the link of radio frequency radiation, and in particular cellular microwave radiation, to cancer, in 2016 and to DNA damage more broadly in 2017. These findings are the result of the largest study (\$25 million) that the NTP has ever conducted of any toxin.

Are you aware of the scientific research literature that connects radio frequency radiation to biological effects, that has been funded by impartial sources?

If your answer to the last question above is "No", there are some references here to help with your research.

For an excellent online overview of the impact of wireless technology on health, please see the web site of the Environmental Health Trust (<https://ehtrust.org/>). This organization is led by XXX who has had a distinguished career of public service in support of public health. XXX was a member of the United Nations Intergovernmental Panel on Climate Change that was named a joint recipient of the Nobel Prize for Peace in 2007.

The Bio-initiative Report updated in 2012, prepared by 29 authors from ten countries, reviewed 1800 studies and conclude, "EMF and RFR are preventable toxic exposures. We have the knowledge and means to save global populations from multi-generational adverse health consequences by reducing both ELF and RFR exposures. Proactive and immediate measures to reduce unnecessary EMF exposures will lower disease burden and rates of premature death."

The International EMF Scientist Appeal is evidence of growing concern among EMF experts world-wide. This Appeal is currently signed by 225 scientists in 41 nations of the world. All of them have conducted EMF studies published in peer-reviewed scientific journals that reported biological and adverse health effects caused by human-made sources of EMF. The combination of these reported findings lends credibility to the Appeal's strong recommendation for review of the current EMF exposure guidelines set by the FCC, as these guidelines are considered to be obsolete and inadequate to protect human health and the environment.

https://www.irseco.com/wp-content/uploads/2017-08_EU_5G_Appeal_10_August_2017.pdf?c=cf13ce20305c

Environmental Health:

The 5G frequency band stretches up to 300GHz, this corresponds to a 1 millimeter wave length. Such short wave lengths are not only biologically problematic, but also require line of sight antenna placement. This issue is discussed in the Surrey University, white paper: "Meeting the Challenge of "Universal" Coverage, Reach and Reliability in the Coming 5G Era"

A solution is to mount the antennas 25m above ground level and they need to be placed every 100-300 meters apart (The National Infrastructure Commission). However even if the antennas are mounted this high, in practice, trees are likely to remain a significant obstacle to signal transmission. The inference we can reasonably make is that given the cost of high antenna towers and the prevalence of mature trees in many parts of Greenwich, there will be a widespread tree felling programme to deal with the issue.

Humans are not the only ones to be harmed by microwave radiation. Wildlife is also be affected, including the already beleaguered, honey bee, <https://ieeexplore.ieee.org/document/6625032/>
And other animals: <https://www.sciencedirect.com/science/article/pii/S0928468009000030>

Conclusion:

Given the situation as outlined here, I believe it is Greenwich Council's responsibility to carry out due diligence in relation to human and environmental safety before proceeding any further with the

deployment of 5G technology. To neglect this duty of care could be construed as gross negligence and the responsibility for any future harm caused to its residents or the environment, would lay at the door of Greenwich Council. Further, I request that Greenwich council carry out a public consultation exercise in order to apprise its residents of the human health, environmental health and civil liberties implications of 5G technology, in order that we can make a fully informed decision as to whether to proceed with its deployment or not.

XXX 12.04.2018.



PHE RF Advice
Summary 28 Feb 201

From: XXX PHE

Sent: 30 July 2018 09:33

To: XXX PHE

Subject: FW: Are ICNIRP 5G Guidelines Faulty?

Please file this correspondence, which seems to have gone to various people involved with ICNIRP.

It includes a letter from XXX (member of public) to his MP, XXX, which must have been sent prior to 25th May 2018, the date when XXX subsequently wrote to the Minister passing on SH's concerns. The Minister's reply is also included and draws on "standard" PHE lines. The correspondence does not appear to have been seen in XXX

I have checked through the email below and do not intend to reply or take any further action. The email expresses disagreement with the position of official bodies, and collates dissenting voices, but it does not contain evidence of which PHE is unaware and which might change PHE's advice.

PHE

From: XXX Enquirer

Sent: 27 July 2018 17:25

To: XXX PHE

Cc: XXX Third Party

Subject: Are ICNIRP 5G Guidelines Faulty?

Dear ICNIRP Members

I am writing to you collectively as, having written to the Department of Health & Social Care regarding the dangers of 5G, it seems that they are completely reliant on... 'complying with the ICNIRP guidelines' (*see letter*) such that I felt it necessary to contact you, the 'experts,' direct, in the hope I might at least pose a few questions.

You will see from the attached letter to my MP, that I appended various links from suitably qualified scientists, doctors and researchers plus those of the Global Research Council and others (*see links*) who warn about the hazards of 5G yet, according to our Government, the ICNIRP would appear to be endorsing it as being 'safe.' So, is this right and are all the others wrong? Do you at the ICNIRP hold information and data that 230 scientists from 40 countries do not have access to? What alone qualifies you to be issuing 'guidelines' informing the UK Government (incidentally which is made up of elected officials who themselves are likely acting out of complete ignorance of 5G) that it's safe to rush ahead with chopping down millions of trees (Network Rail UK alone to cull 11 Million trees) to accommodate the roll-out of 5G in 2020, if so many of your peers in the scientific community and others are warning against its potential dangers? With our current wireless telecoms technology alone, there has already been an explosion in: cancers, Alzheimer's, Parkinson's, fibromyalgia, daily headaches, brain tumours, insomnia, ES/EHS, multiple sclerosis, high blood pressure, forgetfulness, birth defects, nausea, oxidative stress...all of which can be traced back to being due to our increasing use of wireless devices/towers leading to an overall atmospheric increase in EMF (electrosmog). One doesn't need to be a scientist to imagine what horrors are waiting to be unleashed with 5G technology which is so much more powerful, and with its origins in wave warfare, it should come as no surprise that it has already been used in South Korea to shoot wild boar and ward off other 'pests.' One can only hazard a guess as to how long it would take before governments weaponised it again for use on their own civilian populations! Then there's the quality of life and our right to live safely in our homes without being irradiated and monitored 24 hours a day via modified, ugly-looking lamp-posts-cum antennae situated every 30 yards or so down our streets, replacing lush green trees.

As far as I see it, the politicians we vote in power to serve our best interests are drastically failing to do just that, if they are happy to give 5G the green light when there's so much contraindication as to its long-term safety to ourselves and our planet – effectively a shoot first and ask questions later policy. Also, nothing about 5G ever gets discussed, debated or presented to an unsuspecting public via our lapdog mainstream media (one might say, for obvious reasons). People are instead being told to visit their doctor if they suffer from 'EMF hypersensitivity' as if they were some weird mutant breed when compared to the rest of the species (see letter from PHE): after a 5G onslaught, would there be anyone left who, after being irradiated 24 hours a day with microwave technology, would not be adversely affected in some way?

In conclusion, it is dangerous to pretend that 5G does not hold a threat to us all, and the only real safe 'scientific' (common sense?) option we can take under these circumstances, is to call for a moratorium on its development immediately. I have copied my letter to the Global Research Council for their information and to various others, and would strongly encourage all ICNIRP members to heed the warnings of their many scientific colleagues around the world, and to withdraw their support for 5G and perhaps compromise more on improving and making safer the technology that we already have.

Yours faithfully

XXX

https://emfscientist.org/images/docs/keyw_topics/EMFscientist_Appeal_keywords_and_topics.pdf

<https://emfscientist.org/index.php/emf-scientist-appeal>

<https://emfscientist.org/index.php/emfscientist-about-us>
<https://emfscientist.org/index.php/science-policy/expert-emf-scientist-quotations>
<https://www.globalresearch.ca/contact-2>



IMG_20180721_000
2.pdf



IMG_20180721_000
1.pdf



From: XXX PHE

Sent: 06 November 2018 16:07

To: XXX PHE

Subject: Fwd: Growing avalanche of worldwide awariness in the area of EMF and human health

Dear both,

For information, please find below the latest correspondence which does not require a response.

Best wishes,

PHE

From: XXX Enquirer

Date: 6 November 2018 at 15:30:56 GMT

To: XXX PHE

Cc: XXX Third Party

Subject: RE: Growing avalanche of worldwide awariness in the area of EMF and human health

Hello XXX

Many thanks for always replying so promptly – even though I cannot accept your responses, as I am sure you can no doubt clearly follow from our dialogues together.

We are almost old friends now ! And whilst we completely disagree with each other on this vital topic of human health – it is important I always feel to conduct our dialogues with courtesy and respect – and I have no doubt you would agree as you have always been very courteous and polite to me and I very much appreciate that.

I have absolutely no doubt over the coming years PHE and the British Government will change their stance. I could be wrong but I doubt it.

Many things are changing fast in society and this is likely to be part of the changes – of course I could be entirely wrong I am open to that.

It is possible though that PHE and the government will not be able to hold back the waves of the ocean of awareness growing throughout the world, any more than King Canute could hold his waves back. Then they are likely to follow the lead of so many other countries and fall in line and be persuaded by the fact.

No doubt a large amount of freedom of information requests will ensue, through this tidal wave of awareness to come, and if the government and its related ngos do not change, court cases on the grounds of the Nuremberg Treaty and possible EU law might follow, here, as they have in other countries perhaps.

And the court cases have been successful and the courts have found in favour of the facts – as I outlined in my earlier email.

People will not be lambs to the slaughter most likely – and lambs to the slaughter they would otherwise be if Barrie Trower, the former microwave weapons expert is correct – and I fear he is likely to be correct, as he has spent nearly his whole life in the study of this unique subject, and has been well educated in it by the British Navy. I find it difficult to believe he is either a fraudster or delusional . But this action must and should be all within the law and should and must be part of democratic due process. After all we live in a participatory democracy not in a banana republic or a dictatorship .

The reasons why the government and PHE are at variance with the growing scientific consensus might also come under the microscope through this due process, and If as I suspect 5G is proved to be highly detrimental to human health in the ways the former British navy weapons expert (not me) outlines – it will be very, very, very embarrassing for the politicians and their ngo supporters who persist in an the opposite view – for them to have all their clothes removed in public so to speak – if their stance is shown to be utterly misguided and not protective of human health. The public will not be impressed no doubt.

If I am proved entirely wrong by scientific data and truth and your stance is proved right – I will eat all my words .

But at the moment 40 scientists from 200 countries – like Israel and many others now – and xxxxxxxx, and xxxxxxxxxxxx former US Government advisor, and xxxxxxxxxxxx, who gave evidence in a hearing in the US, and countless others much more qualified than I, seem to confirm one's very deepest concerns.

What amazes me is that the politicians and their advisers who take a contrary stance are not on another planet – they live here with us – are also human beings. They will be subject to the effects of 5G too – and why they do not see that is slightly incredible to me.

But there are many crazy things going on this world of course. No doubt you think I am crazy myself – but I fear you will be proved utterly wrong.

With kindest regards and best wishes

XXX

From: XXX PHE

Sent: 06 November 2018 14:28

To: XXX Enquirer

Cc: XXX Third Party

Subject: RE: Growing avalanche of worldwide awarness in the area of EMF and human health

Dear XXX,

Thank you for your email, the questions in your email have been previously responded to in emails from myself and colleagues at PHE. I would refer you to our previous correspondence which detail the advice on this matter from PHE. If you have further questions for PHE please email PHE.enquiries (copied in) at PHE.Enquiries@PHE.gov.uk

Best wishes,

PHE

From: XXX Enquirer

Sent: 05 November 2018 12:03

To: XXX PHE

Cc: XXX Third Party

Subject: RE: Growing avalanche of worldwide awarness in the area of EMF and human health

Hello XXX

I am aware you want cover off my objection with a vague statement – but if your remit is to protect my health and that of all others in the UK – then I am questioning your position in line with the clear guidance of the Council of Europe in relation to ICNIRP.

You have written to me that you accept ICNIRP, as does Wokingham Borough Council, perhaps under your influence I would imagine, and you said you see no current basis to question ICNIRP.

That is your current view I think ?

That is clearly completely at variance to the Council of Europe on this subject isn't it, as I understand it – correct me if I am wrong - they who have clearly issued a directive saying you cannot rely on ICNIRP – saying that is too limited. Again please correct me if I am wrong about any of this.

Now this is a very specific thing and if you are waiting for “when necessary to do so” the train has already arrived at the platform so to speak – as far as I can see - and “it is necessary to do so” according to the Council of Europe itself.

So I would ask you again to explain to me the science for your stance and I would like to ask you again so that I can clearly grasp it – what exactly is the remit of PHE in the UK ?

I ask this second question as I want to know the exact constitutional and legal position of PHE in connection with the structure of our parliamentary democracy and its organs of state - and why Wokingham Borough Council defers to you in this subject.

Look forward to your reply and kindest regards

XXX

From: XXX PHE

Sent: 05 November 2018 11:45

To: XXX Enquirer

Cc: XXX Third Party

Subject: RE: Growing avalanche of worldwide awariness in the area of EMF and human health

Dear XXX,

Thank you for your email; as previously explained Public Health England will continue to monitor the scientific evidence on this subject and will issue new advice when necessary to do so.

Best wishes,

PHE

From: XXX Enquirer

Sent: 02 November 2018 11:06

To: XXX PHE

Cc XXX Third Party

Subject: RE: Growing avalanche of worldwide awariness in the area of EMF and human health

Dear XXX

Very many thanks for your email.

You identified the problem exactly. The PHE stance is to accept ICNIRP isn't it - in summary ?
Correct me if I am wrong.

The Council of Europe Resolution apparently calls for relevant governments to:

"Reconsider the scientific basis for the present standards on exposure to electromagnetic fields set by the

International Commission on NonIonising Radiation Protection, which have serious limitations, and apply

ALARA principles, covering both thermal effects and the athermic or biological effects of electromagnetic

emissions or radiation." "For children in general, and particularly in schools and classrooms, give preference to wired Internet

connections, and strictly regulate the use of mobile phones by schoolchildren on school premises."

Whilst you might want to ignore me is it wise for PHE to ignore the Council of Europe's advice to governments – and also to not take account of the legal cases in other countries mentioned below – where the courts have found that there is causality between cell phone radiation and cancer.

Are you saying the Council of Europe's evidence and the evidence used in the law courts in other countries is wrong, flawed, or are only just views and opinions and not stances based on scientific data and fact ?

And that for example Israel is wrong to prohibit wifi in schools where the children are under 7 years of age - and are you saying that the authorities in Berkeley, USA, are misguided in warning very explicitly their citizens about mobile phone radiation ?

And that PHE has it right but all the other countries listed in the email below are all wrong and have got the science wrong too ?

And are you saying XXX a former British state employee is misguided and that those are just views and opinions he is expressing? I cannot speak for him of course – but likely he would say that what he points out is not a matter of opinion or view but of the facts of science.

Maybe you could consult him and establish if what I surmise is correct or false.

What I have written up for you are not my views of course – I am not a qualified scientist. But I am inclined to think the evidence points to the Council of Europe, Israel, Berkeley USA, and all the nation states listed in the email string below, have based their stances on peer reviewed scientific data and fact and evidence.

Kindest regards

XXX

From: XXX PHE

Sent: 02 November 2018 10:01

To: XXX Enquirer

Cc: XXX Third Party

Subject: RE: Growing avalanche of worldwide awariness in the area of EMF and human health

Dear XXX,

Thank you for your email, while I appreciate there are a range of views on this subject, Public Health England stands by the evidence-based advice that has previously been provided to you.

Best wishes,

PHE

From: XXX Enquirer

Sent: 31 October 2018 18:46

To: XXX PHE

Cc: XXX Third Party

Subject: Growing avalanche of worldwide awariness in the area of EMF and human health

Dear XXX

XXX very kindly forwarded me your email in relation to my email to her with regard to the ICNIRP guidelines and the work of Barrie Tower who was employed by the British Navy and had exposure to the UK intelligence services also. His analysis of the power of emf radiation to affect the human body comes about from his years as a weapons expert in the field of microwaves. Weapons are designed to harm human beings and he lays out before all of us his experience in this field of weaponry. I do not believe that the British Ministry of Defence would waste money on weaponry that was ineffective – public expenditure constraints would most surely preclude such a thing. So it is obvious that EMF can harm human health. It is just a question of degree.

Below is a link to a hearing in the USA where a doctor is making it totally clear that all biological organisms are affected negatively by microwave radiation

To quote from this qualified doctor (who has held assistant professorships in medical academia too):

“Wireless radiation has biological effects. Period. This is no longer a subject for debate when you look at PubMed and the peer-review literature. These effects are seen in all life forms; plants, animals, insects, microbes. In humans, we have clear evidence of cancer now: there is no question. We have evidence of DNA damage, cardiomyopathy, which is the precursor of congestive heart failure, neuropsychiatric effects...5G is an untested application of a technology that we know is harmful; we know it from the science. In academics, this is called human subjects research.” – Dr Sharon Goldberg

Such a situation is at variance of course to the Nuremburg Treaty. https://www.collective-evolution.com/2018/10/26/veteran-md-drops-bombshell-at-michigans-5g-small-cell-tower-legislation-hearing/?fbclid=IwAR0IUReF1Yp_ykXqVp6cYtcTu8xbdSkWZb5ZDXn6F6BamWvX1zxN6cWL_GA

We live here in the UK in a democracy and not a dictatorship and since we live altogether in our shared society we are all responsible for the state of that society. Great Britain has lead the way in so many areas of science and indeed medicine and it would be good to see our country – and PHE has a clear role in this of course – join the role call of many other countries who have woken up to this hugely important issue of science and public health today. Here is a list of countries, below and where they are on this issue and it is interesting that the UK National Health is actually already warning people albeit in a small way, as you can see below - but before that I learn:

Italian Supreme Court - ruled a man's brain tumor was caused by his cell phone use in 2012. The National Institute for Workmen's Compensation must compensate a worker with head tumor due to cell use.

Finland In addition if you have a Samsung mobile if you go to

Settings

General

About Device

Legal information

Safety Information

There is this warning and I quote word for word “ Do not carry your device in your back pockets or on your waste” That is a safety warning which most people live in ignorance of. I do not believe that Samsung put that Safety Warning in the phones for fun.

Here is a list of countries actions – including the UK National Health System approach as mentioned above:

INTERNATIONAL PRECAUTIONARY ACTIONS

by Governments, Authorities and Schools.

France: New National Legislation and the National Agency for Health, Food and Environmental Safety Report. 2015 Law passed:

-

WiFi Banned in Nursery Schools: WIFI and Wireless devices will be banned in "the spaces dedicated to home, to rest and activities of children under 3 years".

-

WiFi on "OFF" as Default to Minimize Exposures in Schools: In elementary schools, WIFI routers should be turned off when not in use.

-

Schools Will be Informed: The school board should be informed when new tech equipment is being installed.

-

Cell Tower Emission Compliance Will Be Verified: A decree will define the limits of emission of equipments for electronic communications or transmission to which the public is exposed. These values can

be verified by accredited organizations and results will be made accessible to the public through a National

Radiofrequency Agency.

-

Citizens Will Have Access to Environmental/Cell Tower Radiation Measurements Near homes: Every resident may get access to the results of measurements for their living space.

-

Cell Antennae Maps For the Country A description and map of the places with atypical (higher than the limits) places will be conducted at regular intervals with follow up of the actions being taken to limit the exposure. A map of all antennas will be produced for each town.

-

Continued Evaluation of Health Effects: The National Radiofrequency Agency will be in charge of surveillance and vigilance, evaluating potential risks and setting up scientific research, including information on health effects.

-

SAR Radiation Labeling Mandated: The SAR of cell phones must be clearly indicated on the package.

-

Information on Reducing Exposures Mandatory: Information on ways to reduce exposure will be detailed in the contents of the cell phone package.

-

WiFi Hotspots will be Labeled: Places where WiFi is provided should be clearly marked with a pictogram.

-

Advertisements Must Recommend Devices That Reduce Radiation Exposure to the Brain: Advertising for cell phones should clearly indicate the recommendation of hand free kits for protection of the head of the user and it will be included in the package. Advertising for cell phone not accompanied by such a kit is forbidden. Companies in violation will be fined 75,000 Euros.

-

Children Must Be Provided Protections: At the request of the buyer, equipment reducing cell phone radiation exposures to the head for children less than 14 years should be provided.

-

The Public Will Be Informed: Within a year, a policy of information on awareness and information on a responsible and reasonable use of cell phones and other apparatus emitting radiofrequencies will be set up.

-

Electrohypersensitivity Report To Be Submitted: Within a year, a report on electrohyper sensitivity must be given to the Parliament.

-

2011 French Cell Phone Statute: Merchants must display SAR Radiation levels for different phone models, all phones must be sold with a headset, cell phone ads aimed at children younger than 14 are banned and phones made for children under 6 are banned.

-

2013 ANSES Report recommends hands free phones, SAR labeling, and "limiting the population's exposure to radiofrequencies... especially for children and intensive users, and controlling the overall exposure that results from relay antennas."

-

The French National Library along with other libraries in Paris, and a number of universities have removed all WiFi networks.

-

HerouvilleSaintClair has removed all WiFi equipment installed in municipalities.

Belgium: Federal Public Health Regulations on March 2013 due to Health Concerns for Children.

-

Phones designed for children under 7 years old are prohibited from sale.

-

Total Advertising Ban on cell phones aimed at children younger than 14

-

Mandatory Radiation SAR levels must be available for consumers at point of sale.

-

Warning label on phones: "Think about your health – use your mobile phone moderately, make your calls wearing an earpiece and choose a set with a lower SAR value."

-

Recommendations include use of handsfree methods to keep the phone away from the body such as text messaging and not making calls when the signal is weak, such as in elevator/vehicle.

-

Ghent Municipality: Wireless internet is banned from spaces that cater to children between 0 and three: preschools and daycares to reduce exposure to microwave radiation.

-

Belgium has set a RF limit of 3V/m (at 900MHz) for cell antennas in certain locations such as indoors, schools, and playgrounds.

Spain: The Parliament of Navarra voted to urge removal of WIFI in schools and to apply the precautionary principle in relation to exposure limits to electromagnetic fields whose boundaries have become "obsolete".

-

The Parliament voted to adopt a resolution which calls to implement the Parliamentary Assembly of the Council of Europe resolution 1815 of 2011, which recommends to "review the scientific basis for the standards of exposure to electromagnetic fields" and " set thresholds for levels of preventive longterm exposure in all indoor areas not exceeding 0.6 volts per meter ".

Canada: Health Canada offers "Practical Advice " on reducing exposure to wireless radiation.

Recommendations: 1. Limit the length of cell phone calls, 2. Replace cell phone calls with text, use "handsfree" devices and 3. Encourage children under the age of 18 to limit their cell phone usage

-

2015: National Bill C648 Introduced into the House Of Commons, "An Act Respecting the Prevention of Potential Health Risks From Radiofrequency Electromagnetic Radiation" would require manufacturers of all wireless devices to place specific health warning labels clearly on packaging, or face daily penalties /fines and/or imprisonment.

-

Canadian Parliament Standing Committee on Health of the House of Commons issued a report

"Radio Frequency Electromagnetic Radiation and the Health of Canadians" on June, 2015 after holding public hearings regarding Health Canada's Safety Code 6 recommended limits. They made 12 recommendations including an awareness campaign on reducing exposures, improved information collecting and policy measures regarding the marketing of radiation emitting devices to children under the age of 14, "in order to ensure they are aware of the health risks and how they can be avoided."

Australia: In 2013 the Australian Radiation Protection and Nuclear Safety Agency issued Fact Sheet 14 titled How to Reduce exposure from mobile phones and other wireless devices.

-

Reduce the risk from WiFi devices by "keeping them at a distance, for example placing the wireless router away from where people spend time", and "reducing the amount of time you use them".

-

"ARPANSA recommends that parents encourage their children to limit their exposure."Italy:

-

On June 10, 2015, the State Parliament of South Tyrol voted to allow the application of the precautionary principle mandating the state government to:

-

1. To replace existing wireless networks whenever possible with networks that emit less radiation at schools, preschools, hospitals, nursing homes, and other public facilities.

-

2. Establish a working group whose mandate it is to assess these new technologies and their exposure levels. With regard to wireless communication technologies, mobile Internet access, and public health, the working group shall clarify which technologies emit less radiation and provide sustainable technology options and

-

3. To start an education and awareness campaign that informs about possible health risks, especially regarding the unborn, infants, children, and adolescents and that develops guidelines for a safer use of cell phones, smartphones, and WiFi ... Discussion at the Plenary Session, 10 June 2015 Official Files, Resolutions Previous Hearing at the Parliament of South Tyrol, 29 April 2015

-

The Italian Supreme Court

ruled a man's brain tumor was caused by his cell phone use in 2012. The National Institute for Workmen's Compensation must compensate a worker with head tumor due to cell use. Finland

• The Radiation and Nuclear Safety Authority issued recommendations for children favoring text messages, parents limiting duration and amount of calls, the use of mobile phones in a low reception area and keeping the phone away from the body.

• "With children, we have reason to be especially careful, because there is not enough research on children's mobile phone use", according to STUK research director Sisko Salo.
Israel: The Israeli Ministry Of Education has issued guidelines limiting WiFi in schools.

• Preschool through 2nd grade have banned the use of wireless networks.
In third and fourth grade class internet is restricted to 3 hours per week.

• A hard wired direct cable connection is required if the teacher has a computer. If the fields below 4mG are being reduced.

• The Israeli Supreme Court ordered the Israeli government to reply on ceasing the use of wireless networks in schools.

• In third and fourth grade class internet is restricted to 3 hours per week.

• The Education Ministry has instructed all schools to perform radiation tests.

• Israel's Minister of Health XXX stated that he supports a ban on WiFi in schools.

• A hard wired direct cable connection is required if the teacher has a computer.

• Government created the Webpage National Information Ctr for Nonionizing Radiation.

• Read the official ISRAEL 2015 RF Safety Report
Switzerland:

The Governing Council of Thurgau Canton 2008 "The Governing Council recommends to forgo the use of wireless networks when the structural makeup of a given school building allows for a wired network."

Germany:

The German Federal Ministry for Radiation Protection states, "supplementary measures such as wired cable alternatives are to be preferred to the WLAN system."

• Bavaria The State Ministry of Education and Cultural Affairs: "For precaution Office for Radiation Protection recommends for schools that if a wireless network is necessary, components in suitable locations and to prefer the use of wired network solutions possible." In 2007 Parliament recommendation to all schools to not install wireless networks.

• Frankfurt

: "In Frankfurt's schools there will be no wireless networks in the short or medium term. The Education Authority did not wish to conduct a "large scale human experiment". Spokesperson of the Head of the School Department Jutta Ebeling.

Austria :

"The official advice of the Public Health Department of the Salzburg Region is not to use WLAN and DECT in Schools or Kindergartens." Gerd Oberfeld, MD.

•
The Austrian Medical Society has issued cell phone safety guidelines stating that cell phones should be used for as short of a time as possible and that children under 16 should not use cell phones at all. They also state that wireless LAN leads to high microwave exposure.

India: 2012 The Ministry of Communications and Information Technology issued EMF guidelines with new Exposure Limits lowered to 1/10 of the ICNIRP level, SAR labeling on phones.

•
Official guidelines for cell phone use include: Headsets, Speakerphones, limiting cell use, increasing distance from devices, and choosing landlines.

•
2013:

Supreme Court of India upheld the High Court of the State of Rajasthan decision to remove all cell towers from the vicinity of schools, hospitals and playgrounds because of radiation "hazardous to life."

•
The Ministry of Communications and Information Technology has an EMF webpage

•
Zilla Parishad orders removal of all cellphone towers near schools citing exposure to "harmful radiation".

Russia: The Russian Federation advises that those under the age of 18 should not use a mobile phone at all, recommends low emission phones; and requires the following: ondevice labelling notifying users that it is a source of RFEMF, user guide information advising that "it is a source of harmful RFEMF exposure" and the inclusion of courses in schools regarding mobile phones use and RFEMF exposure issues. The Russian National Committee on Nonionizing Radiation Protection has repeatedly warned about electromagnetic radiation impacts on children and recommended WiFi not be used in schools.

•
"Thus, for the first time in the human history, children using mobile telecommunications along with the adult population are included into the health risk group due to the RF EMF exposure."

•
"In children, the amount of so-called stem cells is larger than in adults and the stem cells were shown to be the most sensitive to RF EMF exposure."

•
"It is reasonable to set limits on mobile telecommunications use by children and adolescents, including ban on all types of advertisement of mobile telecommunications for children."

•
Decision of Russian National Committee on Nonionizing Radiation Protection 2008, "Children and Mobile Phones: The Health of the Following Generations is in Danger"

European Environment Agency:

"All reasonable measures to be taken to reduce exposures to electromagnetic fields, especially radiofrequencies from mobile phones and particularly the exposures to children and young adults. Current exposure limits to be reconsidered."

United Kingdom:

The UK National Health Service offers specific Recommendations for children and cell phones as "children are thought to be at higher risk of health implications".

•
"Children should only use mobile phones for essential purposes and keep all calls short."

- For the public they have "recommendations to help lower any potential longterm risks" which include keeping calls short, keep phone away from the body on standby mode, only use it when the reception is strong and use a phone with an external antenna. Resolution 1815

: In 2011 The Parliamentary Assembly of the Council of Europe issued The Potential Dangers of Electromagnetic Fields and Their Effect on the Environment. A call to European governments to "take all reasonable measures" to reduce exposure to electromagnetic fields "particularly the exposure to children and young people who seem to be most at risk from head tumours."

The Resolution calls for member states to:

- Implement "information campaigns about the risk of biological effects on the environment and human health, especially targeting children and young people of reproductive age. "

- "Reconsider the scientific basis for the present standards on exposure to electromagnetic fields set by the International Commission on Nonionising Radiation Protection, which have serious limitations, and apply ALARA principles, covering both thermal effects and the athermic or biological effects of electromagnetic emissions or radiation."

"For children in general, and particularly in schools and classrooms, give preference to wired Internet connections, and strictly regulate the use of mobile phones by schoolchildren on school premises."

United States:

Legislation has been introduced at the state and national level. Some Communities have issued proclamations, resolutions and and started initiatives to inform the public of wireless health issues.

- NEW 2015 NEW Massachusetts proposed S1222: An Act creating a special commission to study the health impacts of electromagnetic fields and Bill H2007: An Act relative to a special commission to study electric and magnetic fields. Bills Still in Process as of August,2015.

Watch a view of the statehouse briefing on RF here.

- NEW

2015 Nassau County will have a proposed Wireless Router Labeling Act that would place visible warning signs in all county buildings and facilities where a wireless router is located. Please read recent coverage of the initiative here.

- 2014 California, Berkeley:

May 12, 2015 Berkeley Adopted the Cell Phone "Right to Know" Ordinance on a Unanimous Vote. Berkeley is the first city in the nation to require cell phone retailers to provide those who purchase a new phone an informational fact sheet which informs buyers to read the user manual to learn the cell phone's minimum separation distance from the body. The text states: "The City of Berkeley requires that you be provided the following notice: To assure safety, the Federal Government requires that cell phones meet radio frequency (RF) exposure guidelines. If you carry or use your phone in a pants or shirt pocket or tucked into a bra when the phone is ON and

connected to a wireless network, you may exceed the federal guidelines for exposure to RF radiation. This potential risk is greater for children. Refer to the instructions in your phone or user manual for information about how to use your phone safely."Full text here.

- 2014 New York: Wireless Router Labeling in all Suffolk Public buildings: 12/2014 The Suffolk County Legislature passed legislation to require all county buildings to post notices that wireless routers are in use such as, "Notice: Wireless technology in use." The resolution, sponsored by Legis. William Spencer (a physician), warns that every wireless device emits radio frequency radiation or microwave radiation. It notes that studies "that have looked at the effects of lowlevel RFR radiation on human cells and DNA have been inconclusive."

- 2014 Maryland, Greenbelt: The Greenbelt Maryland City Council voted unanimously on November 24, 2014 1. Alert citizens about the fine print warnings and possible health risks of cell phones and wireless devices By sharing the Environmental Health Trusts 10 Steps to Safe Tech and Doctors Advice on Cell Phones Brochure in City health fairs and city centers. 2. To send the FCC Chairman a letter urging the adoption of "radiation standards that will protect human health and safety." 3. To oppose cell towers on school grounds and write a letter to the local school board and County Executive.

- 2012 Wyoming: Jackson Hole issued a Proclamation of Cell Phone Awareness which cites concern over long term health effects as well as the increased risk that the radiation poses to children.

- 2012 Florida: Pembroke Pines, passed Resolution 3362 expressing the City's "Urgent Concerns" about Wireless Radiation and Health and which encourages citizens to read their manuals and presents information on how to reduce exposure by using a headset or speakerphone. Jimmy Gonzalez, an attorney who had developed brain cancer after heavy cell use, initially petitioned the Commission.

Watch the Video of his powerful testimony here.

- 2010 California, San Francisco: Cell Phone Radiation (How to Reduce Exposures) Webpage launched. Answers on how to reduce exposures to cell phone radiation. The City developed a poster, factsheets and display stickers with public health information.

- 2010 California: Burlingame California City Council voted to include cell phone safety Guidelines in their Healthy Living in Burlingame initiative (WHO classification and consumer precautions).

- 2010 Maine, Portland : XXX declared October "Cell Phone Awareness Month"
US Proposed Legislation

- 2012 National Law The Cell Phone Right to Know Act H.R. 6358 was introduced receiving strong support from many organizations including the American Academy of Pediatrics. (AAP Letter here.) This legislation called for labels on mobile devices at point of sale, a comprehensive national research program to study whether exposure to wireless devices causes adverse biological effects directed by NIEHS and the EPA and exposure level regulation.

- 2014 The Maine LD 1013 "The Wireless Information Act" passed the State Senate and House but then failed to pass the second vote. The Bill requires manufacturer's information on radiofrequency exposure be visible on the outside of the cell phone's product packaging.

- 2014

Hawaii Senate Bill SB 2571 was introduced calling for a warning label encouraging consumers to follow the enclosed product safety guidelines to reduce exposure to radiation that may be hazardous to their health.

●

The San Francisco Cell Phone Right to Know Ordinance was signed in 2011 requiring cell phone retailers to distribute an educational sheet created by the San Francisco Department of Environment that explains radiofrequency emissions from cell phones and how consumers can minimize their exposure.

The CTIA sued the city and settled with the City to block implementation of the Ordinance in exchange for a waiver of attorneys' fees. The City Cell Phone Radiation Webpage remains online.

●

In conclusion I refer to these startling statement from the Council of Europe asking for a reassessment of the ICNIRP guidelines saying these guidelines have SERIOUS limitations::

"In 2011 The Parliamentary Assembly of the Council of Europe issued
The Potential Dangers of Electromagnetic Fields and Their Effect on the Environment.
A call to European governments to "take all reasonable measures" to reduce exposure to
electromagnetic fields
"particularly the exposure to children and young people who seem to be most at risk from head
tumours."

The Resolution calls for member states to:

Implement "information campaigns about the risk of biological effects on the environment and
human
health, especially targeting children and young people of reproductive age. "

"Reconsider the scientific basis for the present standards on exposure to electromagnetic fields set
by the
International Commission on Nonionising Radiation Protection, which have serious limitations, and
apply
ALARA principles, covering both thermal effects and the athermic or biological effects of
electromagnetic
emissions or radiation." "For children in general, and particularly in schools and classrooms, give
preference to wired Internet
connections, and strictly regulate the use of mobile phones by schoolchildren on school premises."

The above statement makes is clear we cannot rely in ICNIRP as a basis for protecting human health

And B

Apparently as shown above India is saying EMF levels should be 0.1 of the ICNIRP stated level

I hope PHE will consider their stance under this avalance of data and policy and join the other
countries in protecting human health and in warning people how to use this technology without
harming each other or themselves.

With kindest regards
XXX

From: XXX PHE
Sent: 31 July 2018 14:08
To: XXX Enquirer
Cc: XXX Third Party
Subject: RE: 5G and health concerns

Dear XXX,

Thank you for your e-mail. Public Health England's (PHE's) Centre for Radiation, Chemical and Environmental Hazards (CRCE) takes the lead on public health matters associated with radiofrequency electromagnetic fields, or radio waves, used in telecommunications.

A summary of PHE's current advice on radio waves can be accessed in the following link:
<https://www.gov.uk/government/collections/electromagnetic-fields#radio-waves>

PHE is not in the process of conducting its own dedicated research on 5G; however, exposure to radio waves is not new and health-related research has been conducted on this topic over several decades. In particular, a large amount of new scientific evidence has emerged over the past few years through dedicated national and international research programmes that have addressed concerns about rapidly proliferating wireless technologies. In addition, PHE continues to monitor the health-related evidence applicable to 5G technology, and to revising advice, should that be necessary.

I have attached here a summary of PHE's position on RF fields and this includes links to the various scientific reviews that help to inform our advice. Central to the advice is that exposures should comply with the exposure guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). We would expect any new 5G products to comply with the current technical standards that draw on the ICNIRP guidelines and the UK network operators are already committed to complying with the guidelines.

The main focus of recent research studies has been on exposure to the types of radio signals used by current communications technologies and at the frequencies they use, up to a few GHz. Fewer studies have been carried out at the higher frequencies planned for use with 5G but the biophysical mechanisms that govern the interaction between radio waves and body tissues are well understood at higher frequencies and are the basis of the present ICNIRP restrictions. The main change in using higher frequencies is that there is less penetration of radio waves into body tissues and absorption of the radio energy, and any consequent heating, becomes more confined to the body surface.

The first results from the US-based animal/cancer exposure studies you mention were released in May 2016, and further results continue to emerge and be discussed. PHE has welcomed the results but taken the view that they are far from definitive with regard to any relationship between the use of mobile phones and cancer in humans. In part, this is because the animals in the studies were subject to high levels of radiofrequency energy absorption throughout their whole bodies for nine hours per day and during their whole lifetimes. These conditions are not the same as normal human exposure when using mobile phone technologies. For example, the exposures in this study are of a

level where the energy absorption would be well above international guideline levels that apply to human exposures. PHE's position remains that there is no convincing scientific evidence that exposures from mobile phones and other radio technologies affect human health at exposure levels below internationally agreed guidelines; however, some precaution is warranted because of the possibility of biological effects occurring at exposure levels within the ICNIRP guidelines and the limited information regarding cancer effects in the long term.

You mention a peer review of the above studies above will report its finding in Autumn 2018. I am not sure of the exact timescale, but ICNIRP is in the process of publishing new RF exposure guidelines, which are now ready for public consultation:

<https://www.icnirp.org/en/activities/public-consultation/consultation-1.html>

The World Health Organization (WHO) is presently preparing an Environmental Health Criteria (EHC) monograph covering the evidence in relation to radiofrequency exposures and health. This follows earlier EHCs published in 2006 on static fields and in 2007 on low frequency fields. Information from WHO about EMF exposure guidelines can be found at:

<http://www.who.int/peh-emf/standards/en/>

Finally, we have a small team of RF measurement experts at CRCE and are currently looking for opportunities to practically assess the exposure levels that arise from new 5G technologies in the UK, so if you have any particular scenarios that might lend themselves to an assessment we would be interested to hear from you.

I hope you find this helpful and please contact me if you have any further questions.

Yours sincerely,

XXX

From: XXX Enquirer
Sent: 30 July 2018 14:47
To: XXX PHE
Cc: XXX Third Party
Subject: 5G and health concerns

Dear XXX,

I hope this finds you well. I email from the West of England Combined Authority (WECA). We are the project lead, working alongside 20 other partners, on a 5G Smart Tourism Research and Development project, predominantly in Bristol and Bath. We are receiving grant funding to assist in progressing this project from the Department for Digital, Culture, Media and Sport (DCMS), who have passed on your details. Our DCMS case officer, XXX, is copied to this email.

There has been some local press recently (<https://www.bristolpost.co.uk/news/bristol-news/questions-raised-over-5g-links-1817191>) as to 5G links to cancer, following an article in the Guardian (<https://www.theguardian.com/technology/2018/jul/14/mobile-phones-cancer-inconvenient-truths>) which draws on studies being conducted in the United States, by their Department of Health and Human Services, into:

* toxicology and carcinogenesis in mice exposed to whole-body radio frequency radiation at a frequency (1,900mhz) and modulations (GSM and CDMA) used by Cell phones:

https://ntp.niehs.nih.gov/ntp/about_ntp/trpanel/2018/march/tr596peerdraft.pdf

* toxicology and carcinogenesis in rats exposed to whole-body radio frequency radiation at a frequency (900mhz) and modulations (GSM and CDMA) used by cell phones:

https://ntp.niehs.nih.gov/ntp/about_ntp/trpanel/2018/march/tr595peerdraft.pdf

We understand a peer review of the studies above will report its finding in Autumn 2018.

The Guardian has also published another article which challenges the article of the 14th July 2018 and questions the veracity of the conclusions being drawn from the studies named above:

<https://www.theguardian.com/technology/2018/jul/21/mobile-phones-are-not-a-health-hazard#comment-118566370>

We may receive related queries on/be alerted to concern about these studies and the press interpretations of them and I wanted to understand if PHE was conducting any of its own research and/or was waiting on the results of other independent research on which it will rely as regards 5G and health concerns. I ask this because if we do receive queries, we will ideally reference such research in our response, as opposed to press articles that are an interpretation, or overseas research.

I look forward to hearing from you.

Yours sincerely,

XXX



PHE RF Advice
Summary 28 Feb 201

From: XXX PHE

Sent: 15 October 2018 10:43

To: XXX PHE

Cc: XXX Third Party

Subject: RE: 5G and ICNIRP ~[UNCLASSIFIED]~

Dear XXX,

Thanks very much for your reply, this is really helpful, I'll do that now.

Best wishes,

XXX

From: XXX PHE

Sent: 15 October 2018 10:15

To: XXX PHE

Cc: XXX Third Party

Subject: RE: 5G and ICNIRP ~[UNCLASSIFIED]~

Dear XXX,

Please could you send the following note to the Public Health Consultant seeking further reassurance. It should be read in conjunction with the briefing documents sent previously, attached again here for completion.

Kind regards

XXX

[Exposure to radio waves is not new and health-related research has been conducted on this topic over several decades. Thousands of papers have been published in the scientific literature and many health topics have been addressed. In particular, a large amount of new scientific evidence has emerged over the past few years through dedicated national and international research programmes that have addressed concerns about rapidly proliferating wireless technologies.

The attached briefing note refers to the ICNIRP guidelines, which underpin PHE's current advice – the guidelines cover frequencies in the range 0-300GHz, which includes those used by existing telecommunications systems and those intended for 5G. The document also highlights national and international reviews on this topic, in particular the 2012 comprehensive evidence review from the independent Advisory Group on Non-ionising Radiation (AGNIR), which concluded there is no convincing evidence that radio wave exposures below guideline levels cause health effects in either adults or children, and the 2015 review from the European Union's Scientific Committee on Emerging and Newly Identified Health Risks which reached much the same position.

The World Health Organization (WHO) is presently preparing an Environmental Health Criteria (EHC) monograph covering the evidence in relation to radiofrequency exposures and health. This follows earlier EHCs published in 2006 on static fields and in 2007 on low frequency fields. The WHO document will be considered by PHE when it becomes available.

PHE acknowledges the difficulty in development of health protection guidance on topics such as this, which is that the interpretation of studies of potential health effects is a matter of judgement, and there is a spectrum of opinion within the scientific community and elsewhere. In formulating its advice, PHE aims to draw out a consensus position based on the totality of the scientific evidence through a process of systematic, critical and impartial review of the published literature. The typical types of evidence reviewed are the human laboratory and epidemiological studies, animal studies and cellular studies. This is also the approach adopted by authoritative international organisations such as WHO, ICNIRP and SCENIHR.

PHE continually monitors publications in the technology and health-related literature to gauge whether any change in PHE advice may merit consideration. At the moment, the conclusion is that they do not.]

XXX

From: XXX PHE

Sent: 11 October 2018 10:01

To: XXX PHE

Cc: XXX Third Party

Subject: FW: 5G and ICNIRP ~[UNCLASSIFIED]~

Dear All,

I wanted to send you a further update about the enquiry in Thames Valley. There is also a question from the Public Health consultant about when the data is likely to be reviewed again at PHE, are you able to advise?

Best wishes,
XXX

From: XXX Enquirer
Sent: 10 October 2018 09:10
To: XXX PHE
Subject: FW: 5G and ICNIRP ~[UNCLASSIFIED]~

Hi XXX

Would you be so kind as to forward this on to the many PHE colleagues who have been copied into the various correspondence to date. One thing I would like to know is whether PHE have anywhere in the future work programme to look at the issue again, reviewing studies which have been done since the last review, as it is getting quite out-of-date, and the technology is advancing at an incredible rate. People in roles like mine rely on authoritative reports from credible organisations such as PHE and when members of the public cite recent studies I feel I should not dismiss them out of hand, but I haven't got months to learn about the subject, and do my own review.

Kind regards

XXX

From: XXX Enquirer
Sent: 09 October 2018 17:48
To: XXX PHE
Cc: XXX Third Party
Subject: 5G and ICNIRP

Dear XXX

Very many thanks for going to the trouble of sending me the official data from XXX.

This is very much as I anticipated and mirrors XXX's approach of course.

It very much puts me in mind of the government view towards smoking many years ago – and a friend of mine told me about an ad for Camel cigarettes the other day. In that ad, doctors – or actors playing doctors – were winding down after a shift in an NHS hospital saying there is nothing better for you than to wind down after a long day – than a good cigarette.

The government today would condemn such an approach of course – but they did not condemn it then.

We will have to see how things change in the sphere of Public Health.

I doubt very much that Public Health England will be able to remain like King Canute trying to hold back the waves of evidence from scientists and doctors across the world and one day they will change their stance exactly as the government did in relation to smoking.

In the mean time I hope in a small way the readers of this email will take note of what an ex British Navy microwave expert, XXX, says about mobile phones and how to use them safely. In addition I hope they take note of Dr Devra Davis who was a health advisor to the US government, and goes round warning people of the health dangers involved.

I am not a Luddite – just a responsible human being. I have a mobile and our employees too. But I don't want to see any of them get cancer through ignorance and so they have all been informed of the dangers as XXX and XXX outline to people.

I hope maybe that even yourself and your Parliamentary assistants on reading this email will not keep their mobiles next to the body but do as the mobile phone companies warn people to do – albeit covertly – to keep the mobile phone away from the body. The phone companies would not warn people to do that unless there were clear dangers involved would they?

To quote from a Time Magazine article:

"But when a colleague raised the possibility that cell phones could be connected to brain cancer, XXX wasn't receptive. "I couldn't believe it and I didn't want to," says XXX. "These were attractive devices. Cell phones were like cars—you couldn't imagine life without them." But as she began to look seriously into the field, XXX began to have doubts that cell phones were harmless. She found evidence of studies, some decades old, showing that the radio-frequency radiation used by cell phones could indeed have biological effects—enough to damage DNA and potentially contribute to brain tumors. She found that other countries—like France and Israel—had already acted, discouraging the use of cell phones by children and even putting warning signs on handsets. She found evidence of increases in certain kinds of brain tumors among unusually young patients who were heavy users of cell phones. And, just as she saw with tobacco and lung cancer, XXX discovered that the wireless industry—often with the help of governments—had fought independent scientists who studied cell phones, and helped produced questionable science that effectively clouded the issue. "This is about the most important and unrecognized public health issues of our time," says XXX. "We could avert a global catastrophe if we act."

I have the greatest respect with regard to your stance against the Iraq War – you stood alone from your party and from the government of the day. You were proved right.

Maybe there will be one MP who will see the truth of what XXX and XXX are pointing out to those willing to listen, on this important issue – just as you saw and stood for truth in the utter fiasco of the Iraq war.

I have yet to find that MP but there must be one who will be receptive to the truth and scientific evidence on this very important issue in public health today.

In fact it will be easier for that MP than it was for you on the Iraq issue as other countries are leading the way and are ahead of Britain. Israel I believe, for example is precluding the use of Wifi in schools for children under 7 and in the schools for older children they are advocating wired not wireless systems.

This is precisely what XXX advises. Maybe the Israeli government heard him.

Kindest regards

XXX

From: XXX PHE
Sent: 13 April 2018 15:00
To: XXX PHE
Subject: RE: EMF 5G enquiry

Dear XXX,

We have received a similar enquiry recently, from XXX Council.

I have attached here the latest lines we are using as a basis for responding.

Kind regards,

XXX

From: XXX PHE
Sent: 13 April 2018 10:41
To: XXX PHE
Cc: XXX Third Party
Subject: EMF 5G enquiry

Dear colleagues,

Are you able to assist Richard with his enquiry below?

Many thanks

XXX

From: XXX PHE
Sent: 13 April 2018 10:38
To: XXX PHE
Subject: EMF 5G enquiry

Dear CRCE,

XXX have received an enquiry from XXX council about Radio Frequency EMFs (mobile phones) and in particular 5G networks. The enquiry originates from a member of the public, and XXX would like our advice before responding.

The enquiry appears similar (?identical) to others reported in the news recently and the primary focus appears to be concern about incorporation of 5g technology in street lights. There also appear to be a number of inaccurate claims about the evidence base around EMFs and health. The whole enquiry is dressed up as an FOI request on the local authority.

Are CRCE aware of this (type of) enquiry and do we have a worked up response that might help the HPT to advise Warrington on how to respond?

XXX

From: XXX PHE
Sent: 12 April 2018 13:38
To: XXX PHE
Cc: XXX Third Party

Subject: information

XXX

Thanks for calling me back.

Please find below the information that we received regarding the cellular radiofrequency radiation.

I have briefly spoken with XXX and he is going to discuss the matter with our Chief Executive as he is in agreement with you regarding responding to the request.

If PHE do release a statement about the subject matter please could you let us know so that we are aware of it should more of these enquiries get sent to us.

Kind regards

XXX

From: XXX PHE
Sent: 13 April 2018 15:00
To: XXX PHE
Subject: RE: EMF 5G enquiry

Dear XXX,

We have received a similar enquiry recently, from XXX Council.

I have attached here the latest lines we are using as a basis for responding.

Kind regards,

XXX

From: XXX PHE
Sent: 17 April 2018 15:33
To: XXX PHE
Subject: RE: FOR RESPONSE BY 1 MAY: Radiation protection department of PHE re: Concerns about 5G technology and Smart Meters

Dear XXX,

Please find attached a summary of our advice, which can be used as the basis for the reply. In relation to the implementation of 5G user devices and networks, this technology is at an early stage and reflects the latest evolution in mobile communications technology. Current technical standards that draw on the International Commission on Non-Ionizing Radiation Protection (ICNIRP) exposure guidelines will apply to the products that are developed. PHE is committed to monitoring the evidence applicable to this and other radio technologies, and to revising its advice, should that be necessary.

Kind regards

XXX

From: XXX PHE

Sent: 17 April 2018 11:45

To: XXX PHE

Subject: FOR RESPONSE BY 1 MAY: Radiation protection department of PHE re: Concerns about 5G technology and Smart Meters

Hi XXX

We have received the enquiry below regarding 5G radiation. Would you be able to assist us in drafting a response?

Many Thanks

XXX

From: XXX Enquirer

Sent: 12 April 2018 22:30

To: XXX PHE

Subject: FAO: Radiation protection department of PHE re: Concerns about 5G technology and Smart Meters

Dear Public Health England (Radiation protection department),

I'm writing as a very concerned British citizen re: the planned future 5G roll out as well as the current 5G trials/testbeds in the UK as i have been researching this topic for nearly a year now and during that time i have read many articles and listened to many unbiased (non-industry or government funded) expert opinions including of many Officials, Doctors and Scientists who are working hard to expose the dangers of this radiation including the extreme health hazards that the 5G millimeter wave frequencies pose to humans, animals as well as the harmful effect on organic life/the ecosystem.

I understand you are the regulatory body for the of people of Englands Health and are advising people this radiation is safe and causes no ill health effects.

As far as I'm aware you are only considering the Thermal effects of non ionizing radiation and not the Biological effects on humans, animals and all wildlife. The Thermal effects are determined by a plastic head filled with water. If the water inside the head does not reach one degree in heat after 6 mins then the radiation is considered safe. This does not mean non ionising radiation is safe at all.

As it happens there are thousands of studies that prove non ionizing radiation is harmful to our health, and that of animals and all wild life.

Could you please tell me why these studies and opinions of Doctors & Scientists & Politicians & Citizens all over the World are being ignored and why we are being told this non ionizing radiation is safe when it clearly is not. And i've included some more relevant details and links below for your reference:

<https://ehtrust.org/factsheet-need-know-5g-small-cells-science-policy-public-health/>

5G and the IOT: Scientific Overview of Human Health Risks - Environmental Health Trust

EUROPEAN UNION 5G APPEAL | AUG. 10TH, 2017.

"We, the undersigned scientists, recommend a moratorium on the roll-out of the fifth generation, 5G, for telecommunication until potential hazards for human health and the environment have been fully investigated by scientists independent from industry. 5G will substantially increase exposure to radiofrequency electromagnetic fields (RF-EMF) on top of the 2G, 3G, 4G, WiFi etc. for telecommunications already in place. RF-EMF has been proven to be harmful for humans and the environment...."

"We expect an answer from you no later than October 31, 2017 to the two first mentioned signatories about what measures you will take to protect the EU-inhabitants against RF-EMF and especially 5G radiation. This appeal and your response will be publicly available. (from post on 'What is 5G and the Internet of Things' facebook group)

https://www.jrselectrohealth.com/wp-content/uploads/2017-08_EU_5G_Appeal_10_August_2017.pdf?c=cf13ce20305cTelecom and Insurance Companies Warn of Liability and Risk - Environmental Health Trust

[http://whatis5g.info/Microwave Radiation](http://whatis5g.info/Microwave_Radiation)

<http://www.bioinitiative.org/>

<http://www.saferemr.com/2017/09/5g-wireless-technology-is-5g-harmful-to.html>

<https://www.youtube.com/watch?v=QvPg1AyQ43I>

5G Technology: Potential Risks To Human Health: Excerpts From Scientific Conference

[Smart meter radiation and health - why are we neglecting non-toxic alternatives?](#)

https://www.youtube.com/watch?v=Fi_0VTS-D8&list=PLzWbW-WltLohkLIAWni1ni73rzCDoxoxZ

5G Wireless Radiation Dangers by Kevin Mottus

I look forward to hearing from you,

Kind regards,

XXX



PHE RF Advice
Summary 28 Feb 201

From: XXX PHE
Sent: 23 April 2018 08:29
To: XXX PHE
Cc: XXX Third Party
Subject: RE: FOR RESPONSE BY 1 MAY: U * BRWL, 5G and Public Health England *

Hi XXX,

I understand the Laser and Optical Radiation Dosimetry (LORD) group have dealt with the optical questions, including via a telephone call between XXX and XXX.

XXX doesn't ask an actual question about EMFs, but has essentially stated her option on the 5th generation of mobile technology, which hasn't been introduced into the UK yet. Please can send her a short reply thanking her for her message and send the following reply.

PHE's advice about exposure to radio waves can be accessed in the following link:
<https://www.gov.uk/government/collections/electromagnetic-fields#radio-waves>

In relation to the implementation of 5G user devices and networks, this technology is at an early stage and reflects the latest evolution in mobile communications technology. Current technical standards that draw on the International Commission on Non-Ionizing Radiation Protection (ICNIRP) exposure guidelines will apply to the products that are developed.

PHE is committed to monitoring the evidence applicable to this and other radio technologies, and to revising its advice, should that be necessary.

Best Regards,

XXX

From: XXX PHE
Sent: 19 April 2018 11:46
To: XXX PHE
Subject: FOR RESPONSE BY 1 MAY: U * BRWL, 5G and Public Health England *

Hi Team,

Can we have your comments on this one please?

Many thanks,

XXX

From: XXX Enquirer
Sent: 18 April 2018 11:13
To: XXX PHE
Cc: XXX Third Party
Subject: URGENT: * BRWL, 5G and Public Health England *

Dear XXX and Public Health England,

I am writing to you regarding my concerns about the roll-out of a worldwide 5G network. This is a very serious issue with huge health and environmental implications for humans, wildlife and plants, not in the least plant crops. We are already surrounded by a soup of EMF's and have had to suffer increased Blue-Rich White Light Pollution coming from cool-white LED lighting. However, 5G is a totally different ball game: Beaming high frequency, pulsated microwave radiation at humans (and non-humans) from every direction without further research - in other words, without due diligence - is completely and utterly irresponsible and could become the focus of future litigation.

I understand that the antennae for this madness are going to be installed on the new LED lamp posts, so now blue-rich white light and the relatively high EMF that LED generates is going to be joined by this highly dangerous technology, which has been shown in studies to have harmful effects on our skin, eyes, heart, brain and immune system, not to mention the carcinogenic effects. Kindly see below for the three links that I have included (but there are many more) showing some of the serious concerns. The second link is an appeal from scientists across the world urging for more research before the roll-out of something which could and most surely will have dire consequences for Public Health and Environment.

As you are aware, Blue-Rich White Light Pollution is harmful to humans and environment (not to mention road safety and sky glow) as it causes circadian disruption as well as hazardous glare and it needs to be halted. What's more, modern lighting technology is making a significant minority of people seriously ill, with symptoms ranging from eye pain, headaches, severe migraines, nausea, dizziness and epileptic episodes. These symptoms are not solely caused by high colour temperature or LED flicker and could be related to Electro-Magnetic Radiation. More research is needed into this and there should really be a moratorium on a roll-out of LED lighting until it is proven to be safe for humans and wildlife. Kindly see: <http://www.lightaware.org>

However, 5G will be far worse: This horror is already being rolled out across the USA without due diligence, but in the UK we are still at the test bed stage. I ask Public Health England to look into the dangers with this technology and to work towards a National Light *and* National Radiation Policy. I also ask for any possible test-bedding in England to be halted until further research has developed an alternative which is safe for humans, animals and plants, in accordance with the scientist appeal - kindly see below link.

I am looking forward to your response and promised phone call,

Many thanks in advance,

Yours sincerely,

XXX

<https://ehtrust.org/wp-content/uploads/Scientist-5G-appeal-2017.pdf>

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-networks-iot-scientific-overview-human-health-risks/>

The Dangers Of 5G – 11 Reasons To Be Concerned

The USA is currently leading the way on 5G. At the June 2016 press conference where the Federal Communications Commission's (FCC) head Tom Wheeler announced the opening up of low, mid and high spectrum's. There was no mention of health effects whatsoever. But the dangers are real.

5G radiation dangersThousands of studies link low-level wireless radio frequency radiation exposures to a long list of adverse biological effects, including:

DNA single and double strand breaks

Oxidative damage

Disruption of cell metabolism

Increased blood brain barrier permeability

Melatonin reduction

Disruption to brain glucose metabolism

Generation of stress proteins

Let's not also forget that in 2011 the World Health Organization (WHO) classified radio frequency radiation as a possible 2B carcinogen.

More recently the \$25 million National Toxicology Program concluded that radio frequency radiation of the type currently used by cell phones can cause cancer.

But where does 5G fit into all this? Given that 5G is set to utilize frequencies above and below existing frequency bands 5G sits in the middle of all this. But the tendency (it varies from country to country) is for 5G to utilize the higher frequency bands. Which brings it's own particular concerns. Here is my review of the studies done to date – 11 reasons to be concerned.

#1 – A DENSER SOUP OF ELECTROSMOG

We're going to be bombarded by really high frequencies at low, short-range intensities creating a yet more complicated denser soup of electrosmog.

5G frequencies

Source: Latest on 5G Spectrum – EMFields Ltd.

To work with the higher range MMW in 5G, the antennas required are smaller. Some experts are talking about as small as 3mm by 3mm. The low intensity is for efficiency and to deal with signal disruption from natural and man-made obstacles.

#2 – EFFECTS ON THE SKIN

The biggest concern is how these new wavelengths will affect the skin. The human body has between two million to four million sweat ducts. xxxxxxxxxxxx of Hebrew University, Israel explains that our sweat ducts act like "an array of helical antennas when exposed to these wavelengths," meaning that we become more conductive. A recent New York study which experimented with 60GHz waves stated that "the analyses of penetration depth show that more than 90% of the transmitted power is absorbed in the epidermis and dermis layer."

The effects of MMWs as studied by xxxxxxxxxxxx of Hebrew University is said to also cause humans physical pain as our nociceptors flare up in recognition of the wave as a damaging stimuli. So we're looking at possibilities of many skin diseases and cancer as well as physical pain to our skin.

#3 – EFFECTS ON THE EYES

A 1994 study found that low level millimeter microwave radiation produced lens opacity in rats, which is linked to the production of cataracts.

An experiment conducted by the Medical Research Institute of Kanazawa Medical University found that 60GHz "millimeter-wave antennas can cause thermal injuries of varying types of levels. The thermal effects induced by millimeterwaves can apparently penetrate below the surface of the eye."

A 2003 Chinese study has also found damage to the lens epithelial cells of rabbits after 8 hours of exposure to microwave radiation and a 2009 study conducted by the College of Physicians and Surgeons in Pakistan conclude that EMFs emitted by a mobile phone cause derangement of chicken embryo retinal differentiation.

#4 – EFFECTS ON THE HEART

A 1992 Russian study found that frequencies in the range 53-78GHz (that which 5G proposes to use) impacted the heart rate variability (an indicator of stress) in rats. Another Russian study on frogs who's skin was exposed to MMWs found heart rate changes (arrhythmias).

#5 – IMMUNE SYSTEM EFFECTS

A 2002 Russian study examined the effects of 42HGz microwave radiation exposure on the blood of healthy mice. It was concluded that "the whole-body exposure of healthy mice to low-intensity EHF EMR has a profound effect on the indices of nonspecific immunity".

#6 – EFFECTS ON CELL GROWTH RATES

A 2016 Armenian study observed MMWs at low intensity, mirroring the future environment brought about by 5G. Their study conducted on E-coli and other bacteria stated that the waves had depressed their growth as well as "changing properties and activity" of the cells. The concern is that it would do the same to human cells.

#7 – EFFECTS ON BACTERIA RESISTANCE

The very same Armenian study also suggested that MMWs effects are mainly on water, cell plasma membrane and genome too. They had found that MMW's interaction with bacteria altered their sensitivity to "different biologically active chemicals, including antibiotics." More specifically, the combination of MMW and antibiotics showed that it may be leading to antibiotic resistance in bacteria.

This groundbreaking finding could have a magnum effect on the health of human beings as the bandwidth is rolled out nationwide. The concern is that we develop a lower resistance to bacteria as our cells become more vulnerable – and we become more vulnerable.

#8 – EFFECTS ON PLANT HEALTH

One of the features of 5G is that the MMW is particularly susceptible to being absorbed by plants and rain. Humans and animals alike consume plants as a food source. The effects MMW has on plants could leave us with food that's not safe to consume.

Think GMOs on steroids. The water that falls from the sky onto these plants will also be irradiated. A 2010 study on aspen seedlings showed that the exposure to radiofrequencies led to the leaves showing necrosis symptoms.

Source: <https://www.hindawi.com/journals/ijfr/2010/836278/>

Another Armenian study found that MMWs of low intensity "invoke(s) peroxidase isoenzyme spectrum changes of wheat shoots." Peroxidase is a stress protein existing in plants. Indications are that 5G will be particularly harmful to plants – perhaps more so than to humans.

#9 – EFFECTS ON THE ATMOSPHERE AND DEPLETION OF FOSSIL FUELS

Implementation of the 5G global wireless network requires the launching of rockets to deploy satellites for 5G. These satellites have a short lifespan which would require a lot more deployment than what we're currently seeing. A new type of hydrocarbon rocket engine expected to power a fleet of suborbital rockets would emit black carbon which "could cause potentially significant changes in the global atmospheric circulation and distributions of ozone and temperature" according to a 2010 Californian study. Solid state rocket exhaust contains chlorine which also destroys the ozone.

The effects on the ozone are thought to be worse than current day CFC exposure.

Google's Project Loon is said to bring Internet to rural and hard-to-access areas by using helium balloons. But these balloons only have a 10-month lifespan. We're looking at a lot of helium being used here, more than what we can possibly have on Earth?

#10 – DISRUPTION OF THE NATURAL ECOSYSTEM

Since the year 2000, there have been reports of birds abandoning their nests as well as health issues like "plumage deterioration, locomotion problems, reduced survivorship and death," says researcher Alfonso Balmori. Bird species that are affected by these low levels, non-ionizing microwave radiation are the House Sparrows, Rock Doves, White Storks, Collared Doves and Magpies, among others.

But it's not just the birds. The declining bee population is also said to be linked to this non-ionizing EMF radiation. It reduces the egg-laying abilities of the queen leading to a decline in colony strength.

A study conducted by Chennai's Loyola College in 2012 concluded that out of 919 research studies carried out on birds, plants, bees and other animals and humans, 593 of them showed impacts from RF-EMF radiations. 5G will be adding to the effects of this electrosmog.

#11 – MOST 5G STUDIES MIS-LEADING

5G will use pulsed millimeter waves to carry information. But as xxxxxxxxxxxx points out, most 5G studies are misleading because they do not pulse the waves. This is important because research on microwaves already tells us how pulsed waves have more profound biological effects on our body compared to non-pulsed waves. Previous studies, for instance, show how pulse rates of the frequencies led to gene toxicity and DNA strand breaks.

LIVE TESTING ALREADY BEGUN

AT&T have announced the availability of their 5G Evolution in Austin, Texas. 5G Evolution allows Samsung S8 and S8 + users access to faster speeds. This is part of AT&T's plan to lay the 5G foundation while the standards are being finalized. This is expected to happen in late 2018. AT&T has eyes on 19 other metropolitan areas such as Chicago, Los Angeles, Boston, Atlanta, San Francisco and so on. Indianapolis is up next on their 5G trail due to arrive in the summer.

Qualcomm has already demonstrated a 5G antenna system with about 27 decibel gain. According to ABI Research, is "about 10 to 12 more db than a typical cellular base station antenna." Not a good sign.

Many more private sector companies such as HTC, Oracle, Sprint, T-Mobile are playing a role in the developing of testing platforms by contributing time, knowledge or money.

Call to Action

Research and pre-testing is rampant by companies who are interested to tap into the lucrative waters of 5G. But few are willing to research its effects on health. The International Commission on

Non-ionizing Radiation Protection (ICNIRP) guidelines remain essentially unchanged since 1998, not allowing for the recognition of radio frequency microwave radiation and MMWs as harmful unless there is a heating effect. But a few experts are speaking out.

XXX from the University of Helsinki and also former member of the International Agency Research on Cancer is one of them. He has brought to attention to ICNIRP intention to classify skin as limbs. Limbs are paid lesser attention to when classifying exposure levels. Research indicates that MMWs affect the skin and the eyes the most. If skin is classified as a limb, this will pave the way for industry giants to introduce even higher exposures and put more people at risk.

The Global Union Against Radiation Deployment from Space (GUARD) addressed a letter to the FCC in September of 2016, bringing to their attention the harm 5G will inflict. GUARD warned the FCC that 5G violates Article 3 of The UN Declaration of Human Rights which states that "everyone has the right to life, liberty and security of person." The document is laden with research, information and global support.

To learn how to write, call or email the relevant agencies to protest against the 5G deployment go here parentsforsafetechnology.org

WHAT EXPERTS ARE SAYING

Here's what experts are saying about 5G:

"Along with the 5G there is another thing coming – Internet of Things. If you look at it combined the radiation level is going to increase tremendously and yet the industry is very excited about it.... they project 5G/IoT business to be a \$7 trillion business."

-XXX, Professor at Electrical Engineering Department at IIT Bombay

"The new 5G wireless technology involves millimeter waves (extremely high frequencies) producing photons of much greater energy than even 4G and WiFi. Allowing this technology to be used without proving its safety is reckless in the extreme, as the millimeter waves are known to have a profound effect on all parts of the human body."

-XXX, Director Autoimmunity Research Foundation, California

"The plans to beam highly penetrative 5G milliwave radiation at us from space must surely be one of the greatest follies ever conceived of by mankind. There will be nowhere safe to live."

-XXX former WHO employee and author of 'No Safe Place'

"It would irradiate everyone, including the most vulnerable to harm from radiofrequency radiation: pregnant women, unborn children, young children, teenagers, men of reproductive age, the elderly, the disabled, and the chronically ill."

—XXX I, PhD, Letter to FCC on 5G expansion

How To Protect Yourself From 5G

My 3 step approach for dealing with EMFs can be summarized as:

Understand your exposures. Understand the different types of EMFs and how they behave – hence the need to read (and share) articles like this one.

Measure – use EMF meters to obtain readings and identify hotspots.

Mitigate your exposure. Which means either eliminate the source, move further away from the source of radiation or shield your body.

I recommend the same approach with 5G. There is a concern that current EMF meters are not able

to measure the frequencies of MMWs. On this point, researcher XXX from Powerwatch states "current RF meters cover the frequency ranges proposed for most 5G use in the next three years".

From: <http://emrabc.ca/?p=12284>

<https://ehtrust.org/wp-content/uploads/Scientist-5G-appeal-2017.pdf>

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-networks-iot-scientific-overview-human-health-risks/>

5G And The IOT: Scientific Overview Of Human Health Risks

[Facebook](#)[Twitter](#)[Google+](#)

5G is the term used to describe the next-generation of mobile networks beyond the 4G LTE mobile networks commonly used today. 5G is intended to be the technology that allows the Internet of Things (IOT) to exist and tie all internet connected devices together.

Currently there is no standard for 5G networks in place and it will be a combination of a variety of frequencies and modulations. Industry is developing exactly what 5G will be as the standard has not been set yet. It is assumed that 5G networks will not become commercially available until 2020 but several cities are rolling out 5G as test areas now.

Published peer reviewed science already indicates that the current wireless technologies of 2G, 3G and 4G – in use today with our cell phones, computers and wearable tech – creates radiofrequency exposures which poses a serious health risk to humans, animals and the environment. Scientists are cautioning that before rolling out 5G, research on human health effects urgently needs to be done first to ensure the public and environment are protected.

However, instead of prudent public health measures to ensure the public's safety, governments such as the United States are quickly rolling out 5G networks in neighborhoods and are enacting various state and federal regulations to "streamline" and fasttrack the rollout. These regulations will end the ability of communities to halt and be a part of the decision making process in this massive 5G infrastructure buildout.

THOUSANDS OF MINI CELL TOWERS TO BE BUILT IN FRONT OF HOMES

5G will require the buildout of literally hundreds of thousands of new wireless antennas in neighborhoods, cities and towns. A cellular small cell or other transmitter will be placed every two to ten homes according to estimates. The purpose of this massive infrastructure build out of small cells, distributed antennae systems and microcells is to increase range and capacity in populated urban areas and *prepare for the future 5G rollout*. 5G frequencies will utilize higher frequencies that do not travel as far as the lower frequencies.

US state and federal governments are moving forth regulations which would make the right of way in front of homes as available sites for 5G transmitters – without consent of the property owners. In response, communities are protesting en masse as they do not want these transmitters built in front of their homes and communities want to be able to regulate the placement on right of ways. Some municipalities are taking the case [to the courts with litigation](#).

5G WILL USE HIGHER ELECTROMAGNETIC FREQUENCIES

5G will utilize multiple frequencies from those currently in use for cell phones and wireless to higher millimeter frequencies.

Today's cellular and Wi-Fi networks rely on microwaves – a type of electromagnetic radiation utilizing frequencies up to 6 gigahertz (GHz) in order to wirelessly transmit voice or data. However, [5G applications](#) will require unlocking of new spectrum bands in higher frequency ranges above 6 GHz to 100 GHz and beyond, utilizing submillimeter and millimeter waves – to allow ultra-high rates of data to be transmitted in the same amount of time as compared with previous deployments of microwave radiation.

[Click here to read about the difference between 1G, 2G, 3G and 4G](#)

MILLIMETER AND SUBMILLIMETER WAVES ARE BIOLOGICALLY ACTIVE

Current investigations of wireless frequencies in the millimeter and submillimeter range confirm that these waves interact directly with human skin, specifically the sweat glands. XXX of the Department of Physics, Hebrew University, Israel recently detailed how human sweat ducts act like an array of helical antennas when exposed to these wavelengths.

MECHANISM OF ACTION IS PROVEN

Research already indicates serious adverse effects from the wireless modalities in use today. Research studies from the Dielectric Spectroscopy Laboratory of the Department of Applied Physics, Hebrew University of Jerusalem, headed by XXX, indicate that 5Gs millimeter and submillimeter waves will uniquely interact with human skin and lead to preferential layer absorption. The number of sweat ducts within human skin varies from two million to four million. Replicated peer research of these biological effects in laboratory research has been conducted internationally and scientists consider this mechanism of action well proven (See documentation further down on this webpage).

5G FREQUENCIES ARE USED IN WEAPONS

For years, the U.S., Russian and Chinese [defense agencies](#) have been developing weapons that rely on the capability of this electromagnetic frequency range to induce unpleasant burning sensations on the skin as a form of crowd control. Millimeter waves are utilized by the U.S. Army in crowd dispersal guns called [Active Denial Systems](#). XXX pointed to research that was commissioned by the U.S. Army to find out why people ran away when the beam touched them. "If you are unlucky enough to be standing there when it hits you, you will feel like your body is on fire." The U.S. Department of Defense explains how "The sensation dissipates when the target moves out of the beam. The sensation is intense enough to cause a nearly instantaneous reflex action of the target to flee the beam."

HUMAN SKIN WILL BE CLASSIFIED AS AN EXTREMITY ALLOWING HIGHER EXPOSURES

Our skin is our largest organ. XXX, PhD, Chief Editor of Radiation and Health has stated that the *International Commission on Non-Ionizing Radiation Protection usually referred to as ICNIRP* – is developing recommendations for public exposure limits of these higher frequencies is planning to classify all the skin in the human body as belonging to the limbs rather than to the head or torso. XXX cautioned that, "If you classify skin as limbs – no matter where the skin is – you are permitted to expose it more than otherwise."

We assume that in terms of US exposure limits this means that the skin will be classified as "an extremity". Extremities are allowed to be exposed to much higher radiation levels than the brain, torso, legs and arms. In the USA extremities -in regards to wireless radiation- are specifically wrists and hands, ankles and feet and the ear.

5G DEPLOYMENT WITHOUT HEALTH EFFECT EVALUATION

5G is being developed and implemented without adequate evaluation of the effect of this technology on human health after long term exposure to these frequencies. Peer reviewed research studies have found adverse effects from the electromagnetic frequencies currently in use and that will be in use for this new technology.

"There is an urgent need to evaluate 5G health effects now before millions are exposed. We need to know if 5G increases the risk of skin diseases such as melanoma or other skin cancers," stated Ron Melnick, the National Institutes of Health scientist, now retired, who led the design of the National Toxicology Program study on cell phone radiofrequency radiation.

In XXX [A 5G Wireless Future: Will it give us a smart nation or contribute to an unhealthy one \(Text PDF\)](#), published in the the Santa Clara Medical Association, Russell states that "3G, 4G, 5G or a combination of zapping frequencies giving us immersive connection and entertainment but at a potentially steep price." XXX details the scientific documentation on 5G's frequencies which include arrhythmias, heart rate variability, bacterial affects, antibiotic resistance, immune system affects, chromatin affects, teratogenic effects, altered gene expression and cataracts.

XXX [lists specific recommendations shared by Environmental Health Trust and scientists worldwide.](#)

RECOMMENDATIONS TO PROTECT PUBLIC HEALTH

1. Do not proceed to roll out 5G technologies pending pre-market studies on health effects.
2. Reevaluate safety standards based on long term as well as short term studies on biological effects.
3. Rescind a portion of Section 704 of the Telecommunications Act of 1996 which preempts state and local government regulation for the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects so that health and environmental issues can be addressed.
4. Rescind portions of The Spectrum Act which was passed in 2012 as part of the Middle Class Tax Relief and Job Creation Act, which strips the ability city officials and local governments to regulate cellular communications equipment, provides no public notification or opportunity for public input and may potentially result in environmental impacts.
5. Create an independent multidisciplinary scientific agency tasked with developing appropriate safety regulations, premarket testing and research needs in a transparent environment with public input.
6. Label pertinent EMF information on devices along with appropriate precautionary warnings.

RESOURCES

Please take the time to scroll down to read research recent research studies, watch videos and see expert testimony. EHT also has a youtube playlist dedicated to [5G science](#) and to [citizen testimony on 5G](#).

This webpage contains lists including recent bioeffects research, videos of expert lectures, and a list of submissions to the FCC on Spectrum Frontiers. Please scroll down for this information.

Potential Risks to Human Health Originating from Future Sub-MM Communication Systems

Expert Forum Lecture at the Israel Institute for Advanced Study at Hebrew University Medical School, January 24, 2017

Watch a lecture on submillimeter and millimeter frequencies by XXX, PhD of the Department of Physics, Ariel University, Israel XXX and XXX, PhD, Head of the Dielectric Spectroscopy Laboratory, Department of Applied Physics, Hebrew University of Jerusalem XXX. Click here for a [PDF of Abstract for this Presentation](#)

NEWS

[Is 5G technology dangerous? Early data shows a slight increase of tumors in male rats exposed to cellphone radiation](#), XXX, Los Angeles Times, Aug 8, 2016

[A 5G Wireless Future: Will it give us a smart nation or contribute to an unhealthy one](#), Dr. Cindy Russell, Santa Clara Medical Association Bulletin Jan/Feb 2017 (Page 20 to 23) (Text only PDF)

[The Internet of Things Poses Human Health Risks: Scientists Question the Safety of Untested 5G Technology at International Conference](#), Environmental Health Trust Press Release 3/9/2017

[Everything You Need to Know About 5G](#) IEEE article

RESOURCES FOR THE COMMUNITY

Why We Should Oppose 5G on Health Grounds, by XXX

[WHAT ARE 5G AND THE INTERNET OF THINGS?](#) Website: <http://whatis5g.info/> This website considers all the issues surrounding 5G and the many ways 5G and the IoT will harm humans, the environment, and our Earth from cybersecurity to conflict minerals to health.

[Citizens' Cell Tower 5G Information Packet of Montgomery County](#): This slide presentation contains key details for communities addressing small cells in their neighborhood.

RECENT 5G and MILLIMETER WAVE BIOEFFECT STUDIES

This compilation has included several papers [compiled from xxxxxxxxxx on his blog SaferEMR](#), from work presented at the [Israel Institute for Advanced Studies at Hebrew University](#) and from the Environmental Health Research Team.

XXX, [The human skin as a sub-THz receiver – Does 5G pose a danger to it or not?](#) Environ Res. 2018 May;163:208-216. doi: 10.1016/j.envres.2018.01.032. Epub 2018 Feb 22.

- Experimentally we showed that the reflectance of the human skin in the sub-THz region depends on the intensity of perspiration, i.e. sweat duct's conductivity, and correlates with levels of human stress (physical, mental and emotional). Later on, we detected circular dichroism in the reflectance from the skin, a signature of the axial mode of a helical antenna. The full ramifications of what these findings represent in the human condition are still unclear. We also revealed correlation of electrocardiography (ECG) parameters to the sub-THz reflection coefficient of human skin. In a recent work, we developed a unique simulation tool of human skin, taking into account the skin multi-layer structure together with the helical segment of the sweat duct embedded in it. The presence of the sweat duct led to a high specific absorption rate (SAR) of the skin in extremely high frequency band. In this paper, we summarize the physical evidence for this phenomenon and consider its implication for the future exploitation of the electromagnetic spectrum by wireless communication. Starting from July 2016 the US Federal Communications Commission (FCC)

has adopted new rules for wireless broadband operations above 24 GHz (5 G). This trend of exploitation is predicted to expand to higher frequencies in the sub-THz region. One must consider the implications of human immersion in the electromagnetic noise, caused by devices working at the very same frequencies as those, to which the sweat duct (as a helical antenna) is most attuned. We are raising a warning flag against the unrestricted use of sub-THz technologies for communication, before the possible consequences for public health are explored.

TRIPATHI et al., [Frequency of the resonance of the human sweat duct in a normal mode of operation](#), BIOMEDICAL OPTICS EXPRESS 130, Vol. 9, No. 3 | 1 March 2018

- This result indicates that careful consideration should be given while designing electronic and photonic devices operating in the sub-terahertz frequency region in order to avoid various effects on human health due to these waves.

XXX, [“The Modeling of the Absorbance of Sub-THz Radiation by Human Skin,”](#) IEEE Trans. THz Sci. Tech. (Paris) 7(5), 521–528 (2017).

- In 2008, we demonstrated that the coiled portion of the sweat duct in upper skin layer could be regarded as a helical antenna in the sub-THz band. The full ramifications of what these findings represent in the human condition are still very unclear, but it is obvious that the absorption of electromagnetic energy is governed by the topology for the skin and its organelles, especially the sweat duct.

XXX, [Towards 5G communication systems: Are there health implications?](#), Int J Hyg Environ Health, 2018 Feb 2.

- “Preliminary observations showed that MMW increase skin temperature, alter gene expression, promote cellular proliferation and synthesis of proteins linked with oxidative stress, inflammatory and metabolic processes, could generate ocular damages, affect neuromuscular dynamics.”
- “Further studies are needed to better and independently explore the health effects of RF-EMF in general and of MMW in particular. However, available findings seem sufficient to demonstrate the existence of biomedical effects, to invoke the precautionary principle, to define exposed subjects as potentially vulnerable and to revise existing limits.

Scientific Citations from the published study “Potential Risks to Human Health Originating from Future Sub-MM Communication Systems” by XXX, PhD and Yuri Feldman, PhD

Feldman, Yuri and Paul Ben-Ishai. [“Potential Risks to Human Health Originating from Future Sub-MM Communication Systems.”](#) Abstract, 2017.

Feldman, Yuri, et al. [“Human skin as arrays of helical antennas in the millimeter and submillimeter wave range.”](#) Physical Review Letters, vol. 100, no. 12, 2008.

Hayut, Itai, et al. [“Circular polarization induced by the three-dimensional chiral structure of human sweat ducts.”](#) Physical Review, vol. 89, no. 4, 2014.

Hayut, Itai, et al. ["The Helical Structure of Sweat Ducts: Their Influence on the Electromagnetic Reflection Spectrum of the Skin."](#) *IEEE Transactions on Terahertz Science and Technology*, vol. 3, no. 2, 2013, pp. 207-15.

Professor Yuri Feldman – [Research Study Summaries, The Hebrew University of Jerusalem Department of Applied Physics, Dielectric Spectroscopy Laboratory](#)

RESEARCH ON MILLIMETER WAVES

Haas AJ, et al. ["Effect of acute millimeter wave exposure on dopamine metabolism of NGF-treated PC12 cells."](#) *Journal of Radiation Research*, 2017.

Gandhi OP, Riaz A. [Absorption of millimeter waves by human beings and its biological implications.](#) *IEEE Transactions on Microwave Theory and Techniques*, vol. 34, no. 2, 1986, pp. 228-235.

Haas AJ, et al. ["Effects of 60-GHz millimeter waves on neurite outgrowth in PC12 cells using high-content screening."](#) *Neuroscience Letters*, vol. 618, 2016, pp. 58-65.

Le Dréan Y, et al. ["State of knowledge on biological effects at 40–60 GHz."](#) *Comptes Rendus Physique*, vol. 14, no. 5, 2013, pp. 402-411.

Sivachenko IB, et al. ["Effects of Millimeter-Wave Electromagnetic Radiation on the Experimental Model of Migraine."](#) *Bulletin of Experimental Biology and Medicine*, vol. 160, no. 4, 2016, pp. 425-8.

Soghomonian D, K. Trchounian and A. Trchounian. ["Millimeter waves or extremely high frequency electromagnetic fields in the environment: what are their effects on bacteria?"](#) *Applied Microbiology and Biotechnology*, vol. 100, no. 11, 2016, pp. 4761-71.

Ramundo-Orlando A. [Effects of millimeter waves radiation on cell membrane – A brief review.](#) *Journal of Infrared Millimeter Terahertz Waves*, vol. 30, no. 12, 2010, pp. 1400-1411.

REFERENCES ON DEFENSE USE OF MILLIMETER WAVES

[US Department of Defense Non-Lethal Weapons Program FAQs](#)

[A Narrative Summary and Independent Assessment of the Active Denial System The Human Effects Advisory Panel](#)

SUBMISSIONS TO THE FCC ON SPECTRUM FRONTIERS

On July 14, 2016, the [FCC voted](#) to approve Spectrum Frontiers, making the U.S. the first country in the world to open up higher-frequency millimeter wave spectrum for the development of 5G fifth-generation wireless cellular technology. The FCC was flooded with comments in opposition to 5G. [Read full details at the EHT website on Spectrum Frontiers](#)

[The Berkshire-Litchfield Environmental Council Comments to Thomas Wheeler, Chairman, Federal Communications Commission](#)

["Federally-protected wildlife species are in danger", Briefing Memorandum from Dr. Albert Manville July 20, 2016 – Dr. Joel Moskowitz Comment to the FCC, "FCC Open Letter Calls for Moratorium on New Commercial Applications of Radiofrequency Radiation"](#)

[Dr. Yael Steins Comments to the FCC in Opposition to 5G Spectrum Frontiers Millimeter Wave Technology](#)

[Dr. Ronald M. Powell Ph.D. Comment to the FCC](#)

[Dr. Devra Davis to FCC, "Long Term Health and Safety Evaluation Needed Before Introduction of 5G"](#)

[Comments to FCC by Electrical Pollution, "Parents Write to the FCC: Be on the Right Side of History"](#)

[Submission to FCC by Susan Clark, "Stop 5G harm to all living beings: The Science is Conclusive"](#)

[Maryland Smartmeter Awareness Comment to the FCC, "FCC Proposed Move to 5G"](#)

[Comments by Dafna Tachover and "We are the Evidence" to FCC, "Those Injured by Wireless ask Congress: Please Protect us and help protect the public's health. Say STOP to the FCC and wheeler in 5G vote"](#)

[Angela Tsiang to US Senate Committee on Commerce, Science, and Transportation](#)

SPECTRUM FRONTIERS RESOURCES

[July 14, 2016 FCC Meeting Video Spectrum Frontiers vote.](#)

[TV Technology: FCC Opens Higher Frequencies to Phone Companies](#)

[Public News Service: FCC Votes Today on Opening Additional Wireless Spectrum for 5G](#)

[Regulators Pave Way For Speedy Next-Generation 5G Networks](#)

[GSMA ANALYSIS Understanding 5G: Perspectives on future technological advancements in mobile](#)

VIDEOS

From: XXX PHE

Sent: 10 May 2018 15:05

To: XXX PHE

Subject: RE: FOR RESPONSE BY 21 MAY: PHE, 5G and BRWL

Dear XXX

I have reviewed the comments and we have nothing to add to our previous reply

Kind regards

XXX

From: XXX PHE

Sent: 09 May 2018 16:40

To: XXX PHE

Subject: FOR RESPONSE BY 21 MAY: PHE, 5G and BRWL

Hi Team

XXX has come back to us with some additional comments, do you have anything else you would like to add in response to this?

Kind Regards

XXX

From: XXX Enquirer
Sent: 02 May 2018 12:55
To: XXX PHE
Cc: XXX Third Party
Subject: PHE, 5G and BRWL

Dear XXX and PHE,

Thank you for your reply to my concerns about 5G. I am glad that PHE is looking into this issue and possibly preparing to revising its advice on electro-magnetic radiation.

I believe that the problem is twofold: 1) 5G will be of a totally different caliber than 4G, with far more high frequency, pulsed, radiation beaming at us from close proximity. 2) Current guidelines are not prepared to deal with this completely different issue as it is not applicable to something so different and potentially much more harmful to humans, animals and plants, including plant crops.

NB: I hope you have read the links that I included in my last email, but just in case, I have included them again just below this email. The warning from 180 scientists and doctors about the dangers of this technology from across the world warrants further attention. I urge PHE to look into this as a matter of urgency so that this country is prepared and not forced to play catch-up as has been the case with damaging Blue-Rich White Light Pollution, which should have been curtailed long ago. In fact, there should have been a moratorium on modern lighting technology, until it has been shown to be safe to all. Again, may I remind you of this link: <http://www.lightaware.org>

I am looking forward to your reply and proactive measures,

Many thanks in advance,

Yours sincerely,

XXX

<http://emrabc.ca/?p=12284>

<https://ehtrust.org/wp-content/uploads/Scientist-5G-appeal-2017.pdf>

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-networks-iot-scientific-overview-human-health-risks/>

On Mon, Apr 30, 2018 at 11:29 AM, XXX PHE wrote:

Dear XXX

Thank you for your email of 18 April to Public Health England (PHE) regarding the implementation of 5G networks and radiation.

PHE's advice about exposure to radio waves can be accessed in the following link:

www.gov.uk/government/collections/electromagnetic-fields#radio-waves

In relation to the implementation of 5G user devices and networks, this technology is at an early stage and reflects the latest evolution in mobile communications technology. Current technical standards that draw on the International Commission on Non-Ionizing Radiation Protection (ICNIRP) exposure guidelines will apply to the products that are developed.

PHE is committed to monitoring the evidence applicable to this and other radio technologies, and to revising its advice, should that be necessary.

Yours Sincerely

XXX

From: XXX Enquirer

Sent: 18 April 2018 11:13

To: XXX PHE

Cc: XXX Third Party

Subject: URGENT: * BRWL, 5G and Public Health England *

Dear XXX and Public Health England,

I am writing to you regarding my concerns about the roll-out of a worldwide 5G network. This is a very serious issue with huge health and environmental implications for humans, wildlife and plants, not in the least plant crops. We are already surrounded by a soup of EMF's and have had to suffer increased Blue-Rich White Light Pollution coming from cool-white LED lighting. However, 5G is a totally different ball game: Beaming high frequency, pulsed microwave radiation at humans (and non-humans) from every direction without further research - in other words, without due diligence - is completely and utterly irresponsible and could become the focus of future litigation.

I understand that the antennae for this madness are going to be installed on the new LED lamp posts, so now blue-rich white light and the relatively high EMF that LED generates is going to be joined by this highly dangerous technology, which has been shown in studies to have harmful effects on our skin, eyes, heart, brain and immune system, not to mention the carcinogenic effects. Kindly see below for the three links that I have included (but there are many more) showing some of the serious concerns. The second link is an appeal from scientists across the world urging for more research before the roll-out of something which could and most surely will have dire consequences for Public Health and Environment.

As you are aware, Blue-Rich White Light Pollution is harmful to humans and environment (not to mention road safety and sky glow) as it causes circadian disruption as well as hazardous glare and it needs to be halted. What's more, modern lighting technology is making a significant minority of people seriously ill, with symptoms ranging from eye pain, headaches, severe migraines, nausea, dizziness and epileptic episodes. These symptoms are not solely caused by high colour temperature or LED flicker and could be related to Electro-Magnetic Radiation. More research is needed into this and there should really be a moratorium on a roll-out of LED lighting until it is proven to be safe for humans and wildlife. Kindly see: <http://www.lightaware.org>

However, 5G will be far worse: This horror is already being rolled out across the USA without due diligence, but in the UK we are still at the test bed stage. I ask Public Health England to look into the dangers with this technology and to work towards a National Light *and* National Radiation Policy. I also ask for any possible test-bedding in England to be halted until further research has developed an alternative which is safe for humans, animals and plants, in accordance with the scientist appeal - kindly see below link.

I am looking forward to your response and promised phone call,

Many thanks in advance,

Yours sincerely,

XXX

<http://emrabc.ca/?p=12284>

<https://ehtrust.org/wp-content/uploads/Scientist-5G-appeal-2017.pdf>

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-networks-iot-scientific-overview-human-health-risks/>

The Dangers Of 5G – 11 Reasons To Be Concerned

The USA is currently leading the way on 5G. At the June 2016 press conference where the Federal Communications Commission's (FCC) head Tom Wheeler announced the opening up of low, mid and high spectrum's. There was no mention of health effects whatsoever. But the dangers are real.

5G radiation dangersThousands of studies link low-level wireless radio frequency radiation exposures to a long list of adverse biological effects, including:

DNA single and double strand breaks

Oxidative damage

Disruption of cell metabolism

Increased blood brain barrier permeability

Melatonin reduction

Disruption to brain glucose metabolism

Generation of stress proteins

Let's not also forget that in 2011 the World Health Organization (WHO) classified radio frequency radiation as a possible 2B carcinogen.

More recently the \$25 million National Toxicology Program concluded that radio frequency radiation of the type currently used by cell phones can cause cancer.

But where does 5G fit into all this? Given that 5G is set to utilize frequencies above and below existing frequency bands 5G sits in the middle of all this. But the tendency (it varies from country to country) is for 5G to utilize the higher frequency bands. Which brings it's own particular concerns. Here is my review of the studies done to date – 11 reasons to be concerned.

#1 – A DENSER SOUP OF ELECTROSMOG

We're going to be bombarded by really high frequencies at low, short-range intensities creating a yet more complicated denser soup of electrosmog.

5G frequencies

Source: Latest on 5G Spectrum – EMFields Ltd.

To work with the higher range MMW in 5G, the antennas required are smaller. Some experts are talking about as small as 3mm by 3mm. The low intensity is for efficiency and to deal with signal disruption from natural and man-made obstacles.

#2 – EFFECTS ON THE SKIN

The biggest concern is how these new wavelengths will affect the skin. The human body has between two million to four million sweat ducts. Dr. Ben-Ishai of Hebrew University, Israel explains

that our sweat ducts act like “an array of helical antennas when exposed to these wavelengths,” meaning that we become more conductive. A recent New York study which experimented with 60GHz waves stated that “the analyses of penetration depth show that more than 90% of the transmitted power is absorbed in the epidermis and dermis layer.”

The effects of MMWs as studied by Dr. Yael Stein of Hebrew University is said to also cause humans physical pain as our nociceptors flare up in recognition of the wave as a damaging stimuli. So we’re looking at possibilities of many skin diseases and cancer as well as physical pain to our skin.

#3 – EFFECTS ON THE EYES

A 1994 study found that low level millimeter microwave radiation produced lens opacity in rats, which is linked to the production of cataracts.

An experiment conducted by the Medical Research Institute of Kanazawa Medical University found that 60GHz “millimeter-wave antennas can cause thermal injuries of varying types of levels. The thermal effects induced by millimeterwaves can apparently penetrate below the surface of the eye.”

A 2003 Chinese study has also found damage to the lens epithelial cells of rabbits after 8 hours of exposure to microwave radiation and a 2009 study conducted by the College of Physicians and Surgeons in Pakistan conclude that EMFs emitted by a mobile phone cause derangement of chicken embryo retinal differentiation.

#4 – EFFECTS ON THE HEART

A 1992 Russian study found that frequencies in the range 53-78GHz (that which 5G proposes to use) impacted the heart rate variability (an indicator of stress) in rats. Another Russian study on frogs who’s skin was exposed to MMWs found heart rate changes (arrhythmias).

#5 – IMMUNE SYSTEM EFFECTS

A 2002 Russian study examined the effects of 42HGz microwave radiation exposure on the blood of healthy mice. It was concluded that “the whole-body exposure of healthy mice to low-intensity EHF EMR has a profound effect on the indices of nonspecific immunity”.

#6 – EFFECTS ON CELL GROWTH RATES

A 2016 Armenian study observed MMWs at low intensity, mirroring the future environment brought about by 5G. Their study conducted on E-coli and other bacteria stated that the waves had depressed their growth as well as “changing properties and activity” of the cells. The concern is that it would do the same to human cells.

#7 – EFFECTS ON BACTERIA RESISTANCE

The very same Armenian study also suggested that MMWs effects are mainly on water, cell plasma membrane and genome too. They had found that MMW’s interaction with bacteria altered their sensitivity to “different biologically active chemicals, including antibiotics.” More specifically, the combination of MMW and antibiotics showed that it may be leading to antibiotic resistance in bacteria.

This groundbreaking finding could have a magnum effect on the health of human beings as the bandwidth is rolled out nationwide. The concern is that we develop a lower resistance to bacteria as our cells become more vulnerable – and we become more vulnerable.

#8 – EFFECTS ON PLANT HEALTH

One of the features of 5G is that the MMW is particularly susceptible to being absorbed by plants and rain. Humans and animals alike consume plants as a food source. The effects MMW has on plants could leave us with food that's not safe to consume.

Think GMOs on steroids. The water that falls from the sky onto these plants will also be irradiated. A 2010 study on aspen seedlings showed that the exposure to radiofrequencies led to the leaves showing necrosis symptoms.

Source: <https://www.hindawi.com/journals/ijfr/2010/836278/>

Another Armenian study found that MMWs of low intensity "invoke(s) peroxidase isoenzyme spectrum changes of wheat shoots." Peroxidase is a stress protein existing in plants. Indications are that 5G will be particularly harmful to plants – perhaps more so than to humans.

#9 – EFFECTS ON THE ATMOSPHERE AND DEPLETION OF FOSSIL FUELS

Implementation of the 5G global wireless network requires the launching of rockets to deploy satellites for 5G. These satellites have a short lifespan which would require a lot more deployment than what we're currently seeing. A new type of hydrocarbon rocket engine expected to power a fleet of suborbital rockets would emit black carbon which "could cause potentially significant changes in the global atmospheric circulation and distributions of ozone and temperature" according to a 2010 Californian study. Solid state rocket exhaust contains chlorine which also destroys the ozone.

The effects on the ozone are thought to be worse than current day CFC exposure.

Google's Project Loon is said to bring Internet to rural and hard-to-access areas by using helium balloons. But these balloons only have a 10-month lifespan. We're looking at a lot of helium being used here, more than what we can possibly have on Earth?

#10 – DISRUPTION OF THE NATURAL ECOSYSTEM

Since the year 2000, there have been reports of birds abandoning their nests as well as health issues like "plumage deterioration, locomotion problems, reduced survivorship and death," says researcher Alfonso Balmori. Bird species that are affected by these low levels, non-ionizing microwave radiation are the House Sparrows, Rock Doves, White Storks, Collared Doves and Magpies, among others.

But it's not just the birds. The declining bee population is also said to be linked to this non-ionizing EMF radiation. It reduces the egg-laying abilities of the queen leading to a decline in colony strength.

A study conducted by Chennai's Loyola College in 2012 concluded that out of 919 research studies carried out on birds, plants, bees and other animals and humans, 593 of them showed impacts from RF-EMF radiations. 5G will be adding to the effects of this electrosmog.

#11 – MOST 5G STUDIES MIS-LEADING

5G will use pulsed millimeter waves to carry information. But as Dr. Joel Moskowitz points out, most 5G studies are misleading because they do not pulse the waves. This is important because research on microwaves already tells us how pulsed waves have more profound biological effects on our body compared to non-pulsed waves. Previous studies, for instance, show how pulse rates of the frequencies led to gene toxicity and DNA strand breaks.

LIVE TESTING ALREADY BEGUN

AT&T have announced the availability of their 5G Evolution in Austin, Texas. 5G Evolution allows Samsung S8 and S8 + users access to faster speeds. This is part of AT&T's plan to lay the 5G foundation while the standards are being finalized. This is expected to happen in late 2018. AT&T has eyes on 19 other metropolitan areas such as Chicago, Los Angeles, Boston, Atlanta, San Francisco and so on. Indianapolis is up next on their 5G trail due to arrive in the summer.

Qualcomm has already demonstrated a 5G antenna system with about 27 decibel gain. According to ABI Research, is "about 10 to 12 more db than a typical cellular base station antenna." Not a good sign.

Many more private sector companies such as HTC, Oracle, Sprint, T-Mobile are playing a role in the developing of testing platforms by contributing time, knowledge or money.

Call to Action

Research and pre-testing is rampant by companies who are interested to tap into the lucrative waters of 5G. But few are willing to research its effects on health. The International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines remain essentially unchanged since 1998, not allowing for the recognition of radio frequency microwave radiation and MMWs as harmful unless there is a heating effect. But a few experts are speaking out.

Dariusz Leszczynski from the University of Helsinki and also former member of the International Agency Research on Cancer is one of them. He has brought to attention to ICNIRP intention to classify skin as limbs. Limbs are paid lesser attention to when classifying exposure levels. Research indicates that MMWs affect the skin and the eyes the most. If skin is classified as a limb, this will pave the way for industry giants to introduce even higher exposures and put more people at risk.

The Global Union Against Radiation Deployment from Space (GUARD) addressed a letter to the FCC in September of 2016, bringing to their attention the harm 5G will inflict. GUARD warned the FCC that 5G violates Article 3 of The UN Declaration of Human Rights which states that "everyone has the right to life, liberty and security of person." The document is laden with research, information and global support.

To learn how to write, call or email the relevant agencies to protest against the 5G deployment go here parentsforsafetechnology.org

WHAT EXPERTS ARE SAYING

Here's what experts are saying about 5G:

"Along with the 5G there is another thing coming – Internet of Things. If you look at it combined the radiation level is going to increase tremendously and yet the industry is very excited about it.... they project 5G/IoT business to be a \$7 trillion business."

-Prof. Girish Kumar, Professor at Electrical Engineering Department at IIT Bombay

"The new 5G wireless technology involves millimeter waves (extremely high frequencies) producing photons of much greater energy than even 4G and WiFi. Allowing this technology to be used without proving its safety is reckless in the extreme, as the millimeter waves are known to have a profound effect on all parts of the human body."

-Prof. Trevor Marshall, Director Autoimmunity Research Foundation, California

"The plans to beam highly penetrative 5G milliwave radiation at us from space must surely be one of the greatest follies ever conceived of by mankind. There will be nowhere safe to live."

-Olga Sheean former WHO employee and author of 'No Safe Place'

"It would irradiate everyone, including the most vulnerable to harm from radiofrequency radiation: pregnant women, unborn children, young children, teenagers, men of reproductive age, the elderly, the disabled, and the chronically ill."

—Ronald Powell, PhD, Letter to FCC on 5G expansion

How To Protect Yourself From 5G

My 3 step approach for dealing with EMFs can be summarized as:

Understand your exposures. Understand the different types of EMFs and how they behave – hence the need to read (and share) articles like this one.

Measure – use EMF meters to obtain readings and identify hotspots.

Mitigate your exposure. Which means either eliminate the source, move further away from the source of radiation or shield your body.

I recommend the same approach with 5G. There is a concern that current EMF meters are not able to measure the frequencies of MMWs. On this point, researcher Alasdair Philips from Powerwatch states "current RF meters cover the frequency ranges proposed for most 5G use in the next three years".

From:

<http://emrabc.ca/?p=12284>

<https://ehtrust.org/wp-content/uploads/Scientist-5G-appeal-2017.pdf>

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-networks-iot-scientific-overview-human-health-risks/>

5G And The IOT: Scientific Overview Of Human Health Risks

[Facebook](#)[Twitter](#)[Google+](#)

5G is the term used to describe the next-generation of mobile networks beyond the 4G LTE mobile networks commonly used today. 5G is intended to be the technology that allows the Internet of Things (IOT) to exist and tie all internet connected devices together.

Currently there is no standard for 5G networks in place and it will be a combination of a variety of frequencies and modulations. Industry is developing exactly what 5G will be as the standard has not been set yet. It is assumed that 5G networks will not become commercially available until 2020 but several cities are rolling out 5G as test areas now.

Published peer reviewed science already indicates that the current wireless technologies of 2G, 3G and 4G – in use today with our cell phones, computers and wearable tech – creates radiofrequency exposures which poses a serious health risk to humans, animals and the environment. Scientists are cautioning that before rolling out 5G, research on human health effects urgently needs to be done first to ensure the public and environment are protected.

However, instead of prudent public health measures to ensure the public's safety, governments such as the United States are quickly rolling out 5G networks in neighborhoods and are enacting various state and federal regulations to "streamline" and fasttrack the rollout. These regulations will end the ability of communities to halt and be a part of the decision making process in this massive 5G infrastructure buildout.

THOUSANDS OF MINI CELL TOWERS TO BE BUILT IN FRONT OF HOMES

5G will require the buildout of literally hundreds of thousands of new wireless antennas in neighborhoods, cities and towns. A cellular small cell or other transmitter will be placed every two to ten homes according to estimates. The purpose of this massive infrastructure build out of small cells, distributed antennae systems and microcells is to increase range and capacity in populated urban areas and *prepare for the future 5G rollout*. 5G frequencies will utilize higher frequencies that do not travel as far as the lower frequencies.

US state and federal governments are moving forth regulations which would make the right of way in front of homes as available sites for 5G transmitters – without consent of the property owners. In response, communities are protesting en masse as they do not want these transmitters built in front of their homes and communities want to be able to regulate the placement on right of ways. Some municipalities are taking the case [to the courts with litigation](#).

5G WILL USE HIGHER ELECTROMAGNETIC FREQUENCIES

5G will utilize multiple frequencies from those currently in use for cell phones and wireless to higher millimeter frequencies.

Today's cellular and Wi-Fi networks rely on microwaves – a type of electromagnetic radiation utilizing frequencies up to 6 gigahertz (GHz) in order to wirelessly transmit voice or data. However, [5G applications](#) will require unlocking of new spectrum bands in higher frequency ranges above 6 GHz to 100 GHz and beyond, utilizing submillimeter and millimeter waves – to allow ultra-high rates of data to be transmitted in the same amount of time as compared with previous deployments of microwave radiation.

[Click here to read about the difference between 1G, 2G, 3G and 4G](#)

MILLIMETER AND SUBMILLIMETER WAVES ARE BIOLOGICALLY ACTIVE

Current investigations of wireless frequencies in the millimeter and submillimeter range confirm that these waves interact directly with human skin, specifically the sweat glands. Dr. Ben-Ishai of the Department of Physics, Hebrew University, Israel recently detailed how human sweat ducts act like an array of helical antennas when exposed to these wavelengths.

MECHANISM OF ACTION IS PROVEN

Research already indicates serious adverse effects from the wireless modalities in use today. Research studies from the Dielectric Spectroscopy Laboratory of the Department of Applied Physics, Hebrew University of Jerusalem, headed by Dr. Yuri Feldman, indicate that 5G's millimeter and submillimeter waves will uniquely interact with human skin and lead to preferential layer absorption. The number of sweat ducts within human skin varies from two million to four million. Replicated peer research of these biological effects in laboratory research has been conducted internationally and scientists consider this mechanism of action well proven (See documentation further down on this webpage).

5G FREQUENCIES ARE USED IN WEAPONS

For years, the U.S., Russian and Chinese [defense agencies](#) have been developing weapons that rely on the capability of this electromagnetic frequency range to induce unpleasant burning sensations on the skin as a form of crowd control. Millimeter waves are utilized by the U.S. Army in crowd dispersal guns called [Active Denial Systems](#). Dr. Paul Ben-Ishai pointed to research that was commissioned by the U.S. Army to find out why people ran away when the beam touched them. "If you are unlucky enough to be standing there when it hits you, you will feel like your body is on fire."

The U.S. Department of Defense explains how “The sensation dissipates when the target moves out of the beam. The sensation is intense enough to cause a nearly instantaneous reflex action of the target to flee the beam.”

HUMAN SKIN WILL BE CLASSIFIED AS AN EXTREMITY ALLOWING HIGHER EXPOSURES

Our skin is our largest organ. Dariusz Leszczynski, PhD, Chief Editor of Radiation and Health has stated that the *International Commission on Non-Ionizing Radiation Protection usually referred to as ICNIRP* – is developing recommendations for public exposure limits of these higher frequencies is planning to classify all the skin in the human body as belonging to the limbs rather than to the head or torso. Leszczynski cautioned that, “If you classify skin as limbs – no matter where the skin is – you are permitted to expose it more than otherwise.”

We assume that in terms of US exposure limits this means that the skin will be classified as “an extremity”. Extremities are allowed to be exposed to much higher radiation levels than the brain, torso, legs and arms. In the USA extremities -in regards to wireless radiation- are specifically wrists and hands, ankles and feet and the ear.

5G DEPLOYMENT WITHOUT HEALTH EFFECT EVALUATION

5G is being developed and implemented without adequate evaluation of the effect of this technology on human health after long term exposure to these frequencies. Peer reviewed research studies have found adverse effects from the electromagnetic frequencies currently in use and that will be in use for this new technology.

“There is an urgent need to evaluate 5G health effects now before millions are exposed. We need to know if 5G increases the risk of skin diseases such as melanoma or other skin cancers,” stated Ron Melnick, the National Institutes of Health scientist, now retired, who led the design of the National Toxicology Program study on cell phone radiofrequency radiation.

In [XXX A 5G Wireless Future: Will it give us a smart nation or contribute to an unhealthy one \(Text PDF\)](#), published in the the Santa Clara Medical Association, Russell states that “3G, 4G, 5G or a combination of zapping frequencies giving us immersive connection and entertainment but at a potentially steep price.” Russell details the scientific documentation on 5G’s frequencies which include arrhythmias, heart rate variability, bacterial affects, antibiotic resistance, immune system affects, chromatin affects, teratogenic effects, altered gene expression and cataracts.

[Dr. XXX lists specific recommendations shared by Environmental Health Trust and scientists worldwide.](#)

RECOMMENDATIONS TO PROTECT PUBLIC HEALTH

1. Do not proceed to roll out 5G technologies pending pre-market studies on health effects.
2. Reevaluate safety standards based on long term as well as short term studies on biological effects.
3. Rescind a portion of Section 704 of the Telecommunications Act of 1996 which preempts state and local government regulation for the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects so that health and environmental issues can be addressed.
4. Rescind portions of The Spectrum Act which was passed in 2012 as part of the Middle Class Tax Relief and Job Creation Act, which strips the ability city officials and local governments to regulate

cellular communications equipment, provides no public notification or opportunity for public input and may potentially result in environmental impacts.

5. Create an independent multidisciplinary scientific agency tasked with developing appropriate safety regulations, premarket testing and research needs in a transparent environment with public input.

6. Label pertinent EMF information on devices along with appropriate precautionary warnings.

RESOURCES

Please take the time to scroll down to read recent research studies, watch videos and see expert testimony. EHT also has a youtube playlist dedicated to [5G science](#) and to [citizen testimony on 5G](#).

This webpage contains lists including recent bioeffects research, videos of expert lectures, and a list of submissions to the FCC on Spectrum Frontiers. Please scroll down for this information.

Potential Risks to Human Health Originating from Future Sub-MM Communication Systems

Expert Forum Lecture at the Israel Institute for Advanced Study at Hebrew University Medical School, January 24, 2017

Watch a lecture on submillimeter and millimeter frequencies by Paul Ben-Ishai, PhD of the Department of Physics, Ariel University, Israel, [Full Bio](#) and Yuri Feldman, PhD, Head of the Dielectric Spectroscopy Laboratory, Department of Applied Physics, Hebrew University of Jerusalem, [Full Bio](#). Click here for a [PDF of Abstract for this Presentation](#)

NEWS

[Is 5G technology dangerous? Early data shows a slight increase of tumors in male rats exposed to cellphone radiation](#), Jim Puzzanghera, Los Angeles Times, Aug 8, 2016

[A 5G Wireless Future: Will it give us a smart nation or contribute to an unhealthy one](#), Dr. Cindy Russell, Santa Clara Medical Association Bulletin Jan/Feb 2017 ([Page 20 to 23](#)) ([Text only PDF](#))

[The Internet of Things Poses Human Health Risks: Scientists Question the Safety of Untested 5G Technology at International Conference](#), Environmental Health Trust Press Release 3/9/2017

[Everything You Need to Know About 5G](#) IEEE article

RESOURCES FOR THE COMMUNITY

[Why We Should Oppose 5G on Health Grounds](#), by Dr. Ronald Powell

[WHAT ARE 5G AND THE INTERNET OF THINGS?](#) Website: <http://whatis5g.info/> This website considers all the issues surrounding 5G and the many ways 5G and the IoT will harm humans, the environment, and our Earth from cybersecurity to conflict minerals to health.

[Citizens' Cell Tower 5G Information Packet of Montgomery County](#): This slide presentation contains key details for communities addressing small cells in their neighborhood.

RECENT 5G and MILLIMETER WAVE BIOEFFECT STUDIES

This compilation has included several papers [compiled from Dr. Joel Moskowitz on his blog SaferEMR](#), from work presented at the [Israel Institute for Advanced Studies at Hebrew University](#) and from the Environmental Health Research Team.

Betzalel N, Ben Ishai P, Feldman Y., [The human skin as a sub-THz receiver – Does 5G pose a danger to it or not?](#) Environ Res. 2018 May;163:208-216. doi: 10.1016/j.envres.2018.01.032. Epub 2018 Feb 22.

- Experimentally we showed that the reflectance of the human skin in the sub-THz region depends on the intensity of perspiration, i.e. sweat duct's conductivity, and correlates with levels of human stress (physical, mental and emotional). Later on, we detected circular dichroism in the reflectance from the skin, a signature of the axial mode of a helical antenna. The full ramifications of what these findings represent in the human condition are still unclear. We also revealed correlation of electrocardiography (ECG) parameters to the sub-THz reflection coefficient of human skin. In a recent work, we developed a unique simulation tool of human skin, taking into account the skin multi-layer structure together with the helical segment of the sweat duct embedded in it. The presence of the sweat duct led to a high specific absorption rate (SAR) of the skin in extremely high frequency band. In this paper, we summarize the physical evidence for this phenomenon and consider its implication for the future exploitation of the electromagnetic spectrum by wireless communication. Starting from July 2016 the US Federal Communications Commission (FCC) has adopted new rules for wireless broadband operations above 24 GHz (5 G). This trend of exploitation is predicted to expand to higher frequencies in the sub-THz region. One must consider the implications of human immersion in the electromagnetic noise, caused by devices working at the very same frequencies as those, to which the sweat duct (as a helical antenna) is most attuned. We are raising a warning flag against the unrestricted use of sub-THz technologies for communication, before the possible consequences for public health are explored.

TRIPATHI et al., [Frequency of the resonance of the human sweat duct in a normal mode of operation](#), BIOMEDICAL OPTICS EXPRESS 130, Vol. 9, No. 3 | 1 March 2018

- This result indicates that careful consideration should be given while designing electronic and photonic devices operating in the sub-terahertz frequency region in order to avoid various effects on human health due to these waves.

Betzalel, Y. Feldman, and P. Ben Ishai, [“The Modeling of the Absorbance of Sub-THz Radiation by Human Skin,”](#) IEEE Trans. THz Sci. Tech. (Paris) 7(5), 521–528 (2017).

- In 2008, we demonstrated that the coiled portion of the sweat duct in upper skin layer could be regarded as a helical antenna in the sub-THz band. The full ramifications of what these findings represent in the human condition are still very unclear, but it is obvious that the absorption of electromagnetic energy is governed by the topology for the skin and its organelles, especially the sweat duct.

Di Ciaula, [Towards 5G communication systems: Are there health implications?](#), Int J Hyg Environ Health. 2018 Feb 2.

- “Preliminary observations showed that MMW increase skin temperature, alter gene expression, promote cellular proliferation and synthesis of proteins linked with oxidative

stress, inflammatory and metabolic processes, could generate ocular damages, affect neuromuscular dynamics.”

- “Further studies are needed to better and independently explore the health effects of RF-EMF in general and of MMW in particular. However, available findings seem sufficient to demonstrate the existence of biomedical effects, to invoke the precautionary principle, to define exposed subjects as potentially vulnerable and to revise existing limits.

Scientific Citations from the published study “Potential Risks to Human Health Originating from Future Sub-MM Communication Systems” by Paul Ben-Ishai, PhD and Yuri Feldman, PhD

Feldman, Yuri and Paul Ben-Ishai. [“Potential Risks to Human Health Originating from Future Sub-MM Communication Systems.”](#) Abstract, 2017.

Feldman, Yuri, et al. [“Human skin as arrays of helical antennas in the millimeter and submillimeter wave range.”](#) *Physical Review Letters*, vol. 100, no. 12, 2008.

Hayut, Itai, et al. [“Circular polarization induced by the three-dimensional chiral structure of human sweat ducts.”](#) *Physical Review*, vol. 89, no. 4, 2014.

Hayut, Itai, et al. [“The Helical Structure of Sweat Ducts: Their Influence on the Electromagnetic Reflection Spectrum of the Skin.”](#) *IEEE Transactions on Terahertz Science and Technology*, vol. 3, no. 2, 2013, pp. 207-15.

Professor Yuri Feldman – [Research Study Summaries, The Hebrew University of Jerusalem Department of Applied Physics, Dielectric Spectroscopy Laboratory](#)

RESEARCH ON MILLIMETER WAVES

Haas AJ, et al. [“Effect of acute millimeter wave exposure on dopamine metabolism of NGF-treated PC12 cells.”](#) *Journal of Radiation Research*, 2017.

Gandhi OP, Riazi A. [Absorption of millimeter waves by human beings and its biological implications.](#) *IEEE Transactions on Microwave Theory and Techniques*, vol. 34, no. 2, 1986, pp. 228-235.

Haas AJ, et al. [“Effects of 60-GHz millimeter waves on neurite outgrowth in PC12 cells using high-content screening.”](#) *Neuroscience Letters*, vol. 618, 2016, pp. 58-65.

Le Dréan Y, et al. [“State of knowledge on biological effects at 40–60 GHz.”](#) *Comptes Rendus Physique*, vol. 14, no. 5, 2013, pp. 402-411.

Sivachenko IB, et al. [“Effects of Millimeter-Wave Electromagnetic Radiation on the Experimental Model of Migraine.”](#) *Bulletin of Experimental Biology and Medicine*, vol. 160, no. 4, 2016, pp. 425-8.

Soghomonyan D, K. Trchounian and A. Trchounian. [“Millimeter waves or extremely high frequency electromagnetic fields in the environment: what are their effects on bacteria?”](#) *Applied Microbiology and Biotechnology*, vol. 100, no. 11, 2016, pp. 4761-71.

Ramundo-Orlando A. [Effects of millimeter waves radiation on cell membrane – A brief review.](#) *Journal of Infrared Millimeter Terahertz Waves*, vol. 30, no. 12, 2010, pp. 1400-1411.

REFERENCES ON DEFENSE USE OF MILLIMETER WAVES

[US Department of Defense Non-Lethal Weapons Program FAQs](#)

[A Narrative Summary and Independent Assessment of the Active Denial System The Human Effects Advisory Panel](#)

SUBMISSIONS TO THE FCC ON SPECTRUM FRONTIERS

On July 14, 2016, the [FCC voted](#) to approve Spectrum Frontiers, making the U.S. the first country in the world to open up higher-frequency millimeter wave spectrum for the development of 5G fifth-generation wireless cellular technology. The FCC was flooded with comments in opposition to 5G. [Read full details at the EHT website on Spectrum Frontiers](#)

[The Berkshire-Litchfield Environmental Council Comments to Thomas Wheeler, Chairman, Federal Communications Commission](#)

["Federally-protected wildlife species are in danger", Briefing Memorandum from Dr. Albert Manville](#)

[July 20, 2016 – Dr. Joel Moskowitz Comment to the FCC, "FCC Open Letter Calls for Moratorium on New Commercial Applications of Radiofrequency Radiation"](#)

[Dr. Yael Steins Comments to the FCC in Opposition to 5G Spectrum Frontiers Millimeter Wave Technology](#)

[Dr. Ronald M. Powell Ph.D. Comment to the FCC](#)

[Dr. Devra Davis to FCC, "Long Term Health and Safety Evaluation Needed Before Introduction of 5G"](#)

[Comments to FCC by Electrical Pollution, "Parents Write to the FCC: Be on the Right Side of History"](#)

[Submission to FCC by Susan Clark, "Stop 5G harm to all living beings: The Science is Conclusive"](#)

[Maryland Smartmeter Awareness Comment to the FCC, "FCC Proposed Move to 5G"](#)

[Comments by Dafna Tachover and "We are the Evidence" to FCC, "Those Injured by Wireless ask Congress: Please Protect us and help protect the public's health. Say STOP to the FCC and wheeler in 5G vote"](#)

[Angela Tsiang to US Senate Committee on Commerce, Science, and Transportation](#)

SPECTRUM FRONTIERS RESOURCES

[July 14, 2016 FCC Meeting Video Spectrum Frontiers vote.](#)

[TV Technology: FCC Opens Higher Frequencies to Phone Companies](#)

[Public News Service: FCC Votes Today on Opening Additional Wireless Spectrum for 5G](#)

[Regulators Pave Way For Speedy Next-Generation 5G Networks](#)

[GSMA ANALYSIS Understanding 5G: Perspectives on future technological advancements in mobile](#)

VIDEOS

From: XXX PHE

Sent: 02 May 2018 14:56

To: XXX PHE

Cc: XXX PHE

Subject: RE: OFFICIAL: Query from DPH: mobile phone radiation for council meeting next week

Dear XXX,

Please find below a response for you to pass on to the council (note there is an attachment also):

[Public Health England (PHE) advises the UK Government on the public health aspects of exposure to radio waves, including those from mobile phone base stations and other radio transmitters in the environment.

PHE's advice about exposure to radio waves can be accessed in the following link:
<https://www.gov.uk/government/collections/electromagnetic-fields#radio-waves>

In relation to the implementation of 5G user devices and networks, this technology is at an early stage and reflects the latest evolution in mobile communications technology. Current technical standards that draw on the International Commission on Non-Ionizing Radiation Protection (ICNIRP) exposure guidelines will apply to the products that are developed.

Further information about the position of PHE and other authoritative bodies on exposures to radiofrequency radiation can be found in the attached advice summary document, which responds in more detail to the points raised in the letter from XXX.

PHE is committed to monitoring the evidence applicable to this and other radio technologies, and to revising its advice, should that be necessary.]

I hope this is helpful,

XXX

from: XXX PHE

Sent: 02 May 2018 13:49

To: XXX PHE

Cc: XXX PHE

Subject: Re: OFFICIAL: Query from DPH: mobile phone radiation for council meeting next week

Dear XXX,

We have received a somewhat urgent request for advice from a director of public health regarding 5G radio wave exposures, from XXX who is one of the local consultants at the HPT. Would you be able to consider the correspondence below and help Simon with this enquiry?

Many thanks

XXX

From: XXX Councillor

Sent: 02 May 2018 12:54

To: XXX PHE

Subject: OFFICIAL: Query from DPH: mobile phone radiation for council meeting next week

OFFICIAL

Dear XXX,

A question is being asked by one of the councillors at a council meeting next week about radiation and 5G and the DPH has asked for us to help with a response to this – would someone be able to get back to me fairly soon about this? I appreciate things may still be busy of course

– please see the quite long e-mail below this with some references that this person has found to support this. Is there an update to the previous evidence on mobile phone base stations that might address any of this specifically about 5G? I notice that the NRPB doc was published quite a while ago now (2000) but might still be the best source of evidence for allaying the concerns raised

<https://www.gov.uk/government/publications/mobile-phone-base-stations-radio-waves-and-health/mobile-phone-base-stations-radio-waves-and-health>

<http://webarchive.nationalarchives.gov.uk/20140722234049/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/MiscellaneousNRPBReports/Abstracts1996To2001/2000nrpbR321/>

thanks

XXX

From: XXX Councilor

Sent: 02 May 2018 11:41

To: XXX PHE

Cc: XXX Third Parties

Subject: FW: Urgent need to stop the 5G and Smart Grid roll out (including rejecting 'Smart Cities') on the grounds of health, safety, privacy, security, liberty and environmental protection

Dear XXX

Full Council is 16th May.

Would be grateful for PHE assistance in responding to this issue.

Thanks

Best wishes

XXX

From: XXX Councillor

Sent: 02 May 2018 11:28

To: XXX Councillor

Subject: Fwd: Urgent need to stop the 5G and Smart Grid roll out (including rejecting 'Smart Cities') on the grounds of health, safety, privacy, security, liberty and environmental protection

Good morning XXX

Please see below an email that has been sent to all councillors about 5G and the point raised by Cllr XXX. Would you be able to provide me with some information on this and possible points that could be put if a question does arise at Full Council.

Many thanks

XXX

From: XXX Councillor

Date: 1 May 2018 at 19:34:22 BST

To: XXX Councillor

Subject: RE: Urgent need to stop the 5G and Smart Grid roll out (including rejecting 'Smart Cities') on the grounds of health, safety, privacy, security, liberty and environmental protection

Hello XXX

We have been here before with mobile phone masts. I am not aware of any risks to human health caused by 5G wireless infrastructure.

I am sure that XXX and I will be ready for any challenge.

XXX

From: XXX Councillor

Sent: 01 May 2018 19:03

To: XXX Councillor

Subject: FW: Urgent need to stop the 5G and Smart Grid roll out (including rejecting 'Smart Cities') on the grounds of health, safety, privacy, security, liberty and environmental protection

XXX

does this come under Access (cause), or Public Health (effect) – either way one of you may need to be prepared in case one of our members asks you about it at CC?

cheers, XXX

From: XXX Enquirer

Sent: 29 April 2018 22:14

To: XXX Councillors

Subject: Urgent need to stop the 5G and Smart Grid roll out (including rejecting 'Smart Cities') on the grounds of health, safety, privacy, security, liberty and environmental protection

Dear Members of XXX Council,

The international biomedical research community has made it quite clear that radiofrequency radiation, and specifically cellular radiofrequency radiation, can harm people in an enormous number of ways. Most recently the National Institutes of Health linked cellular radiation to brain cancer (glioma) which is usually fatal, and to a nerve cancer (schwannoma) that can be fatal.

https://www.salzburg.gv.at/gesundheits/Documents/Hardell_Comment-on-NTP-study_180312.pdf

That is, the scientific evidence suggests that we must treat radiofrequency radiation, and in particular cellular radiation, not only as dangerous to health generally, but also as a CARCINOGEN that is dangerous to life itself. So, when a small cell tower is placed “up close and personal” to people, those people must be regarded as under “assault” by a carcinogen. And, there are laws against assault. Further, since that assault can result in death, those people must be considered as under “assault with a deadly weapon”. That is also against the law. Furthermore, if any of those people die as the result of that assault, that is “murder”. Murder is also against the law.

This applies to the 5G technology that they want to roll out, wifi in schools and phone masts that are too close to residential areas.

http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf

So, it seems fair to ask this question: Is the 1996 Telecommunications Act so powerful that it overrides the laws against assault, assault with a deadly weapon, and murder? I doubt very much that the authors of the 1996 Telecommunications Act, in their zeal to promote the rapid expansion

of cellular technology without prior testing for safety, intended to convey a right to the telecommunications industry to assault, and even kill, people.

The National Infrastructure Commission has claimed that in order to facilitate 5G technology the UK would need to place small cell towers every 100/300 metres.

If XXX Council (and all other UK council officials) want to protect the public from harm, they need to rally their legal might to resist ALL EFFORTS to install 5G enabled small cells and mobile phone towers in the area, not just because that is the right thing to do, but also because such installation violates multiple existing laws that are reasonably believed to be preeminent.

I would be proud to see XXX Council take the lead in making this argument against the 1996 Telecommunications Act, which has proved to be an unjust law.

If you don't believe that cellular radiation is harmful

If you reject the above line of reasoning because you don't believe that cellular radiation is harmful, then I ask you to consider these questions:

On which sources of information are you relying for assurances of safety? Do those sources have extensive backgrounds in the biological effects of radiofrequency radiation? Are those sources free from vested interests in cellular communications or other wireless technologies?

Are those sources more authoritative on health issues than the International Agency for Research on Cancer of the World Health Organization? That organization linked radiofrequency radiation, and in particular cellular radiation, to cancer back in 2011?

Are those sources more authoritative on health issues than the National Toxicology Program (NTP) at the National Institutes of Health? The NTP confirmed the link of radiofrequency radiation, and in particular cellular radiation, to cancer in 2016 and to DNA damage more broadly in 2017? These findings are the result of the largest study (\$25 million) that the NTP has ever conducted of any toxin.

Have you read some of the scientific research literature that connects radiofrequency radiation to biological effects and that has been funded by impartial sources?

If your answer to the last question above is "No", I hope that you will explore at least some of the vast biomedical research literature available.

Also, for an excellent online overview of the impact of wireless technology on health, please see the web site of the Environmental Health Trust (<https://ehtrust.org/>). This organization is led by XXX, who has had a distinguished career of public service in support of public health. XXX was a member of the United Nations Intergovernmental Panel on Climate Change that was named a joint recipient of the Nobel Prize for Peace in 2007.

Environmental Health Trust - Education, Research, and Policy to Reduce Environmental Risks.

ehtrust.org

The BioInitiative Report updated in 2012, prepared by 29 authors from ten countries, reviewed 1800 studies and conclude, "EMF and RFR are preventable toxic exposures. We have the knowledge and means to save global populations from multi-generational adverse health consequences by reducing both ELF and RFR exposures. Proactive and immediate measures to reduce unnecessary EMF exposures will lower disease burden and rates of premature death."

It is the councils responsibility to protect the residents of North Yorkshire, the council needs to critically consider the potential impact of the 5th Generation wireless infrastructure on the health and safety of the residents before proceeding to deploy this infrastructure.

The International EMF Scientist Appeal is evidence of growing concern among EMF experts world-wide. This Appeal is currently signed by 225 scientists in 41 nations of the world. All of them have conducted EMF studies published in peer-reviewed scientific journals that reported biological and adverse health effects caused by human-made sources of EMF. The combination of these reported findings lends credibility to the Appeal's strong recommendation for review of the current EMF exposure guidelines set by the FCC, as these guidelines are considered to be obsolete and inadequate to protect human health and the environment.

EUROPEAN UNION 5G APPEAL | AUG. 10TH, 2017.

"We, the undersigned scientists, recommend a moratorium on the roll-out of the fifth generation, 5G, for telecommunication until potential hazards for human health and the environment have been fully investigated by scientists independent from industry. 5G will substantially increase exposure to radiofrequency electromagnetic fields (RF-EMF) on top of the 2G, 3G, 4G, WiFi etc. for telecommunications already in place. RF-EMF has been proven to be harmful for humans and the environment..."

https://www.irselectrohealth.com/wp-content/uploads/2017-08_EU_5G_Appeal_10_August_2017.pdf?c=cf13ce20305c

<https://ehtrust.org/factsheet-need-know-5g-small-cells-science-policy-public-health/>

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-networks-iot-scientific-overview-human-health-risks/>

<https://ehtrust.org/key-issues/cell-phoneswireless/telecom-insurance-companies-warn-liability-risk-go-key-issues/>

<http://whatis5g.info/>

<http://whatis5g.info/microwave-radiation/>

<https://mdsafetech.org/problems/industry-influence-in-science/>

<http://www.naturalblaze.com/2017/02/5g-network-being-pushed-on-the-public-with-zero-concern-for-safety.html>

<http://www.saferemr.com/2017/09/5g-wireless-technology-is-5g-harmful-to.html>

<https://www.youtube.com/watch?v=QvPg1AyQ43I>

5G Technology: Potential Risks To Human Health: Excerpts From Scientific Conference

<http://stopsmartmeters.org.uk/resources/resources-scientific-studies-into-the-health-effects-of-emr/>

https://www.youtube.com/watch?v=Fi_0VTS-D8&list=PLzWbW-WltLohkLIAWni1ni73rzCDoxoxZ

5G Wireless Radiation Dangers by Kevin Mottus

List of some more organizations who are fighting 5G. Good info on their website:

Wireless Education Action

SaferEMR.com

StopSmartMeters.org.uk

TakeBackYourPower.net

<http://www.bioinitiative.org>

The EMF Safety Network

National Association of Parents for Safe Technology

Canadians for Safe Technology, Citizens for Safe Technology

SafeSchool.ca

The People's Initiative

Center for Electrosmog Prevention

WiFinSchools.com

Ecological Options Network

ElectricSense.com

Citizens for Responsible Cell Tower Placement

EMFScientist.org

Environmental Health Trust

Parents For Safe Technology

California Brain Tumor Association

We Are the Evidence

Citizens For Safe Technology

C4ST

I personally strongly believe, based on all the evidence from unbiased/non-industry sponsored experts and deep researchers in this field, that stopping the 5G roll out in the narrow window of opportunity we have left, should be top priority for everyone who values, good health, safety, security, privacy, liberty and the protection of all the human and animal inhabitants of our beautiful planet as well as the ecosystem including our precious oxygen producing trees, many of which have been/continue to be chopped down (without the actual reason being disclosed to the public) which is in preparation for the 5G roll out (please see supporting information below).

And i strongly urge you to please do what ever is with in your power to help stop the 5G/Smart Grid roll out and to do your own research (using non industry/unbiased sources) and to reject the globalists (top down) push for 'Smart Cities' world wide which are essentially a mass irradiating surveillance and control grid that certainly do not have the best interests of the public at heart and that would make Orwell's 1984 look like a walk in the park!

info below about how trees, foliage and rain can effect 5G signals (hence why so many are being chopped down)

<https://www.ordnancesurvey.co.uk/business-and-government/smart/5g.html>

<https://eandt.theiet.org/content/articles/2017/05/our-canopy-is-vanishing-london-councils-remove-almost-50-000-trees-in-five-years/>

<https://www.surrey.ac.uk/.../white-paper-rural-5g-vision.pdf> The Surrey University white paper, showing the relevance of tree height to 5G

https://www.surrey.ac.uk/sites/default/files/White-Paper-Rural-5G-Vision_0.pdf

http://epubs.surrey.ac.uk/810667/1/5G_GAIA_V2_final.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684420/OS_Final_report_5g-planning-geospatial-considerations.pdf

<http://tech.newstatesman.com/news/5g-testbeds-uk>

<https://www.gov.uk/government/publications/ordnance-survey-5g-planning-and-mmwave-environment-reports>

<https://www.thesun.co.uk/news/5838497/5g-phone-system-reception-problems-trees/>

<https://www.telegraph.co.uk/news/2017/01/11/birmingham-tree-cut-replaced-concrete-barriers-protect-city/>

<https://passionfortrees.co.uk/historic-birmingham-tree-for-the-chop/>

<https://www.independent.co.uk/environment/sheffield-residents-in-bitter-row-with-council-over-tree-felling-proposals-a6698471.html>

<http://www.dailymail.co.uk/news/article-3439673/Chainsaw-massacre-Residents-fury-council-fells-3-000-trees-Sheffield-bid-save-money-fear-thousands-risk.html>

<https://www.theguardian.com/commentisfree/2017/jan/23/council-tree-fellers-sheffield-tree-removal-scheme>

Deployment of 5G-ready small cells in London on new LED lamp posts etc:

<https://5g.co.uk/news/5g-small-cells-lambeth-lamp-posts/4196/>

UK communications infrastructure company Arqiva has won the right to fit 5G-ready small cell technology to street furniture in a key area of London.

Arqiva now has exclusive access rights to approximately 15,000 lamp posts across The London Borough of Lambeth, making it the twelfth such Borough concession in the UK capital following on from Barnet, Brent, Camden, Hammersmith & Fulham, Haringey, Harrow, Hounslow, Islington, Merton, Richmond upon Thames and Wandsworth.

Similar deals have also been struck in Manchester, Southampton, Colchester, Eastbourne and Medway.

The plan is to fit so-called small cells to lamp posts in these areas, which will initially be used to boost mobile capacity where demand is particularly high or existing coverage is poor. Of more

interest is the fact that these small cells will be essential to the rollout of 5G from 2020, where multiple smaller cellular nodes will replace large solitary base stations.

In addition to lamp posts, these compact cellular radio access nodes can be fitted to the sides of buildings or even inside venues where a concentration of phone users can compromise performance.

<https://www.arqiva.com/news/news/arqiva-advances-in-public-space-wifi/>

<https://www.arqiva.com/news/press-releases/arqiva-secures-12th-london-borough-street-furniture-concession-for-small-cells-roll-out-as-lambeth-signs/>

<https://www.gov.uk/government/news/25m-for-5g-projects-on-the-anniversary-of-the-uks-digital-strategy>

<https://5g.co.uk/guides/what-are-5g-testbeds/>

We now have the first clear evidence cell phone radiation can cause cancer in rats

<http://bit.ly/2IoliB3>

"Clear Evidence of Cancer" Concludes U.S. National Toxicology Program Expert Panel on Cellphone radiation <http://bit.ly/2pU86Ow>

5G smartphones cause cancer; Big Wireless doesn't want you to know <http://bit.ly/2GskPOR>

<http://www.dailymail.co.uk/health/article-5409921/Residents-enduring-stillbirths-street-lamps.html?ito=AutoPostCommentToFacebook> article link

The town facing a 'humanitarian crisis' caused by the radiation from state-of-the-art street lamps: Residents have endured insomnia, nose bleeds and even stillbirths, scientist claims

Cybersecurity Agency Warns Of 'Extremely Dangerous' Risks Of 5G Technology <http://bit.ly/2pTiWn7>

Smartphones Are Killing The Planet Faster Than Anyone Expected <http://bit.ly/2uAyPnT>

National Toxicology Program: Peer & public review of cell phone radiation study reports <http://bit.ly/2uxyh2n>

2018 NTP Conclusions re: RF Microwave Radiation Studies in Rats <http://bit.ly/2Gq0iKq>

Stop the roll-out of 5G small cell towers before 5G small cell towers stop us.

Thanks in advance for taking the time to read this very important message, and i look forward to hearing from you.

Yours sincerely,

XXX

From: XXX PHE

Sent: 27 September 2018 17:13

To: XXX PHE

Cc: XXX Third Parties

Subject: RE: Public concern re impact of 5G radiofrequency electromagnetic fields on health

Dear XXX,

Thank you for your latest e-mail. XXX contacted me yesterday about the same enquiry.

PHE's advice remains as stated in the email sent to XXX on 2nd May 2018 (see thread below); however, in the interest of clarity I have provided some short responses to the questions below, which I hope are helpful. These should be read in conjunction with the attached 5G and RF briefing notes. PHE's overall position remains as summarised in the email sent to Robie (as below).

1. Has there been 'any' research on the health effects of 5G, a technology about to be introduced in London and nationwide?

As with other telecommunications systems, 5G uses radio waves, otherwise known as radiofrequency electromagnetic fields. Exposure to radio waves is not new and health-related research has been conducted on this topic over several decades. Thousands of papers have been published in the scientific literature and many health topics have been addressed through a range of study types. These studies can be found by searching the academic literature through databases (for example: <https://www.emf-portal.org/en>), or by looking at the reference lists that can be found in the comprehensive evidence review reports that have been published by official bodies and which are mentioned in the attached PHE RF briefing note.

A large amount of new scientific evidence has been produced over the past few years through dedicated national and international research programmes that have addressed concerns about rapidly proliferating wireless technologies. The UK has played its role in assembling the new evidence through the Mobile Telecommunications Health Research Programme (MTHR), which supported 31 individual research projects that have resulted in around 60 papers in peer reviewed scientific journals. Similar programmes supported in other countries and internationally have added to the pool of evidence that is available for expert committees reviewing the evidence. The Government continues to support research on this topic, including the ongoing Cohort Study of Mobile Phone Use and Health (COSMOS, <http://www.ukcosmos.org/>) and the Study of Cognition, Adolescents and Mobile Phone studies (SCAMP, <http://www.scampstudy.org/>) at Imperial College London. Reports detailing the findings of the MTHR Programme are available in the National Archives at the link below:

<http://webarchive.nationalarchives.gov.uk/20150423142832/http://www.mthr.org.uk/>

2. If any research papers are available may I have the links to them and information about their sponsors?

See the answer to question 1 regarding the number of research papers that have been published and where they may be found. Information about sponsors is normally declared in the acknowledgements sections at the end of individual published research papers. The MTHR Programme was jointly supported by Government and industry, with an independent Programme Management Committee ensuring the sponsors could not influence the research.

3. As electromagnetic radiation is seen as an 'Emerging Risk' by the insurance industry how will health effects be compensated when proven?

PHE's role is to provide public health advice based on the evidence, and on PHE's professional and scientific judgement. PHE does not hold information about practices in the insurance industry.

I hope this information is helpful and please feel free to call me if you have any questions.

Kind regards,

XXX

From: GLA

Sent: 26 September 2018 19:06

To: XXX PHE

Cc: XXX Third Parties

Subject: Public concern re impact of 5G radiofrequency electromagnetic fields on health

Dear XXX,

The GLA has received another email to the Mayor raising concerns about the health impacts of 5G. Please see the attached redacted version of the email.

The sender has asked the Mayor to make inquiries with PHE regarding three questions. Please could you provide lines to answer the three specific questions in the attached:

1. Has there been 'any' research on the health effects of 5G, a technology about to be introduced in London and nationwide?
2. If any research papers are available may I have the links to them and information about their sponsors?
3. As electromagnetic radiation is seen as an 'Emerging Risk' by the insurance industry how will health effects be compensated when proven?

I note that the latest PHE briefing that I have seen (dated 28/2/18, attached) does not specifically refer to research on the health impacts of 5G.

I am cc'ing XXX and XXX for information. (XXX and I have requested a meeting with XXX and XXX to discuss how the GLA should respond to continued correspondence from the UK & Commonwealth EMF Action Group addressed to the Mayor and XXX.)

Many thanks in advance for your help.

Best wishes,

XXX

From: XXX PHE

Sent: 07 May 2018 21:22

To: XXX GLA

Cc: XXX PHE

Subject: FW: Public concern re impact of 5G radiofrequency electromagnetic fields on health

XXX

XXX and I have discussed this and XXX has kindly identified a response that came from government to this correspondent. He appears to have written to several bodies and the letter makes it clear that this is a collective response. Our advice is to stick with something very similar in any draft that comes from XXX, because this is the best advice that exists. The summary of the evidence is also enclosed, you may have seen this already.

XXX

From: XXX PHE

Date: 3 May 2018 at 08:11:03 BST

To: XXX PHE

Subject: FW: Public concern re impact of 5G radiofrequency electromagnetic fields on health

Dear XXX

The correspondent received a reply back in October last year as the collective response from HMG – please see attached. If the Mayor does want to respond I suggest it is with the same advice given here.

Regards

XXX

From: XXX PHE

Sent: 02 May 2018 20:56

To: XXX PHE

Cc: XXX Third Party

Subject: FW: Public concern re impact of 5G radiofrequency electromagnetic fields on health

Hi XXX

Please see response below from our specialist XXX colleagues, the correspondents have contacted a wide range of cross-government colleagues, so it will be important to maintain a consistent response. The best approach may be to advise XXX colleagues to highlight that they are following national guidance, based on national and international scientific consensus. As noted below we agree that commissioning an independent review is not likely to be helpful.

Happy to discuss

Regards

XXX

From: XXX PHE

Sent: 02 May 2018 16:17

To: XXX PHE

Cc: XXX Third Parties

Subject: RE: Public concern re impact of 5G radiofrequency electromagnetic fields on health

Dear XXX,

Following on from our phone conversation and responding to point 1, we suggest that XXX approaches DHSC directly to obtain a copy of their response to the letter from XXX. We have a copy of a subsequent response (ref DE-XXX), attached here, but not the original reply (ref: DE-XXX).

A number of parties, including DHSC and the devolved admins, have received the letter and requested contributions from PHE. All received the following contribution, plus the summary advice attached to this e-mail:

[Public Health England monitors the emerging evidence relevant to the health effects of electromagnetic fields and is committed to keeping its advice under review. PHE maintains standard

lines on frequently mentioned EMF topics as a way of ensuring efficiency and consistency in providing responses to enquiries. These lines draw attention to evidence reviews that have been published by national and international expert groups, and which have applied rigorous processes to develop health-related conclusions.

The World Health Organization is in the process of carrying out its own authoritative review and health risk assessment of radio frequency electromagnetic fields and PHE will consider this review carefully when it is published.

http://www.who.int/peh-emf/research/rf_ehc_page/en/

By and large the reviews from official bodies have achieved consensus as regards the evidence on these matters. However, the Government and Public Health England are aware that this is a sensitive topic on which a range of views can be found.

The document you sent has been read carefully by specialists at Public Health England to see if it contains important new evidence that might merit a review of PHE's advice, or if it raises any substantial new topics/questions that could feed through into an update of PHE's standard response lines (as attached). The outcome from that process is that PHE has concluded the document does not contain such evidence.]

Responding to point 2 of XXX's letter, we think the best option for the Mayors Health Advisor is to review the conclusions of the World Health Organization and other authoritative bodies listed in the briefing note, rather than commissioning an independent review, which would not have the same standing.

Kind regards,

XXX

From: XXX PHE

Sent: 14 March 2018 16:16

To: XXX Enquirer

Cc: XXX PHE

Subject: RE: Public health concern about millimetre wave radiation, small cells and 5G (Ciris 43397)

Dear XXX,

PHE's XXX takes the lead on public health matters associated with telecommunications.

A summary of PHE advice on radio waves can be accessed in the following link:

<https://www.gov.uk/government/collections/electromagnetic-fields#radio-waves>

I am also sending you a briefing note that explains more about our position on this subject. In relation to the implementation of 5G user devices and networks, this technology is at an early stage and reflects the latest evolution in mobile communications technology. Current technical standards that draw on the ICNIRP exposure guidelines will apply to the products that are developed. PHE is committed to monitoring the evidence applicable to this and other radio technologies, and to revising its advice, should that be necessary.

Please feel free to pass the information to XXX.

XXX

From: XXX PHE

Sent: 14 March 2018 15:39

To: XXX PHE

Cc: XXX Third Parties

Subject: RE: Public health concern about millimetre wave radiation, small cells and 5G (Ciris 43397)

Dear XXX,

Could you please address this enquiry which we received which relates to radiation. The response can be provided directly to XXX and cc XXX.

Kind regards

XXX

From: XXX PHE

Sent: 14 March 2018 15:05

To: XXX PHE

Subject: Fwd: Public health concern about millimetre wave radiation, small cells and 5G

Dear XXX Colleagues,

Can you help with a response please? It's a tight timeline for the council to respond to this.

Best wishes,

XXX

From: XXX Council

Sent: 13 March 2018 10:38

To: XXX PHE

Subject: Public health concern about millimetre wave radiation, small cells and 5G

Hi XXX /XXX

The council has received the following complaint through its complaints system from a member of the public about the city's involvement in a 5G testbeds and trials project for which £5 million has been won from Government.

The bid was led by XXX and will see smart tourism applications tested in a number of visitor attractions and some work around public safety and monitoring led by our Ops Centre.

<https://www.westofengland-ca.gov.uk/west-england-secures-5m-5g-network/>

<https://www.gov.uk/government/news/25m-for-5g-projects-on-the-anniversary-of-the-uks-digital-strategy>

Can you please let us have your input into a response by 28 March. We're looking for some text which can be inserted into the response with the XXX public health perspective to accompany the

points that we will be making that this is a localised, time limited trail, not the development of a city wide 5G network as the complainant believes.

One thing we are not clear about from a public health perspective is which body we look to for a lead on public health around telecommunications? Does Public Health England take a lead in this area?

Regards

XXX Council

Public Health complaint about 5G -

I notice today that XXX has been chosen as a testbed city for 5G Wi-Fi. I have massive reservations about this and for the health implications which cannot be overstated. 5G will be an absolute abomination for health.

Anyone who has any concern about their own health and perceptions, nevermind family and loved ones, needs to ensure this is resisted. If they don't, they are condemning themselves, their family and loved ones to the potential of endless damage to their health including cancer and the manipulation of perception. The health risks of mobile phones and Wi-Fi in general are nothing compared to 5G.

This is not just me saying this but learned professionals. For example:

XXX from the Department of Physics at Israel's Hebrew University has explained how 5G wavelengths can make human sweat ducts act like an array of helical antennas.

XXX, an internationally renowned epidemiologist, President of the Environmental Health Trust and Director at the Centre for Environmental Oncology at the University of Pittsburgh, said:

"This work shows that the same parts of the human skin that allow us to sweat also respond to 5G radiation much like an antenna that can receive signals. We need the potential adverse health impacts of 5G to be seriously evaluated before we blanket our children, ourselves and the environment with this radiation."

5G operates on the same frequency as crowd control weapons as the article I've included with this complaint shows. A U.S. Department of Defense report said of a crowd control weapon:

"If you are unlucky enough to be standing there when it hits you, you will feel like your body is on fire."

The International Scientific Declaration on EHS & multiple chemical sensitivity (MCS), Brussels 2015, declares that:

"In view of our present scientific knowledge, we thereby stress all national and international bodies and institutions...to recognize EHS and MCS as true medical conditions which acting as sentinel diseases may create a major public health concern in years to come worldwide i.e. in all the countries implementing unrestricted use of electromagnetic field-based wireless technologies and marketed chemical substances..."

Inaction is a cost to society and is not an option anymore... we unanimously acknowledge this serious hazard to public health...that major primary prevention measures are adopted and prioritized, to face this

worldwide pan-epidemic in perspective."

I have attached more information.

I cannot overstate the catastrophic consequences that lie in wait with 5G.

I would urge the council to seriously re-think the introduction of 5G Wi-Fi in the city of Bristol as a matter of the highest importance given the inevitable catastrophic implications for health of its citizens that will surely ensue with its introduction.

Consider the cancellation of the introduction of 5G due to the inevitable catastrophic implications for health.



PHE RF Advice
Summary 28 Feb 201

From: XXX PHE

Sent: 27 September 2018 11:53

To: XXX PHE

Subject: RE: For response by 5 October: 5G, Phased Array and the Internet of Things

Dear XXX,

Please could you send a brief reply stating that PHE's position on this topic is covered in the attached briefing note. Further information on PHE advice on electromagnetic fields is available on the PHE website at:

<https://www.gov.uk/government/collections/electromagnetic-fields>

Many thanks

XXX

From: XXX PHE

Sent: 26 September 2018 16:51

To: XXX PHE

Subject: For response by 5 October: 5G, Phased Array and the Internet of Things

Hi Team,

Could you advise on a response to the below query?

Best wishes, XXX

From: XXX

Sent: 18 September 2018 22:34

To: XXX PHE

Subject: FW: 5G, Phased Array and the Internet of Things

Sorry missed the dot out of your email address, please see below.

From: XXX

Sent: 18 September 2018 21:30

To: XXX GOV XXX PHE

Subject: 5G, Phased Array and the Internet of Things

Dear Public Health England, Home Office, XXX and XXX

I write to you after XXX from the Department of Health and Social Care told me that I should contact Public Health England and the Home Office in relation to some questions and concerns I have about 5G, Phased Array and the Internet of Things.

I have pasted all the previous correspondence I have to hand below to try and help you get up to speed with where the discussion is at. There is some stern criticism of Public Health England over the recent Novichok incidents from me in here, which I stand by. That's not meant to insult you or belittle you as I have no desire to be abusive towards you and I realise not everyone at Public Health England will have been involved in the Novichok incidents.

I don't intend to go on for too long as much of what I have to say is in the email trail, but I want impress upon you that this is not some looney theory. This is real and it affects you as much as me. In 2020 this technology could be killing you or your loved ones. the frequencies, the vast increase in receiver/transmitters and connecting all sorts of things to the Internet of Things will combine to create the perfect storm. We can stop this, but you have to act now. It doesn't really matter how much money the telecommunications industry may be paying for this, if we are all largely dead, dying or brain addled this money won't be of any use to any of us anyway.

5G isn't simply a step up in frequencies which would be bad enough in itself. Currently we have masts which spread the signal out over an area. With phased array on each street light (this is what is planned), you might as well put a mobile phone mast next to your head. You are irradiating the earth if you do this.

XXX, is it possible to meet you face to face to discuss this? I want to get a feel for what your view and the general view of MPs is. If anyone is in the position to know it is probably you, with you being Chief Whip.

Warmest regards

XXX

Dear XXX

Thank you for your reply. I wondered if it might have gone through some screening process, but I'm glad the letter arrived. I hope the message of the letter and DVD will have good effect.

If you get a chance it's worth watching. From memory there may be one or two scathing comments about the government in there, but I didn't send it to offend you with those, if you focus on the information and message it is conveying, it is a real eye opener. I am a qualified IT professional and

the lack of safety, health, privacy and risk assessments in to new technology and software always disappoints me. The industry is awash with it. All of us in the industry occasionally make mistakes too (I do from time to time). Usually these mistakes only end up with something you quickly correct after some error occurs somewhere, the thing with 5G, phased array and the Internet of Things is they are all mistakes that will cause mass death and ill health and that's a real big issue. Some people are obsessed with flashy gadgets and showing off to think of the real life impact.

Kind regards

XXX

Dear XXX

Many thanks for your email.

XXX has asked that I get in touch with you to confirm that your letter and enclosed DVD have arrived. I understand that the delay was due to security screening which has to take place before post can be delivered to the MPs office.

XXX has also asked that I thank you for sending him the DVD and to say that he has written to XXX MP to raise your further concerns. I believe a letter from xxxxxx to you confirming that he has made representations to the Minister should be in the post, and he will write to you again as soon as a response is received.

Best wishes,

XXX

Dear XXX,

I sent a letter to you with a DVD recorded delivery on 16th August. Royal Mail seem to have either not delivered it or not done the signature part properly. I enclose the contents of the letter below, I did send a DVD with it. I can't send the contents with this email as the video file on the DVD is far too big to do so. I also sent XXX the letter and DVD and his was delivered so you may be able to get the DVD off him if yours hasn't arrived. I am going to take it up with Royal Mail as to where it has gone, but if you have received it, I would be grateful to know.

Dear XXX and XXX (letter and DVD have been sent to both of you)

Thank you for taking the time to reply to me.

I appreciate the reply, however I think it is only vaguely related to what I am trying to warn you about.

I would strongly argue that there the radio waves used currently even if they are within ICNIRP levels are not safe and there is ample evidence on the raise of tumours etc as these things have become more common place to prove this.

I have seen the graphs and the statistics about radio waves and cancer and whilst I am not an expert in how precisely they effect the body on a cellular level, I am capable of critical thinking and can work out obvious conclusions when presented with the uncensored evidence. Obviously some people do seem to take radio waves better than others, but I think the evidence is clear that on the whole our collective health massively impacted.

That is not the issue here however, as experts are already speaking about evidence from tests they have done where 5G and phased array are in use that prove that 5G and phased array are way above the safe levels, so a report from 2012 considering health effects resulting from exposures below ICNIRP is not really relevant to 5G and phased array.

This study details how levels below the safe levels cause harm as well as being signed by over 180 scientists warning against 5G:

<https://ehtrust.org/wp-content/uploads/Scientist-5G-appeal-2017.pdf>

I have enclosed a DVD with a presentation by expert xxxxxxxxxx for both of you. The copyright holder (xxxxxxx) does not enforce copyright so please feel free to copy and share this as you please. You can make contact with him via his website if you want to check this.

Please watch this DVD, all the evidence you need to shut this thing down is contained within there. He has done plenty of other presentations that are available online.

You cannot make a smart grid safe. Even if there were no health effects from the radio waves, we still have the threat of the hacking of smart cars and them being rammed in to things remotely. I can tell you as a Cisco qualified IT professional that you cannot guarantee that these smart devices cannot be compromised. Obviously it'll usually take someone who knows a lot to break the security initially, but once that is done, what they have found will leak out and even those with basic IT knowledge would be able to hack one of these cars. Also, please be informed that some smart cars have already been hacked.

If 5G, phased array and the Internet of Things are fully rolled out, we will have absolute chaos in Britain in coming years.

I would also like to add on the issue of Public Health England that I would be wary of accepting their advice and would remind you that the Chief Medical Officer recommended cleaning up Novichok with baby wipes. Quite clearly that would be an act of suicide. I include the advice of Public Health England on Novichok below:

"While there is no immediate health risk to anyone who may have been in any of the locations identified by the police (listed below), as a highly precautionary measure we are advising that people undertake the following actions.

If you visited any of the locations identified by police you should:

- wash the clothing that you were wearing in an ordinary washing machine using your regular detergent at the temperature recommended for the clothing
- wipe personal items such as phones, handbags and other electronic items with cleansing or baby wipes and dispose of the wipes in the bin (ordinary domestic waste disposal)

- if your items are dry-clean only, you should keep them double-bagged and securely fastened.

Further details will follow

- none of these actions should damage your washing machine
- other items such as jewellery and spectacles that cannot go in the washing machine or be cleaned with baby wipes should be hand washed with warm water and detergent and then rinsed with clean cold water
- please thoroughly wash your hands with soap and water after cleaning any items
- you do not need to seek advice from a health professional unless you are experiencing symptoms

This precautionary advice is only for the clothes worn or items carried at the time of your visit to any of the five locations identified and listed below. It does not apply to the belongings or clothes of others that you may have come into contact with later – these items do not need to be cleaned. This advice stands from 10pm on Friday 29 June.

Locations:

- Queen Elizabeth Gardens in Salisbury
- a property at John Baker House, Rolleston Street, Salisbury
- a property on Muggleton Road, Amesbury
- Boots the Chemist, Stonehenge Walk, Amesbury
- the Baptist church on Raleigh Crescent, Amesbury "

Perhaps someone should tell those who wear Hazmat suits to handle such chemicals that a quick wipe down with a baby wipe would suffice instead. Of course we can laugh at the bizarre nature of this advice, but it raises a big question. If PHE are going to come out with this advice which is so badly wrong I would argue it should be considered criminal, can we trust them on radio waves?

I can also tell you that if we get smart street lighting going with these phased array transmitter/receivers, they can and will be hacked. xxxxxxxxx advises these transmitter/receivers can be used to put out focused waves that could kill people. In effect we then run the risk of a terrorist attack where millions could be killed by someone working remotely. I think we both know there are some sick people who wouldn't hesitate to do this. Bear in mind, when one of these lamp posts is compromised, we potentially have the whole country compromised. You are effectively setting up the perfect weapon for terrorists. Neither you, I or anyone would be safe from this.

I believe you don't fully comprehend what is going on here (or you'd be opposing this massively) as unless you had a retreat where all these signals are blocked by signal blockers, you are not going to escape this should it happen, but there are those who know exactly what they are doing with this. They should be charged with treason as that is exactly what this 5G and phased array grid is, a treason upon the nation.

I would very much like someone involved in government to address these questions:

1. Have any health and safety reviews being carried out specifically on 5G and phased array? If so please can I have a copy or link to these?

2. Has xxxxxxxxxx's evidence being considered by the government as part of any review or study in to the safety of 5G and phased array?

3. Have any of the counter terror units or anyone within the government done any reviews or studies into the possibilities on smart cars being weaponised as part of the Internet of Things? If so please can I have a copy or link to these?

4. Have any of the counter terror units or anyone within the government done any reviews or studies into the possibilities of street lights being turned in to death rays if a phased array grid is rolled out country wide? If so please can I have a copy or link to these?

I intend to share the answers to these 4 questions to give you forewarning. I would also like to share our previous correspondence on this issue, but I think it common decency not to do that without your permission as I didn't state that I would do in my previous letter. Would you be agreeable for me to publish previous correspondence?

I hope you will see the urgency of this matter. It is not conspiracy theory, although there is a conspiracy going on here to harm the men, women and children of this country. Whether the motive is money, population control, both or something else I cannot say as I don't have the evidence to 100% define the motive. The evidence does absolutely exist to prove we have a threat to national security here.

The radio waves should be put back inside wires. There would be a massive amount of work and money in that for the economy.

Yours sincerely

XXX

Dear XXX

Please may I ask how you are processing this now Matt Hancock has left his post and moved to Health Secretary?

Will the ceasing of 5G, IoT and phased array be raised with his replacement?

We don't have much time to avert this nightmare. 5G and phased array are threats to national security.

Many thanks

XXX

XXX

Tue 19/06/2018, 21:02

XXX

Hello XXX

I wanted to ask you if it is true that XXX in recent days has said "We are also determined to be a world leader in the deployment of 5G mobile connectivity."?

If this is so then I must impress on you that this would I believe eventually make xxxxxxxxxxxx guilty of mass murder and mass assault on this nation given the information you have passed to him. It also makes him guilty of abuse of office.

I take no pleasure in saying this, but it is now incumbent on you to take action to either show xxxxxxxxxxxx the evidence of the damage 5G will do (which you have done) and to push him to cease it or alternatively if he refuses to do so you need to take the appropriate steps to ensure he is removed from his position for abuse of office.

Inaction is not an option as that would make you a complicit accessory in an attack on the nation and also constitute abuse of office. Put simply 5G is a matter of national security. It is not a good idea, it is destructive.

None of this is meant with any bad feeling towards the two of you, it is simple common sense that 5G will harm all of us and it cannot be allowed to go ahead.

Kind regards

XXX

Hello XXX

I wanted to thank you for your prompt reply to my 5G and Internet of Things email. I await your further reply.

Would you mind if I shared it and my initial email in the public domain as an example that others with similar concerns should contact the relevant MP for their area?

There is a lot more to be said to be said about 5G. I feel the health element would be better covered by someone such as XXX, I for example could show you the data that over the decades the more frequencies and microwave rays beamed out, the more cancer etc, but he could give you the information as to what it specifically does to the cells in the body etc.

From an IT security point of view though (which is secondary after the health issue), take for example self driving cars which plan to use 5G. Let us say for example someone discovers an exploit to send malicious updates to these vehicles, we could have cars crashing in to each other all over the country. That is entirely possible and could be done from abroad by those who our justice system would have no jurisdiction over. We both know there will be people trying to do this. No IT system can be guaranteed safe. Look at the history of games consoles, piracy protection is added, but someone always cracks it and opens up the system to run their own code.

Alternatively from my experience in IT, often an update is pushed out in good faith to fix an issue and it inadvertently causes another. This is also possible with 5G fed self driving cars.

Kind regards

XXX

Hello XXX

I hope you are in good health.

There is an issue that I think you need to be aware of. Technically it's more than one issue, but they interlink so could be viewed as one conjoined problem.

5G and the Internet of Things are what I want to bring to your attention. I am a qualified IT professional and am happy to state the IT concerns around these are credible and accurate. The health concerns are evidenced by numerous medical professionals and radio wave specialists.

I want to start by saying the wireless systems we have now including WiFi and 4G are huge causes of cancer and illness. It really is a subject that requires research, but if you delve further from the initial videos I provide you will find lots that will shock you.

5G opens up even more dangerous frequencies than what we already have. Dementia, Alzheimer's and Cancer will rise even more if this goes ahead. The new LED street lights will (unless this monstrosity is slain) be fitted with 5G receivers and transmitters in the near future. This means you and I will be grilled when we go out to work and grilled in our homes in an evening. There is no distinction, it will irradiate all of us.

The Internet of Things which I am happy as an IT professional to state is a giant spy grid which will track everyone everywhere will be linked to this as the chips/receivers that are going to go in things like plant pots and hairbrushes will use this 5G.

The spy grid is a huge issue, but I suspect some in power will love that aspect. The aspect that affects us all is it will make us all ill and could kill any one of us.

XXX a very intelligent man on environmental issues (which 5G is as it will destroy the ecosystem such as killing bees) and there is a feature here from him with a specialist he has on explaining why 5G is a health hazard. I know it is long (and I had to listen hard to understand the specialist's accent), but it is worth taking in the information. Humanity vs Insanity 103 -

<https://m.youtube.com/watch?v=lkFnIUblgi8&feature=youtu.be>

This report from SGTReport is worth watching:

<https://m.youtube.com/watch?feature=youtu.be&v=pIYPnOM-SXs>

I'd be very interested to hear your thoughts. I know you will likely be briefed not to listen to this stuff, but if what I and those in the videos have said is rubbish, then the real way to dismiss it is evidenced debate. Sadly this 5G conspiracy is true. It's a killer and must be stopped.

Kind regards

XXX



PHE 5G Lines 17
April 2018CIn.pdf

2019

From: XXX PHE

Sent: 03 May 2019 14:33

To: XXX PHE

Subject: For response: A letter sent in April 2019

Hi XXX,

Just double checking whether our standard response is fine to send out for a 20 page piece of correspondence that has come through on 5g.

Kind regards,

XXX

From: XXX Enquirer

Sent: 02 May 2019 17:15

To: XXX PHE

Subject: A letter sent in April 2019

Dear PHE,

Can you confirm the receipt of a letter sent to you at XXX in the beginning of last month (April).

My name is XXX. XXX, XXX. The subject matter was the health concerns in relation to the implementation of 5G Microwave frequencies in factories and various test cities, etc.,

I look forward to your reply.

With thanks.

XXX

From: XXX PHE

Sent: 18 February 2019 13:24

To: XXX PHE

Subject: FW: OFFICIAL: CIRIS #49589- Query regards 5G as a carcinogen, Sheffield

Dear XXX,

We receive quite a number of 5G enquiries and the recommended course of action is to send our latest advice summary and 5G statements as attached here.

Please call me if you have any questions.

Kind regards,

XXX

From: XXX PHE

Sent: 18 February 2019 13:03

To: XXX PHE

Cc: XXX PHE

Subject: OFFICIAL: XXX- Query regards 5G as a carcinogen, XXX

OFFICIAL

Dear XXX

We have had a query from the DPH of XXXCity Council regards the safety of 5G. This query stems from an email XXX City Council have received from a member of the public which links to several videos on you. I have attached the email chain to this email for your information.

Would you be able to provide us with some lines to respond please?

I have logged the enquiry on Ciris as #XXX- Query regards 5G as a carcinogen, XXX

Thanking you advance

XXX

From: XXX PHE

Sent: 25 June 2019 14:37

To: XXX Enquirer

Cc: XXX Third Party

Subject: OFFICIAL: 5G

OFFICIAL

Dear XXX,

Your enquiry has been passed to us by a PHE colleague XXX; thank you for sharing the emails regarding the health concerns of your residents, and the circulated views related to the roll out of fifth generation (5G) mobile technology.

Public Health England (PHE) advises the UK government on the public health aspects of exposure to radio waves, including those from 5G radio transmitters in the environment. PHE provides public health advice on limiting exposures to Electromagnetic Fields (EMFs) based on the published scientific evidence, but that we do not have regulatory powers to enforce that advice.

Central to PHE's advice is that exposures to radio waves should comply with the guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). ICNIRP is formally recognised by the World Health Organization (WHO). This position is underpinned by various formal reviews of the scientific evidence suggesting that exposure to radio waves below ICNIRP guidelines do not cause adverse health effects, as explained in the attached PHE advice summary document. I understand that you have already been sent our latest 5G briefing note and link to PHE's webpage on mobile phone base stations, which provide more information.

The lines that you have been sending to enquiries seem perfectly reasonable and in line with our information.

PHE acknowledges the difficulty in development of advice on this topic which is that the interpretation of studies of potential health effects is a matter of judgement, and there and there exists a range of opinions within the scientific community and elsewhere. However, exposure to radio waves has been carefully researched, and evidence reviews have been performed both nationally and internationally at UK and EU level. The overall weight of evidence does not suggest devices producing exposures within current guidelines pose a risk to public health. Regarding the attachment emails, they have been considered and there is nothing new contained therein that would cause PHE to review its advice.

In summary, PHE recognises the concerns but does not expect the 5G roll-out to have an adverse effect on public health. We are committed to monitoring the evidence applicable to this and other radio technologies, and to revising our advice, should that be necessary.

PHE's role is to provide public health advice based on the evidence, and on PHE's professional and scientific judgement. PHE does not hold information about practices in the insurance industry, as this is outside our remit.

Please feel free to share this response and the supporting document with your colleagues.

I hope this is helpful and please do not hesitate to contact me if you have any further questions.

Best Regards

XXX

From: XXX PHE

Sent: 24 June 2019 13:46

To: XXX PHE

Subject: FW: 5G

Importance: High

Hi XXX

We have recently (in the last week) had a massive increase in enquiries about 5G. I have been sending people a response which includes the latest guidance from PHE, but I am now getting further questions from enquiries who are still concerned. I wonder if there is anyone at PHE that I can escalate these enquiries to? Any advice/guidance would be really welcome.

Thanks

XXX

From: XXX Enquirer

Sent: 22 June 2019 07:30

To: XXX PHE

Subject: RE: 5G

Importance: High

Dear XXX

I would be happy to hear your answer to the questions below

Swiss Re Group is one of the world's leading insurance providers and have recently rated 5G as a "high impact" risk affecting property and casualty claims within 3 years.

Who will indemnify UK citizens against 5G personal injuries or reduced property values?

Is PHE or the UK Government responsible for allowing our country to install untested and unregulated technology?

Download the Swiss Re report here: https://www.radiationresearch.org/articles/swiss-re-rated-5g-high-impact/?fbclid=IwAR1asU6TTPcTR1uZEaswbl9hppH_3olilKO0GoMJimoFvk4B5PsbK73Fk-4

Kind regards

XXX

From: XXX Council
Sent: 21 June 2019 11:45
To: [XXX Enquirer](#)
Cc: XXX Third Party
Subject: RE: 5G

Dear XXX

Thank you for your enquiry regarding the roll out of 5G technology. From a XXX Council public health perspective we take advice from Public Health England (PHE) regarding the health and safety of mobile technologies including 5G. PHE continues to monitor the health-related evidence applicable to radio waves, including in relation to base stations, and is committed to updating its advice as required. XXX Council has been in touch with PHE (June 2019) to ask for any further advice. PHE responded to confirm that their briefing note on 5G is still current (attached to this email), and PHE has also recently updated its website with information on 5G.

<https://www.gov.uk/government/publications/mobile-phone-base-stations-radio-waves-and-health/mobile-phone-base-stations-radio-waves-and-health>

Public Health England (PHE) advises the Government on appropriate public health standards for protection from exposure to radiofrequency electromagnetic fields (EMFs), or radio waves. PHE's main advice is that the guidelines of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) should be adopted and there is no convincing evidence that exposures below the ICNIRP guideline levels cause adverse health effects. ICNIRP is formally recognised as an official collaborating non-governmental organisation by the World Health Organization (WHO) and the International Labour Organization. ICNIRP is also consulted by the European Commission. Advice from PHE includes comprehensive scientific review reports and statements on topics.

In terms of future deployments of mobile infrastructure and in particular 5G mobile it is our understanding that there are effectively two forms of 5G. The first will utilise sub 10GHz spectrum (operating in very similar frequencies to current 3G and 4G services). The second will utilise 24GHz - 300GHz spectrum, the so-called millimetre wave frequencies associated with more revolutionary 5G aspects (such as 1-10Gbps+ speeds and low latency connections). All current UK 5G plans from mobile network operators are solely related to sub 10GHz spectrum technologies as this is currently the only spectrum that Ofcom has licenced. This spectrum has very similar characteristics to current mobile communications technologies that have been in use for 30 years, and some of this spectrum has also been previously granted for use by radio and TV broadcasts. When it comes to the higher frequency (millimetre wave) spectrum, not only has Ofcom yet to set a date for auctioning this spectrum, the practical reality of using such spectrums remains to be proven.

Ofcom is still consulting on the potential uses and auctions of millimetre wave spectrum and is expected to announce their plans for the first limited range of 26GHz spectrum later this year. However, it does not appear that Ofcom expects such spectrums to be used in traditional ways associated with mobile technologies.

I hope the information above goes some way to answering your enquiry, particularly about the safety of 5G technology.

Regards

XXX

From: XXX Council
Sent: 19 June 2019 11:13
To: XXX Enquirer
Cc: XXX Third Party
Subject: 5G

Information Classification: PUBLIC

Dear XXX

Thank you for your email of 14 June regarding the rolling out of 5G in Cornwall.

Cllr XXX has noted your comments and passed your email to XXX, Interim Deputy Director of Wellbeing and Public Health for consideration as this matter falls within his remit.

I hope this is helpful to you.

Yours sincerely

From: XXX Enquirer
Sent: 14 June 2019 09:29
To: XXX Third Party
Subject: 5G

Dear Sir

I write to you to add my protest to the rolling out of 5G in the county.

It is unnecessary, we have fast fibre.

Not one person i have spoken to in the county has a desire for a smart fridge, virtual reality systems (we have a marvellous reality already) or faster download speeds to their smart phones.

Pulsed microwave radiation has already been shown to be highly dangerous

<https://microwavenews.com/news-center/ntp-final-rf-report>

Hundreds of scientists have signed an appeal worldwide to stop the rollout

<http://www.5gappeal.eu/scientists-and-doctors-warn-of-potential-serious-health-effects-of-5g/>

Even the Polish PM has now got involved <https://www.activistpost.com/2019/06/prime-minister-of-poland-signs-global-appeal-to-stop-5g.html?fbclid=IwAR00IUd-sEHpqEkl6ohqBqPA0JPzCGrImDyn9IH4L2UFnmz1tYYJKDMppJI>

Several European countries including Brussels have halted the rollout until independent testing has been completed which proves there is no harm to humans and other living creatures.

The UK is behind the game on this one. Let Cornwall be different, safer and stay beautiful.

Kind regards

From: XXX PHE
Sent: 18 February 2019 13:03
To:

Cc: XXX PHE

Subject: OFFICIAL: CIRIS #XXX- Query regards 5G as a carcinogen, XXX

OFFICIAL

Dear XXX,

We have had a query from the DPH of XXX Council regards the safety of 5G. This query stems from an email XXX Council have received from a member of the public which links to several videos on you. I have attached the email chain to this email for your information.

Would you be able to provide us with some lines to respond please?

I have logged the enquiry on Ciris as #XXX- Query regards 5G as a carcinogen, XXX

Thanking you advance

XXX

From: XXX Enquirer

Sent: 17 February 2019 15:54

To: XXX Council

Subject: 5G is a group 1 carcinogen to humans

Dear XXX,

XXX who is a long time World Health Advisor says 5G is a group 1 carcinogen to humans. Please will you kindly clarify if XXX Council will consider the "Precautionary Principle" approach to 5G technology?

https://www.youtube.com/watch?v=ZtHlb_eh-5E

US Study: Heart Damage Found in Rats Exposed to Cell Phone Radiation

<https://www.youtube.com/watch?v=HtfXJFNOQFc>

Brain Cancer Found in US NIH Animal Study on Cell Phone Radiation

<https://www.youtube.com/watch?v=PU6RUsntxIs>

xxxxxxxxxxxx: Comments on the National Toxicology Program Study

https://www.youtube.com/watch?v=j_JAX30biU

<http://www.ukfamilylawreform.co.uk/wifi.htm>

Yours Sincerely

XXX

From: XXX Council

Sent: 18 February 2019 12:40

To: XXX PHE

Cc: XXX PHE

Subject: RE: 5G is a group 1 carcinogen to humans

TY in advance!

XXX

Dear XXX

This is the first time I am coming across such an information.

I have copied this to our Chemicals Team to check whether they are aware of any such thing.

XXX, Kindly let me and xxxxx know if you are aware of this please.

We will get back to you soon on this, XXX.

Regards,

XXX

From: XXX City Council

Sent: 18 February 2019 12:34

To: XXX PHE

Subject: 5G is a group 1 carcinogen to humans

Here's an interesting one

Any intel on this

We have received an email (with lots of youtube links) suggesting that 5G is group 1 carcinogen

I will check WHO position on this

Are you aware of a PHE or govt position statement

Is there a scientific advisory group??

XXX

-----Original Message-----

From: xxxxxxxxxxxxxxxxx

Sent: 20 March 2019 12:17

To: XXX PHE

Cc: XXX PHE **Subject:** OFFICIAL: Re : Case ref XXX EIR request 5G technology

OFFICIAL

Dear team

Please find attached an EIR request regarding 5G technology please can you confirm you can provide a contribution by 2 APRIL.

Thank you

Best wishes,

PHE

-----Original Message-----

From: XXX PHE

Sent: 01 July 2019 11:46

To: XXX PHECc:xxxxxxxxxxxxxx <>

Subject: OFFICIAL: RE: 5G mayoral correspondence - deadline today

OFFICIAL

Dear XXX Enquirer,

It seems from our records that XXX has already replied to you.

Best Regards

PHE

From: XXX GLA

Sent: 01 July 2019 11:35

To: XXX PHE

Cc: XXX Third Party

Subject: 5G mayoral correspondence - deadline today

Importance: High

Dear XXX,

I hope you received my email below. The deadline for me to respond to the attached emails to the Mayor is today.

Please can you let me know as soon as possible today whether PHE need to take any action based on the points raised and whether you have any comments on my proposed response below.

Many thanks,

GLA

From: XXX GLA

Sent: 21 June 2019 11:10:02

To: XXX PHE

Cc: XXX PHE

Subject: 5G mayoral correspondence

Dear XXX,

I'm emailing to let you know that we have received quite a few emails to the Mayor about concerns about the roll out of 5G recently. I have attached the latest two which I need to respond to by July 1st. Reference number XXX is written by a partner in a law firm. Please can you review the points and evidence cited in this email and let me know whether PHE need to take further action?

Please let me know if you have any comments on my proposed response below.

Many thanks,

XXX GLA

Dear Enquirer

Thank you for your email to the Mayor regarding 5G.

The GLA has sought advice from Public Health England (PHE) which advises the Government on all aspects of public health, including exposure to radio waves, the appropriate standards of protection for the general population and any measures necessary to protect sensitive groups. PHE also advises the Mayor on these matters.

PHE's view is that exposures to radio waves are small in relation to guidelines and not expected to pose a hazard to the public. PHE advises that exposures to radio waves should comply with the guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). Technical standards based on the ICNIRP guidelines apply to all mobile communications technology including 5G.

PHE has issued precautionary advice to discourage the non-essential use of mobile phones by children. This precautionary advice recognises that exposures are much higher than occur in other situations, though still within the guidelines, when mobile phones are held to the head to make voice calls. Similar advice is not considered necessary with the lower exposures that occur from Wi-Fi equipment, smart meters and mobile phone base stations.

Please find PHE's guidance on radio waves and health at:

<https://www.gov.uk/government/publications/mobile-phone-base-stations-radio-waves-and-health/mobile-phone-base-stations-radio-waves-and-health>

PHE is committed to monitoring the evidence applicable to this and other radio technologies, and to revising its advice, should that be necessary.

Thank you again for writing to the Mayor.

Yours sincerely

GLA

From: XXX PHE

Sent: 13 March 2019 22:28

To: XXX Enquirer

Cc: XXX PHE

Subject: OFFICIAL: RE: Mayoral correspondence: Wireless industry confesses to U.S. Senate: "NO STUDIES to show 5G is safe"

OFFICIAL

Dear XXX Enquirer

Having watched the video (as requested) and taken a quick look at the other material on the website, I am satisfied that none of the issues or evidence raised below requires a deeper review by PHE or any change in guidance.

PHE monitors the evidence on this topic and is able to provide directions to authoritative reviews and health positions that have been reached at national and international levels.

Many thanks

XXX PHE

From: XXX GLA

Sent: 13 March 2019 20:12

To: XXX PHE

Cc: XXX PHE

Subject: Mayoral correspondence: Wireless industry confesses to U.S. Senate: "NO STUDIES to show 5G is safe"

Importance: High

Dear XXX PHE,

The Mayor has received the email below from a former health journalist who is campaigning against the introduction of 5G. The email provides a link to an article and US senate hearing on 6/2/19:

<https://takebackyourpower.net/senate-hearing-wireless-industry-confesses-no-studies-showing-5g-safety/>

Please can you let me know if any of the issues or evidence raised below requires a review by PHE or any change in guidance?

Unfortunately I've only just been given this correspondence and the deadline to reply is tomorrow, 14th March.

I'd be grateful if you could reply as soon as possible.

Many thanks,

XXX GLA

From: XXX Enquirer

Sent: 14 February 2019 22:14

To: XXX GLA

Subject: Fwd: Wireless industry confesses to U.S. Senate: "NO STUDIES to show 5G is safe"

Dear Mayor of London,

Is there any chance you would take two minutes to watch the US senate hearing establishing that no studies have shown that 5G is safe? see video below.

Surely, as someone who has decided to introduce this technology to London you MIGHT feel it your DUTY to at least be a little informed on this issue

Sincerely,

XXX Enquirer

Begin forwarded message:

From: XXX Enquirer

Subject: Wireless industry confesses to U.S. Senate: "NO STUDIES to show 5G is safe"

Date: 14 February 2019 at 20:36:38 GMT

To: XXX PHE

Reply-To: XXX Enquirer

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Dear

Before these new revelations in the U.S. Senate, I want to clear up some confusion, with a key piece of information in the fight for safe technology.

FACT: The "5G" you see in WiFi routers means "5 GHz". This is NOT the same as actual 5G which means "5th Generation" infrastructure.

FACT: Actual 5G ("5th Generation") is planned to operate at 25-90+ GHz frequencies, use beam-forming / targeting systems, and be integrated with thousands of satellites to blanket the earth.

SURE LOOKS LIKE FACT: The wireless industry has purposefully obfuscated this, in an attempt to normalize and gain acceptance of the term "5G". Remember, the root word of "Babylon" means "confusion".

People need to know this, as it is an important element as we piece this thing together. Please spread this awareness. -Josh

Featured Article

**Wireless Industry Confesses:
"No Studies Show 5G is Safe"**

with U.S. Senator Richard Blumenthal

Last week, U.S. Senator Richard Blumenthal grilled wireless industry representatives, who admitted the industry has done ZERO health & safety studies on 5G technology. Meanwhile, dozens of independent studies indicates that 5G is a risk to all biological life. **Read more...**

From: XXX PHE

Sent: 21 June 2019 14:26

To: XXX Enquirer

Cc: XXX PHE

Subject: OFFICIAL: RE: 5G mayoral correspondence

OFFICIAL

Dear XXX Enquirer

Thank for the email. The points made in the two letters have been reviewed and I can confirm no further action is needed on the part of PHE. One slight clarification that may help with the reply is the inserted text in red below.

Best regards

XXX PHE

From: XXX GLA

Sent: 21 June 2019 11:10

To: XXX PHE

Cc: XXX PHE

Subject: 5G mayoral correspondence

Dear XXX PHE

I'm emailing to let you know that we have received quite a few emails to the Mayor about concerns about the roll out of 5G recently. I have attached the latest two which I need to respond to by July 1st. Reference number MGL040619-3884 is written by a partner in a law firm. Please can you review the points and evidence cited in this email and let me know whether PHE need to take further action?

Please let me know if you have any comments on my proposed response below.

Many thanks,

XXX GLA

Dear XXX Enquirer

Thank you for your email to the Mayor regarding 5G.

The GLA has sought advice from Public Health England (PHE) which advises the Government on all aspects of public health, including exposure to radio waves, the appropriate standards of protection for the general population and any measures necessary to protect sensitive groups. PHE also advises the Mayor on these matters.

PHE's view is that exposures to radio waves from mobile phone base stations are small in relation to guidelines and not expected to pose a hazard to the public. PHE advises that exposures to radio waves should comply with the guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). Technical standards based on the ICNIRP guidelines apply to all mobile communications technology including 5G.

PHE has issued precautionary advice to discourage the non-essential use of mobile phones by children. This precautionary advice recognises that exposures are much higher than occur in other situations, though still within the guidelines, when mobile phones are held to the head to make voice calls. Similar advice is not considered necessary with the lower exposures that occur from Wi-Fi equipment, smart meters and mobile phone base stations.

Please find PHE's guidance on radio waves and health at:

<https://www.gov.uk/government/publications/mobile-phone-base-stations-radio-waves-and-health/mobile-phone-base-stations-radio-waves-and-health>

[Mobile phone base stations: radio waves and health - GOV.UK](https://www.gov.uk/government/publications/mobile-phone-base-stations-radio-waves-and-health/mobile-phone-base-stations-radio-waves-and-health)

www.gov.uk

1. Summary. Base stations transmit and receive radio waves to connect the users of mobile phones and other devices to mobile communications networks.

PHE is committed to monitoring the evidence applicable to this and other radio technologies, and to revising its advice, should that be necessary.

Thank you again for writing to the Mayor.

Yours sincerely

XXX GLA

From: XXX PHE

Sent: 13 March 2019 22:28

To: XXX Enquirer

Cc: XXX PHE

Subject: OFFICIAL: RE: Mayoral correspondence: Wireless industry confesses to U.S. Senate: "NO STUDIES to show 5G is safe"

OFFICIAL

Dear XXX Enquirer

Having watched the video (as requested) and taken a quick look at the other material on the website, I am satisfied that none of the issues or evidence raised below requires a deeper review by PHE or any change in guidance.

PHE monitors the evidence on this topic and is able to provide directions to authoritative reviews and health positions that have been reached at national and international levels.

Many thanks

XXX PHE

From: XXX GLA

Sent: 13 March 2019 20:12

To: XXX PHE

Cc: XXX PHE

Subject: Mayoral correspondence: Wireless industry confesses to U.S. Senate: "NO STUDIES to show 5G is safe"

Importance: High

Dear XXX PHE,

The Mayor has received the email below from a former health journalist who is campaigning against the introduction of 5G. The email provides a link to an article and US senate hearing on 6/2/19:

<https://takebackyourpower.net/senate-hearing-wireless-industry-confesses-no-studies-showing-5g-safety/>

Please can you let me know if any of the issues or evidence raised below requires a review by PHE or any change in guidance?

Unfortunately I've only just been given this correspondence and the deadline to reply is tomorrow, 14th March.

I'd be grateful if you could reply as soon as possible.

Many thanks,

XXX GLA

From: XXX Enquirer

Sent: 14 February 2019 22:14

To: XXX GLA

Subject: Fwd: Wireless industry confesses to U.S. Senate: "NO STUDIES to show 5G is safe"

Dear Mayor of London,

Is there any chance you would take two minutes to watch the US senate hearing establishing that no studies have shown that 5G is safe? see video below.

Surely, as someone who has decided to introduce this technology to London you MIGHT feel it your DUTY to at least be a little informed on this issue

Sincerely,

XXX Enquirer

From: XXX PHE

Sent: 02 April 2019 15:48

To: XXX Enquirer

Cc: XXX PHE

Subject: OFFICIAL: RE: 5G technology

OFFICIAL

Dear Enquirer

Thanks for the message and I hope all's well.

My department leads on PHE's advice on EMFs and it is fine to contact me, although it's probably best to use the generic contact point (emf.enquiries@phe.gov.uk) for enquiries. This is managed by the specialist team and likely to be more robust than my own email. I've attached the latest list of PHE contact points on various topics.

There have been quite a few enquiries about 5G/EMFs and health, including several PQs and the Petition you mention. We have put together some lines on 5G that are being used to answer enquiries and also a broader explanation of PHE's advice about RF EMFs, with links to supporting evidence reviews and the positions of other authoritative bodies. These documents are attached. The Petition is in line with these documents and it is fine to reuse its text.

I hope this is of assistance

Best regards

XXX PHE

Exposure to radio waves has been carefully researched and reviewed. The overall weight of evidence does not suggest devices producing exposures within current guidelines pose a risk to public health.

Public Health England (PHE) advises the Government on appropriate public health standards for protection from exposure to radiofrequency electromagnetic fields (EMFs), or radio waves. PHE's main advice is that the guidelines of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) should be adopted and there is no convincing evidence that exposures below the ICNIRP guideline levels cause adverse health effects. ICNIRP is formally recognised as an official collaborating non-governmental organisation by the World Health Organization (WHO) and the International Labour Organization. ICNIRP is also consulted by the European Commission. Advice from PHE includes comprehensive scientific review reports and statements on particular topics that can be viewed at:

<https://www.gov.uk/government/collections/electromagnetic-fields>.

The Government continues to support research on this topic, including the ongoing Cohort Study of Mobile Phone Use and Health (COSMOS, <http://www.thecosmosproject.org/>) and the Study of Cognition, Adolescents and Mobile Phone studies (SCAMP, <https://www.scampstudy.org/>) at Imperial College London. PHE keeps the emerging evidence under review and maintains precautionary advice that recognises exposures can be much higher when mobile phones are held to the head to make voice calls than in other situations. Similar advice is not considered necessary with the lower exposures that occur from mobile phone base stations and wireless networks.

PHE's advice is based on EMF and health evidence reviews have been prepared by scientific expert groups in the United Kingdom (UK) and around the world. The independent Advisory Group on Non-ionising Radiation (AGNIR) published their report in the UK in 2012 and the European Commission's Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) published their report in 2015. Links to these reviews are below:

<https://www.gov.uk/government/publications/radiofrequency-electromagnetic-fields-health-effects>

https://ec.europa.eu/health/sites/health/files/scientific_committees/docs/citizens_emf_en.pdf

The main conclusion from the WHO reviews is that EMF exposures below the limits recommended in the ICNIRP guidelines do not appear to have any known consequence on health. WHO is presently preparing an Environmental Health Criteria Monograph covering the evidence in relation to radiofrequency exposures and health. This publication will complement the monographs on static fields (2006) and extremely low frequency fields (2007) and will update the previous monograph on radiofrequency fields (1993). Information from WHO about EMF exposure guidelines can be viewed at: <http://www.who.int/peh-emf/standards/en/>.

ICNIRP guidelines apply up to a frequency of 300 gigahertz (GHz), well beyond the maximum frequencies under discussion for 5G (a few tens of GHz). Some 5G technology will use similar frequencies to existing communications systems. Other 5G technology will work at higher frequencies (a few tens of GHz), where the main change would be less penetration of radio waves through materials, for example walls. International product standards applying to mobile phones and other transmitting devices, health and safety legislation, and planning policy for telecommunications developments all look towards compliance with exposure restrictions from the ICNIRP guidelines. While a small increase in overall exposure to radio waves is possible when 5G is added to the existing network, the overall exposure is expected to remain low and well within the ICNIRP guidelines. Guidelines and other information from ICNIRP can be found at the following link: www.icnirp.org.

In 2018, the United States' National Toxicology Program (NTP) released its final reports on rat and mouse studies. NTP concluded it had found evidence linking high levels of exposure to cancers in the animals. NTP explained that the findings cannot be directly applied to humans for two reasons: firstly, the exposure levels and durations were greater than what people may receive from mobile phones; and secondly, because the rats and mice received exposure throughout their whole bodies, which is different from the more localised exposures humans may receive, as from a mobile phone in their pocket or next to their head. The press release and links to the study are available at:

<https://www.niehs.nih.gov/news/newsroom/releases/2018/november1/index.cfm>.

PHE considers the results from the NTP studies, though interesting, do not alter the balance of evidence in relation to human exposure when using mobile phone technologies. However, the