

## Electromagnetic Hypersensitivity confirmed again

Another new study, this time from France and Italy, on 32+ people with EHS but not MCS, shows again that EHS is “a truly objective pathological disorder, as for cancer or Alzheimer's disease”.

This confirms the 1960s and 1970s studies from Poland and the USSR and many since then.

The Department of Health and PHE can no longer confuse EHS with Electrophobia or a nocebo effect.

Instead, doctors should use these objective markers to diagnose 70-80% of people with EHS.



**FOUR WORST ASPECTS OF ENVIRONMENTAL POLLUTION:**  
Air  
Electromagnetic Radiation  
Water  
Noise



## Environmental Pollution

Air pollution is reckoned the worst environmental pollution. It causes 40,000 early deaths in the UK each year. In 2003 it was reckoned that man-made electromagnetic pollution was the fourth worst environmental pollution, after air, water and noise. In recent years electromagnetic pollution has grown substantially. Increases of 10-15% in early deaths when 2G was introduced suggest that electromagnetic pollution may now be the second or even the leading environmental pollution in the UK.

International biological guidelines: **Bioinitiative 2012**, and **EUROPAEM EMF Guidelines 2016**.

*“Thermal and non-thermal health effects of low intensity non-ionizing radiation: An international perspective”* is an important new study in the journal *Environmental Pollution* and shows the urgent need for biological guidelines, not ICNIRP.

## Local Authorities: responsible for reducing Environmental Pollution

Since 2013 local authorities have been responsible for improving public health and reducing environmental pollution.



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## Radio interviews: Deborah Fry talking about her daughter's death from school Wifi

In June 2018, around the EMF Awareness day on June 11, three years after the tragic death of her daughter Jenny when the school refused to turn off its Wifi, her mother Deborah was interviewed on some 17 local radio stations. This was a campaign supported by ES-UK and generous donors to help raise awareness of the condition of electrosensitivity.

It was clear from the questions asked by the interviewers from the local radio stations that most had not even heard of the condition or knew very little about it.

On U105 in Belfast, for instance, Deborah started by saying: "I'm trying to raise awareness after the death of my daughter three years ago. I had expected that there would have been a scientific investigation, like would happen with a plane crash, but unfortunately that hasn't happened yet." She went on to say that she wanted people to "wake up to the dangers and health hazards of wireless irradiating technology".



## Poster on Wifi dangers

The poster (see next page) was displayed in various locations around the north of England in May and June 2018. Many thanks to our generous donors.

## Thanks, and keep writing!

Many thanks to our supporters, both for their generous donations and for continuing to write to their MPs, local councillors, government departments, newspapers, magazines, contributing to radio discussions etc. It is beginning to make a difference. Although many people are still unaware of the dangers of EM exposure or its disabling effects, increasing numbers are becoming alert to the problem of toxic environmental pollution. Please keep writing, emailing, telephoning and giving leaflets. Education can be a long process!

## Thank you

Many thanks too for all that our supporters and trustees do, often behind the scenes. This includes those responsible for the accounts, postings and printing, as well as those seeking to help in often complex individual cases where a few government agencies which should be responsible at present fail these individuals badly.



## Making Waves conference

This was an excellent conference, repeated on two days, Saturday and Sunday May 12-13 2018, and supported by ES-UK. It started with the showing of Generation Zapped, a new challenging and informative documentary film. It was a privilege to listen to the three speakers, leading experts in their fields of bioeffects of electromagnetic energy. They explained the latest science on the subject, along with how society is coping or failing to deal with the consequent challenges to health. We are grateful to the speakers for travelling so far, to Judy Sharp who ran the conferences, and the hosts at their lovely manor house in Sussex.



Photograph (from left) Dr George Carlo, Professor Olle Johansson, Dr Dimitris Panagopoulos  
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# Why risk your health with Wi-Fi?

Wi-Fi is an important threat to human health



- ✓ Switch off your Wi-Fi and spend the day without your smartphone!
- ✓ Use wired cables for internet access instead.
- ✓ Always switch off Wi-Fi and smartphones in bedrooms at night.

**Know the risks.**

For more information visit: [www.es-uk.info](http://www.es-uk.info)

BM Box ES-UK, London WC1N 3XX Tel: 0845 643 9748

\*Electromagnetic Fields

*"Repeated Wi-Fi studies show that Wi-Fi causes oxidative stress, sperm/testicular damage, neuropsychiatric effects including EEG changes, apoptosis (cell death), cellular DNA damage, endocrine changes, and calcium overload."*

Dr M PA, Professor Emeritus, Washington State University (Environmental Research, 2018)



## Jenny Fry Memorial Lectures

Sunday July 15 2018 at Sedgwick Park House was devoted to an informative set of lectures in memory of Jenny Fry.

Speakers were Debbie Fry, on the tragedy three years earlier and what she has been doing to raise awareness of the dangers of Wifi since then, Dr. Jean Monro of the Breakspear Clinic on her

research since 1982 at first with Dr Cyril Smith leading to recent developments in the understanding and treatment of people with EM and chemical sensitivities, Dr. Peter Julu who has conducted preliminary but impressive objective studies of measurements showing biophysical reactions to EM radiation, Dr. Erica Mallery-Blythe with her wealth of experience and expertise in

dealing with EHS and what people with EHS need, and Michael Bevington, the chair of trustees of ES-UK, who related some of his experiences of health effects from Wifi and mobiles to the needs and rights of people with EHS.

It was good to see a large and appreciative audience, including the esteemed Prof. Olle Johansson. Many thanks to Stef, Stuart, Peter, Bob and everyone else involved in the organisation of such a positive day,

### **Advertising Standards Authority dismisses WHO 2B cancer rating**

The “It’s your call” poster on display in May 2017 was approved by experts in the field and applauded by people who saw it.

The ASA started by announcing in June 2017 that it would find against the poster, showing no interest in the overwhelming weight of scientific evidence, or even impartiality. During the next nine months, despite ES-UK providing hundreds of peer-reviewed studies fully substantiating the poster’s wording, the ASA still kept to

their anonymous initial decision against it (see the ES-UK website for documentation, and commentaries by groups in the UK and abroad).

The ASA council’s patently absurd dismissal of the science, instead preferring non-peer-reviewed and out-dated claims by a minority clique still clinging to Schwan’s mistaken heating hypothesis of 1953, was even upheld by their “independent reviewer” in April 2018.

The ASA council’s anonymous and anti-scientific stance does it no credit, except to strengthen fake news and cherry-picking supporters of the wireless industry, over evidence-based science. The ASA dismissed even the WHO IARC’s classification of EM as a 2B “possible” cancer risk, just like the poster’s “potential”.

### **Copies of posters?**

*A supporter writes:* “Thank you for your efforts with the poster. Would it be possible for new

posters to be available for purchase? I personally would like to display them on local, village, community hall, supermarket notice boards, or lamp posts where mums gather to collect children from school. I’m sure others would like this too.”

### **ASA complaints: irresponsible use of mobiles and laptops**

There are reports of growing numbers of complaints to the ASA that a few TV shows, films and commercials still irresponsibly show some

people grasping mobile phones in their hands or with them pressed to their heads or in pockets. These locations generally break the manufacturers’ safety rules which require that mobiles are kept some 15-25 mm (0.5-1 inch) from all parts of the body. Similarly, laptops have to be kept at least 20 cm (8”) from all parts of the body. These distances, of course, are for ICNIRP 6-minute heating effects, as required by the UK government. Biological EUROPAEM guidelines require that they are used further away from the body.



### **PHSO complaint continues**

The complaint to the Public Health Services Ombudsman continues. PHSO is apparently now reviewing the appeal against its patently inadequate report last summer, including serious allegations of maladministration. This complaint, by over 80 people, started in 2013 and is rapidly becoming more and more significant to the future health of all citizens of the UK. It is about Public Health England’s repeated failures to warn in a proportionate and responsible way about the established health effects of low-level electromagnetic energy. The need for warning is now becoming ever more apparent as the leading international experts and advisors to the WHO increasingly call for Wifi and mobile phone radiation to be classified as a class 1 certain human carcinogen, like tobacco and asbestos.

## First gagging order for ES sacking?

It was reported in July 2018 that a former employee in the UK with ES had a gagging order imposed on his/her employment termination where the employer refused to make the reasonable adjustments necessary for the employee to continue working and sought to avoid tribunal action or news about the sacking settlement getting out. Quite a number of other employees with ES are experiencing similar problems from UK employers who fail to comply with the Equality Act and fail to produce a safe working environment for all their employees.

## Thanks to ES-UK

“Much appreciation for all that you do – keep up to good work.”

“Thank you for the fabulous newsletters. For those of us severely affected by EMFs, they really are a lifeline of information.”

“Please, please keep up the good work. You are a beacon of hope for those of us struggling in this awful environment. And with some success. I read the Mirror article from the end of May, and apparently there was an EHS feature on Radio 4 a couple of weeks back. All good news. Thank you for all your hard work.”

From an email from the southern hemisphere: “I can't tell you how much I am grateful for your work and that of ES-UK.”

## Comments on the new ES-UK Colour Leaflet

“I think the new colour scheme and logo of the information leaflet is very good.”



“I would like to give copies to my GP, MP etc.”  
“I really really loved your electro sensitivity leaflet. Thank you so much. This is great for me to give to people who don't believe me, and that means a lot.”

## ES-UK Christmas Cards

Order as soon as you can (see the letter).

# COMMENTS

## Put all Wifi in a Faraday Cage: “the most terrible pollution in the history of humankind” *Stephanie writes:*

“It's ridiculous that it is up to the sensitive to put themselves in a Faraday cage to protect themselves. It ought to be the other way round. Put Wifi in a Faraday cage and let those who wish to use it go inside it themselves.

I can hardly go to a concert or theatre these days without being unwell, due to mobile phones, which are typically put on silent and NOT off or on flight mode. Why should it not be obligatory to switch off during performances. Mozart did not have to suffer this pollution and interference. Why should his music now be spoiled by it?

Then there is the problem of addiction. During the interval, many people cannot even sit and think about the play or concert that they are at,

but have to get out their phone and start texting - even in the middle of La Traviata in Prague. Not only is this a physical interruption, with Wifi beaming into you, but it is psychologically disturbing. It is not possible to stay in the moment of the play when the bright lights of mobiles crash in on your thoughts.

This is the physical effect it has on me: after 20 to 40 minutes, first a wave of intense heat rises up my body and an uncomfortable feeling of needing to get out and get away, and then sweating, but a cold sweat, (which will repeat in cycles if I stay). Then I get a feeling of pressure in the back of my head, which becomes an ache. Soon after I start burping, seriously burping, like an attack (it's how I first described it). I cannot stop burping and the burps are coming from very deep in my stomach, like the kind of burps before you are sick. Needless to say this is associated

with nausea and then a hugely bloated stomach. I go from a slim woman to someone who ridiculously looks 7 months pregnant at 56 (yes, really it's that big). The whole stomach from under my bra to my knickers is swollen and hard like a pregnancy. I feel out of breath due to the pressure on my diaphragm. It can take days for my stomach to go down. And it can swell in seconds, one minute I am normal, the next like a balloon. I have to wear dresses to accommodate this. I believe it has precipitated a pelvic organ prolapse.

Wifi is the most terrible pollution in the history of humankind, physically damaging, psychologically addictive, socially destructive and EVERYWHERE. Add to this the massive propaganda and vested interests, and the fact that this industry wants to connect every place and everything to the internet. Imagine how bad it will be in the future when every light bulb, car, fridge and domestic appliance is also talking to the mobile phone. This is so much worse than anything we've seen before."



### **Computer use by projector and separate keyboard?**

"I am severely EHS, utterly unable to tolerate electricity – not even a hardwired computer, land-phone or TV are possible for me. I have read 'Girl in the Dark' by Anna Lyndsey, a very interesting read, and to my mind clearly a fellow ES sufferer, although she doesn't appear to know it. Being severely photosensitive, she lives very literally in the dark. She talks about a friend with health issues caused by using a computer. He has now rigged up a computer so the image that would

appear on the monitor is projected onto a wall by an extension cable. A separate wired keyboard is kept away from the computer itself at a safe distance. Maybe this is a viable option for those otherwise unable to use a computer. Has anyone else tried this?"

*(Tessa TS. Contact email available via ES-UK)*

### **Killing the elderly with cordless phones and masts**

"In my experience, microwave radiation accelerates Alzheimer's in the elderly. My father's cousin put a cordless phone in the kitchen. Six months later his wife, aged 80, had dementia. My mother in law wasn't that well, but five months after a cordless phone was given to her she got lung cancer and died, aged 83. Someone else I know gave her father a cordless phone. He used it a fair bit and after a year developed skin cancer on the side where he held it. The cancer was removed but grew back. He was given radio therapy and six months later was dead. The elderly are fragile. Their immune systems are weak. They can live for a long time if nothing knocks them down but I think that cordless phone radiation is too powerful and they can't cope with it."

"Three weeks after a cordless phone was installed in one flat, the healthy man in his 80s in the flat next door suddenly died from no obvious illness or disease."

"When phone masts were switched to digital signals in the 1990s, there was an increase of 10-15% in deaths in each area over the two months following. This helped convince me that Public Health England /HPA and the World Health Organization were telling lies when they said that wireless radiation was harmless."

### **Feeling the radiation**

"I was talking to an elderly gentleman at a garden party and I started to feel the effects of EMF. I politely asked if he would mind switching his mobile phone to flight mode as the radiation that it emitted was affecting my heart and nervous system and that I might collapse. He was so stunned because I knew he had a mobile phone in his inside pocket, which was on silent mode, that he went very pale and nearly had a heart attack! (- a bit of an exaggeration, but he promptly switched it off.)"

**Public Health England and Cancer Research UK: “looking the other way ... fabricating 'fake news'”**

“Western governments/public bodies (e.g. UK/Public Health England) and associated establishment organisations (e.g. Cancer Research UK) have determined to do everything from simply 'looking the other way' to literally fabricating 'fake news' (see recent reporting of "mythical cancer beliefs")” (Digital Disconnect: Comment in The Mirror, June 3 2018)

**Public Health England guilty of “loss of life”**

*From a supporter:*

“I will not stop writing until Public Health England is brought to order. They have caused loss of life. The guilt lies at their door.”

**PHE: ELF sleep effects “still unknown”**

PHE’s advert of spring 2018, for a researcher within the Physiology and Neurobiology Group of the PHE’s Biological Effects Department: “We are

constantly exposed to EMFs. Magnetic fields are associated with power generation and electrical appliances. At low exposure levels, such as those encountered daily, the effects of exposure on sleep behaviour are still unknown. ...”

**Arthritis from microwaves**

“When I was a young engineer I talked to the old timers about their early experience. One engineer started his career installing radar and radio systems for the military, working in cold places, like Alaska and North Dakota. The techs would sometimes warm up their hands in front of the microwave dish. This “oven” was often only about 100 watts or even less - one 10th or one 15th of your standard oven. The two techs that this engineer kept in touch with had severe arthritis in the hands.” (Quora, June 2018)

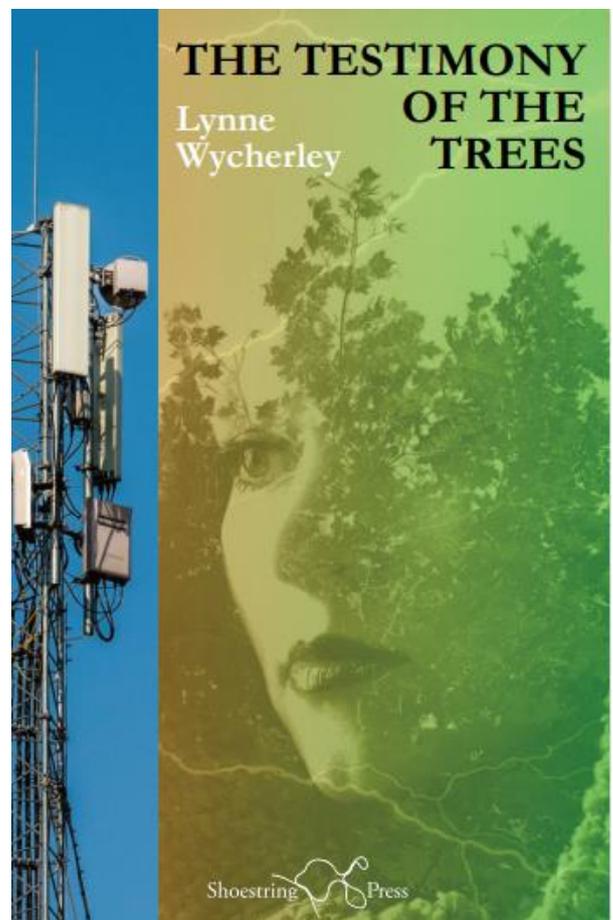


# THE TESTIMONY OF THE TREES

*Lynne Wycherley: “Testimony of the Trees”*  
(July 2018, £7.50, ISBN 9781912524198, 58 pages)

Following “Listening to Light: new & selected poems”, Lynne Wycherley’s new volume is a prayer for the living world in the face of dark digital trends. In an age increasingly swallowed up by wireless radiation, corporate greed, and addiction to small screens, embattled trees, children—and even DNA—shimmer with endangered beauty. Long known as a lyrical poet, and more recently as a science writer, Wycherley has brought the two dimensions together in her new collection, whose closing poems return us to the spiritual realm of nature that has always been close to her heart. Lynne is a health refugee living in Devon.

“In this inspiring collection, Lynne Wycherley paints pictures with words that capture the exquisite connections among living creatures and the dangers posed by the unprecedented rising sea of radiofrequency radiation. Her gift to the world, linking the smallest to the grandest, provides uplifting moments of reflection and compels us to come out of



the culture of denial. If we are to create a safer and healthier world for our children, we must set limits on how we use technology.”  
– Dr Devra Davis, Nobel Prize laureate, Founder/President, The Environmental Health Trust



From reviews of her previous collections: “A unique lyric sensibility... the poems alight on the page winged and true. Not since the work of Frances Horovitz has one heard such a voice”  
– Penelope Shuttle

“A compelling contribution to eco-poetry”  
– Peter Abbs, Resurgence.

“Wycherley is a real Renaissance woman. Her poetry will wake you! She has the courage to ask the penetrating questions we should all be asking”  
– Dr Olle Johansson, Professor Emeritus, Karolinska Institute

“A goal is held to with clarity of eye as well as the passion of a vision”  
– W N Herbert

The Editor comments: *“It is rare to meet such a creative and wide-reaching range of words and ideas tightly controlled within a carefully constructed poetic framework. When it is combined with erudite allusions to one of the great scientific challenges of our age, the destruction of our natural environment through the selfish application of wireless technology, it is easy to consider Lynne Wycherley's contribution to a growing societal awareness as both the genesis of pathos and the product of genius. Just over three centuries ago, in his political vision of the tree-strewn landscape of Windsor Forest, Alexander Pope claimed "First in these fields I sung the sylvan strains". Now Lynne's 'Testimony of the Trees' has presented us with another moving arboreal reflection on our own generation's relationship with its woodland life, sombre in tone but emotive in content.”*

*You may wish to consider purchasing this volume for your friends and yourself.*

*The book is available at an attractively low price and thanks to the author's great generosity postage for single copies marked “ES-UK Newsletter” will be post free until 2019.*

*Cost: £7.50 [and £1.20 but free until 2019 for single copies].*



# RADIO MIKE DANGERS

*It's well known that the level of wireless radiation is particularly strong in places which use radio mikes extensively, like TV studios, theatres, music shows, churches, conference auditoriums etc. Since the specific symptoms from wireless radiation depend on cumulative exposure, people regularly appearing in these situations, along with people with EHS, need to be especially careful.*

## **Suranne Jones mystery illness: dizzy on stage**

“Suranne Jones has been forced to pull out of West End theatre show Frozen after suffering from a mystery illness. The former Coronation Street star posted a heartfelt apology to her fans on social media explaining why she couldn't make the last four of the shows, revealing that she had felt dizzy when she was on stage.” (Hannah Fillingham: “Suranne Jones forced to pull out of theatre show after suffering from mystery illness” Hello! May 06 2018)

## **Kym Marsh mystery illness: dizzy and off balance**

The Coronation Street actress Kym Marsh had to have an emergency brain scan after suffering from mystery illness. She developed an inner ear problem which has caused dizziness and balance issues. She had a brain scan last month to rule out a tumour or signs of multiple sclerosis. It all started in January, when she realised something was seriously wrong. “I just turned over in bed and the room spun around me and I've not been right since” Kym said. “It's a horrible feeling, being dizzy and off balance. It feels like the floor's uneven. It's worse when I'm in busy places. At first they thought it was benign paroxysmal positional vertigo, which is to do with your neck - when you turn your head, you get dizzy. I knew it wasn't, as it was more to do with my eye movement, which is linked to the vestibular nerve that carried messages between your ear and your brain. If it's inflamed, which is usually because of a virus, it messes up the messages between the two.” Doctors can't say for sure what it is, but Kym is now on medication to improve the blood flow to the brain. (Jessica Gibb: “Kym Marsh rushed to hospital for brain scan after mystery illness left her 'dizzy and off balance’” Mirror, March 26 2018)

## **Simon Cowell mystery illness: feeling dizzy**

“X FACTOR boss Simon Cowell was forced to miss part of today's London auditions due to a sudden mystery illness. The music mogul, 57, was left bed-bound after being struck down with the unknown condition.” (Benjy Potter: “THE HEX FACTOR X Factor boss Simon Cowell misses London auditions due to sudden mystery illness: The music mogul was forced to bail on co-judges after being struck down by the unknown condition” Sun, July 4 2017) “The telly judge fainted and tumbled down a steep staircase at his home at 6.45am. He had woken up in bed feeling dizzy and gone to fetch a glass of warm milk — but lost consciousness and fell backwards on the flight of steps.” (Dan Wootton and Matt Wilkinson: “MY 999 TERROR’: Shaken Simon Cowell tells how he was rushed to hospital on a stretcher for a brain scan after ‘terrifying’ fall at home — and he's set to MISS first X Factor live shows” Sun October 27 2017) “They think I fainted because I had low blood pressure and so I have got to really take good care of myself to sort that out.” (Simon Boyle: “FALL'S A LIFE-CHANGER’: Simon Cowell opens up about his battle with low-blood pressure — and vows to take care of himself for his son Eric after life-changing fall” Sun, October 31 2018)

## **Simon Cowell: no mobile since late 2017**

Simon Cowell, the music mogul, 58, confessed he has kept his mobile switched off since late 2017. He said: “I literally have not been on my phone for ten months. It has been so good for my mental health. It's a very strange experience but it really is good for you and it has absolutely made me happier. The difference it made was that I became more aware of the people around me and way more focused.” (Katie Hind: “It has absolutely made me happier.’ Simon Cowell reveals he hasn't touched his mobile phone in 10 months because it was making him distracted and irritated” Daily Mail, June 2 2018; “Mobile phones: We got rid of ours like Simon Cowell” BBC News, June 3 2018)

# The Blue Pill, the Red Pill and Wireless Technology - Which Will You Choose?

D.L. Britton

(A version of this article appeared in the Summer 2018 edition of Miserden Parish Post.)

*In the 1999 cult film The Matrix, main character Nero is offered the choice between a red pill and a blue pill by rebel leader Morpheus.*

*The red pill will allow him to escape a computer-simulated dream world, The Matrix, that prevents humans from discovering they are slaves to sentient machines. By escaping he will find freedom in the real world with all its hardships and brutal truths.*

*The blue pill, on the other hand, guarantees a return to the dream world and a life spent in the blissful ignorance of illusion.*

*Lost a little faith recently in social media over the safety of your personal data? Wondering whether, in today's wirelessly connected world, it's more than just your privacy at stake?*

*Happy with the blue pill, or ready for the red?*

*Here's some product information to help you choose:*

## First, the blue pill\*

*[\*Spot the two false statements: answer at end if you are uncertain]*

- Wireless networks are easier to install than wired ones.
- Wireless gives you increased mobility: you can sit anywhere in a building and still access your files over the internet.
- You can add more users to a wireless network without having to spend money on additional cabling. The risk of tripping over trailing cables is eliminated.
- Staff can bring their own computers to work, saving businesses money on hardware.
- With wireless you can increase productivity: staff can work while they're on the move, or at home in their own time.
- Wireless hotspots enable people to connect to the internet when they're away from the office or from home. You are rarely out of touch.
- Wireless networks allow you to make free international phone calls and connect with anyone.
- Fifth generation (5G) wireless technologies will be even faster than 4G and provide more reliable internet speeds.
- Wireless technology can reduce business travel, thus reducing carbon emissions.
- We are now making everything wireless, from drones and cars to hearing aids and tampons. In future we'll connect everything and everyone to the 'Smart Grid'. 5G technology will make all of this possible.
- Non-ionising electromagnetic radiation (EMR) emitted by wireless devices is harmless and there's no plausible mechanism by which cell phones or Wi-Fi devices could cause cancer. Electro-hypersensitivity (EHS) is psychosomatic.
- People who say wireless radiation is unsafe don't understand the difference between ionising and non-ionising radiation.

## Before you swallow, here's the red pill:

- Hundreds of peer-reviewed, non-industry funded scientific studies show that EMR emitted by mobile phones and phone masts, Wi-Fi routers, cordless phones, smart meters, baby monitors, fitbits etc. is harmful to human health and to the environment.
- We are all electrical beings. Nerve impulses are electrical energy signals. We not only have electricity coursing through our bodies (from billions of nerve impulses), we generate and radiate our own electro-magnetic fields. Man-made (MM) EMR interferes with these fields and disrupts our health and wellbeing. It also interferes with the navigation systems of bees and migratory animals.

- EMR affects human nervous systems, brain chemistry and the blood brain barrier. We have known this for decades. It can break DNA strands and is a cancer promoter. It causes infertility. Many people experience sleep disturbance, headaches, blood pressure variations, heart arrhythmia, tinnitus, impotence, mood swings and anxiety after exposure to wireless devices and phone mast EMR.
- Between 3% and 5% of the population are now so sensitive to EMR they are unable to live a normal life. Wi-Fi is everywhere. So are mobile phones. Sweden recognizes EHS as an environmental disability; the Council of Europe wants member states to provide white zones for EHS people.
- Lloyd's of London and Swiss Re consider wireless radiation to be among the most serious emerging risks for insurers. Mobile phone companies are warning shareholders (not customers) of the potential risks of cancer from using phones.
- MM EMR is different to natural background radiation. It pulses as it carries packets of information (e.g. videos, photos) and it is polarized. Humans and wildlife haven't evolved to cope with it.
- MM EMR levels are now one quintillion (1,000,000,000,000,000,000) times greater than natural levels and are rising each year. Current levels are 'safe' according to 1998 guidelines from the International Committee on Non-Ionizing Radiation Protection (ICNIRP). ICNIRP is a private organisation with strong ties to the telecoms industry and the military.
- Safety limits in the UK are based on ICNIRP guidelines. Other countries have abandoned these guidelines for far lower radiation exposure levels.
- You cannot object to mobile phone masts on health grounds.
- In April this year the UK government received £1.4 billion from telecom companies when it auctioned off 5G frequency bandwidths. It received £2.3 bn for 4G and £22.5 bn for 3G.
- Focussed millimetre waves are being used by the military as non-lethal weapons for crowd control and defence. Such radiation causes pain by triggering nerves in the skin. Future 5G networks will use the same frequencies.
- The Cyprus government has produced YouTube videos on the dangers of EMR as part of a national public health information campaign. South Tyrol State Parliament (Austria) has voted to replace existing wireless networks in schools, preschools, hospitals, nursing homes and other public facilities with wired networks. France has banned Wi-Fi for under threes in nurseries, and is banning phones in schools from this September. In the UK a near media blackout exists on coverage of health risks.
- In Quebec a Class Action suit has been filed against 50 respondents including the Attorney General of Canada, the Attorney General of Quebec and around 40 corporations and manufacturers for their roles in exposing Canadians to harmful levels of wireless radiation.
- In 2015 the wireless 'cloud' generated around 30 megatonnes (mt) of CO<sub>2</sub> compared to 6 mt in 2012—the equivalent of 4.9 million new cars on the road. Energy consumption continues to rise.
- More than 200 international scientists and experts have called for a moratorium on the rollout of 5G until safety issues surrounding wireless technology have been addressed.

### **So what's it to be, the blue pill or the red pill?**

Your choice will have consequences for your health and that of children, companion animals and the wider environment. Choose wisely. As Morpheus explains: '... After this there is no turning back... remember - all I'm offering is the truth. Nothing more.'

Blue pills and information are available from: the WHO; Public Health England; Cancer Research UK; Wikipedia; the national press; the UK Government, major political parties and all trusted retailers with conflicts of interest.

For red pills and information contact: Electrosensitivity UK, EM Radiation Research Trust, Powerwatch, Stop Smart Meters UK, Environmental Health Trust; International EMF Alliance; InPower Movement.

*[\*The two false statements are the last two.]*

# SMART METER DANGERS

## Headaches from smart meters

Ever since he has had two smart meters installed in his home, John Lawn, 65 from Sheringham, has been having headaches. Now Mr Lawn has called for an investigation into the possible side effects of the devices and the radio waves they emit. He said: "Whenever I'm in the same room it seems I'm in their way. I'm in quite a bit of discomfort, actually. It may be just that I'm one in a million, but it's something that should be looked into." Mr Lawn said he has had suffered headaches since his meters were installed last week. He said he no longer felt comfortable inside his home because of the headaches. Mr Lawn said the smart meters were installed by SSE, and when he challenged them over their side effects, SSE advised him to contact North Norfolk District Council to assess the devices. An SSE spokesman said Public Health England (PHE) research showed smart meters were no danger to health. (Stuart Anderson: "My smart meters are giving me headaches": Man calls for investigation into the devices" North Norfolk News, May 12 2018) Actually, the only study on health effects of smart meters, Lamech 2014, shows that they can cause health effects including headaches. PHE heating limits, based on Schwan's mistake of 1953, are 1 million to 100 million times above international biological guidelines for smart meters – Ed.]

## Smart meter are optional, but some firms are bullying customers

There are reports of companies trying to bully or trick customers into taking a smart meter. Most smart meters emit wireless radiation, a 2B human carcinogen. Some firms are charging people more unless they accept one of the devices, or setting up appointments for customers who have not requested them. (Dan Hyde: "Stop the smart meter bullying: We reveal the catalogue of dirty tricks power firms are using to force us to switch to digital meters" Daily Mail, April 10 2018)

## Informing the meter people

*From a reader:*

"Yesterday, the E.ON Meter Reader called to take meter readings of both our Gas and Electricity meters. He immediately commented on the "Stop

Smart meters" notices that I have pinned up inside our meter cupboard. This resulted in a discussion about the problems with my EHS and the reasons for me insisting that I will not have a smart meter fitted.

Interestingly the E.ON reader said that he does not have a smart meter himself and confirmed it was not mandatory to have one fitted. I mentioned that microwave frequencies produced from devices such as smart meters can badly affect people. I offered him an ES-UK leaflet for further information which he readily accepted as he was unaware of EHS and was interested to learn more about the problems. He actually asked for more leaflets as he wanted to raise the problem of EHS with his manager. We found several leaflets for him to pass on back at the office. We were both very impressed when the E.ON meter reader took the trouble and called again early this morning to tell us that he had passed on the ES-UK leaflets and discussed our problems and concerns with his manager. He also told us that the matter was going to be discussed higher up in the management structure."



## PHE claims smart meters "not a health risk"

"The evidence to date suggests exposures to the radio waves produced by smart meters do not pose a risk to our health" ( Dr Azadeh Peyman, Public Health England, in Paid Advertisement by SMART ENERGY GB: "Smart meters on trial: how safe are they and how will they affect my bills?" Express, May 17 2018)

## The only peer-reviewed health study on smart meters: "symptoms" "significant effects"

"The most frequently reported symptoms from exposure to smart meters were (1) insomnia, (2) headaches, (3) tinnitus, (4) fatigue, (5) cognitive

disturbances, (6) dysesthesias (abnormal sensation), and (7) dizziness. The effects of these symptoms on people's lives were significant. Review of some key studies, both recent and old (1971), reveals that the participants' symptoms were the same as those reported by people exposed to RF fields emitted by devices other than smart meters. Interestingly, the vast majority of Victorian cases did not state that they had been sufferers of EHS prior to exposure to the wireless meters, which points to the possibility that smart meters may have unique characteristics that lower people's threshold for symptom development." (Lamech F: "Self-reporting of symptom development from exposure to radiofrequency fields of wireless smart meters in Victoria, Australia: a case series", 2014)

**Comparison of Pulsed Smart Meter Radiation levels:**

	<i>mW/m<sup>2</sup></i>	<i>µW/m<sup>2</sup></i>
Natural level	0	0
International Biological Guidelines (Bioinitiative 2012)	0.006	6
PHE Smart Meter maximum radiation (at 0.5m = 20 inches) (Peyman A et al.: 2017)	15	15,200
ICNIRP 1998 heating guidelines (one degree rise over 6 minutes)	9,200	9,200,000

*(milliWatts or microWatts per metre squared)*

**Conclusion:**

**“Wireless smart meters should be banned immediately”**

PHE's own measurements show that smart meters emit wireless radiation at levels far above natural levels and the International Biological Safety Guidelines. Therefore PHE's reassurance about the imagined safety of smart meters is invalid and dangerous for the health of the general population. This is confirmed by the only study on health effects of smart meters, which showed the specific symptoms caused by wireless radiation of insomnia, headaches, tinnitus, fatigue, cognitive disturbances, dysesthesias (abnormal sensation), and dizziness.

*Wireless smart meters should be banned immediately.*

# WIFI SHOULD BE BANNED FROM SCHOOLS

*In May and June 2018 two very important, game-changing articles were published explaining the convincing and consistent evidence that Wifi, iPads and mobile phones should be banned from schools on health grounds. These were probably the first detailed science-based accounts in the UK press on this vital topic. The Mirror and Daily Mail should be congratulated for tackling such an important issue for the future health of everyone in our nation, when so many media outlets appear to prefer to share the profits of the wireless industry rather than present the evidence-based science which shows conclusively the damaging nature of this radiation.*

**WiFi affecting children and teachers in schools**

*From an excellent review of Wifi in schools:*

“A leading cancer expert has called for a ban on school wifi networks over fears they could put children's health at risk. Dr Anthony Miller, an advisor to the WHO, says pupils could suffer long-term effects from exposure to the radio waves. He warned: “Radiation from mobile phones and other wireless devices can cause changes in DNA and induce cancer in experimental animals. Children's skulls are thinner and absorb much more of this radiation. We ignore this at our future peril.” He believes WHO should increase the risk rating: “We know that when humans are exposed to cancer-causing agents, it's usually quite a delay before you see the full effect. We're concerned

when those children become adults their risk of cancer will be much greater. We could be storing up higher cancer rates in the future. Since RF radiation was graded 2B there have been more studies showing this increased risk. In my view it should be on the same level as tobacco and asbestos [class 1 certain human carcinogen]. It should not be allowed in school.”

Mum Debra Fry told how her daughter Jenny killed herself after developing the wifi “allergy”. The 15-year-old hanged herself from a tree following two years of crippling tiredness, headaches and even bladder problems. Debra, 57, said: “I believe she just couldn’t take any more. She had overwhelming fatigue, headaches and ear pressure, difficulty finding words, itchy skin, dizziness and stiff joints. She was getting into trouble at school because she couldn’t concentrate and needed to urinate more than usual, so was always leaving class.”



Surveys have shown up to 5% of people believe they are affected by sensitivity to radio waves. Even insurance firms play safe, with some refusing outright to cover schools against claims for exposure. Schools in France, Belgium and parts of America already ban or limit wifi use. Mum-of-three Alisa Keane, of Downpatrick, Co Down, has taken her three sons out of school because the wifi was making them ill. She is now home schooling them after seeing how the “fog” lifted away from the classroom.

And in Doncaster, dad Paul Lewis removed daughter Jessica from her junior school after she developed headaches when wifi was introduced in the classroom. He said she no longer suffers symptoms: “The frustrating thing is there is no need for school wifi. They should be

using cables until it can be proved there is no risk from EMFs.”

Sarah Dacre, a trustee of charity Electrosensitivity UK, says they help “hundreds” of people with symptoms including tinnitus, skin rashes, muscle pains and memory loss. She said: “New ES cases often tell us they’re unable to use smartphones or wifi routers, and that installation of smart meters has made their lives impossible.”

Diana Hanson, of the Safe School Information Technology Alliance, says parents convinced wifi is making their children sick are often “extremely distressed”. She said: “People say the risk is minimal by comparing it to things on the Group 2B list such as coffee and exhaust fumes. But we don’t give our children 10 coffees a day or sit them in a room full of running cars.”

Classics teacher Michael Bevington works in a wifi-free classroom after developing electromagnetic sensitivity. He said: “If people can be allergic to foods and chemicals, it makes sense we can be sensitive to radio waves.”

*(Grace Macaskill: “School wifi networks ‘could put children’s health at risk’ as grieving mum tells of daughter’s wifi ‘allergy’” Mirror, May 26 2018; Phoebe Cooke: “WIFI WARNING: Cancer expert claims school wifi networks could put pupils at risk because they ‘absorb radiation’” The Sun, May 26 2018; Grace Macaskill: “Is WiFi a danger to our kids? The Times of India, May 27 2018)*

## Wifi, iPads and mobile phones “should not be allowed in schools”

*From another excellent article:*

Yet there is another issue which is perhaps even more important: one of the world’s top cancer experts has said the wifi beamed through Britain’s classrooms — radio waves that send signals between base units and devices such as iPads and mobile phones — could be as dangerous as ‘tobacco and asbestos’. Prof Anthony Miller of Toronto University couldn’t be blunter, saying: “[Wifi] should not be allowed in schools.” Professor Miller – who was Director of Canada’s National Cancer Institute’s Epidemiology Unit, and has held top posts in the WHO and the German Cancer Research Centre – is not alone in his fears. He is the latest in a long line of top scientists to warn that the invisible waves of electromagnetic radiation that now constantly wash over us all - dubbed ‘electrosmog’ even by some academics - may cause a future cancer epidemic, and that it’s children who are most at risk.

Some concerned nations have already begun banning or restricting wifi, as well as mobile phones – another source of electrosmog – in schools. But not Britain. Eighteen years after a landmark official inquiry, headed by a former Government Chief Scientist, recommended a raft of measures to reduce this kind of radiation, virtually nothing has been done.

In the meantime, we have effectively been conducting a massive medical experiment on ourselves, and our children – who some campaigners are now referring to as ‘Generation Zapped’. For the fact is that human beings have never been exposed to anything like this before. The ubiquitous electrosmog from mobile phones, wifi, baby monitors, smart energy meters and a host of other internet-connected products is a billion times stronger than the natural electromagnetic fields in which living cells developed over the past 3,800 million years. The worrying thing is that we don’t know how this experiment will end. That is partly because it will take years to play out: massive exposure only began recently and cancers, for example, can take decades to develop. But partly it is because scandalously little research has been done into the possible effects of electrosmog.

Most of the little we are learning comes from studies on mobile phones, which deliver relatively intense doses of the radiation to the head. And it’s not only cancer that is causing concern. Campaigners, and some senior academics, point to evidence that the thickening electrosmog may be linked with heart failure, male infertility, autism, severe cognitive impairment, damage to chromosomes and DNA, and many other conditions.

It is also increasingly accepted that about three in every hundred people are especially sensitive to the radiation, suffering symptoms like headaches, ringing ears, chest pains and sleeplessness.

As Professor Miller recently said, it is high time to start taking sensible precautionary measures to protect our children. The alternative is to do nothing and hope for the best. That’s what we did with tobacco and asbestos, and we know how that turned out. In the Professor’s words: ‘We ignore this at our future peril.’

*(Geoffrey Lean: “As more countries ban iPads and mobile phones from the classroom, could wifi be giving our children cancer?” Daily Mail, June 22 2018)*



### **Wifi: “knocked out for 20 minutes” “industry well aware of health issue”**

A trial of a new WiFi installation effectively knocked out Bob Pont for 20 minutes. He said: “I was informed that the industry was well aware of this health issue and that I was amongst 5-8% of the population who are vulnerable to the effects of radiation. When are we going to be told the whole truth about the potential effects?”

*(Fiona Phillips, Daily Mirror, May 12 2018)*

### **PHE: “inaccurate” and “unsafe” advice on Wifi**

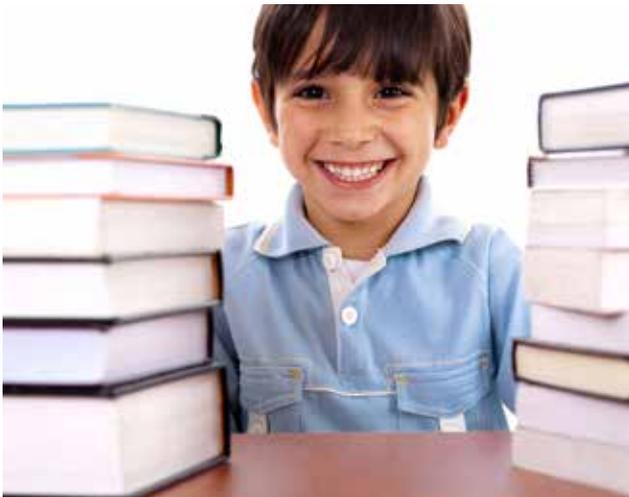
PHE and the Department of Health are still referring to the notorious non-peer reviewed AGNIR Report of 2012 which a detailed peer-reviewed study of 2016 showed convincingly was consistently “inaccurate” and “unsafe advice”. To declare that Wifi is “safe” (e.g. J Moxon, Ministerial and Public Communications Division, Department for Education, June 11 2018) is a travesty of science and truth. Excellent letters by SSITA on March 18 2018 to Indra Morris and June 8 to Damian Hinds MP, Secretary of State for Education, both highlighted the fact that the AGNIR 2012 Report is now regarded as scientifically worthless and highly dangerous to safeguarding children in schools and homes.

### **Report on WiFi causing cancer: changes on whose orders?**

Two follow-up articles to the Daily Mail of June 22 2018 in i-News, on June 24 online and nine days later on July 2 in a print version, had some differences, presumably after pressure from the wireless industry or government. The later one removed from Dr Miller’s argument the reference to multiple studies linking prolonged exposure to mobile phones to more than double the risk of

brain cancers. The later version had four paragraphs inserted: (1) reporting that the NHS claimed cancer from RF was unlikely, (2) referring to the Department of Health guidelines for under 16s to keep phone calls to a minimum but “there is no immediate need for concern”, (3) the AGNIR 2012 Report [notorious since it was shown in 2016 to be inaccurate and unsafe] concluding that more information was required and (4) referring to IARC’s 2001 risk of childhood leukaemia from ELF and a 2006 “WHO” study claiming certain people near TV masts did not become ill.

(Rhiannon Williams: “Fact Check: Can Wi-Fi give you cancer?” i-News (online), June 24 2018; Rhiannon Williams: “More research needed to prove Wi-Fi cancer risk” i-News (print), July 2 2018)



### **Mum removes children ill from school Wifi:**

Alisa Keane, 45, a trained teacher in Downpatrick, Co Down, Northern Ireland, removed her three sons from their school. They suffered headaches, nausea and problems with flagging and erratic concentration when in class, but after spending an hour or two at home the symptoms vanished. “James said he just couldn’t think in school and could only think straight when he was at home. This was from a very bright boy who loved to learn, he loved to participate but he was really struggling. But once he was home, the fog lifted and he was able to get down to his work happily. But he often felt nauseous and had a runny nose from an inflammatory problem which took longer to ease off and by the time it did, he’d be back in class and the problem would start again. Their dad Mark and I noticed a pattern and the only difference between school and home was that we had no WiFi at home.” Their little primary school had two industrial sized routers for 23 iPads. “WiFi in a classroom is constant, even when the devices are not in use. The signals are also much stronger

than from your average home WiFi hub because of the amount of bandwidth required to for a large number of users.”

“On 26 May 2017 Mark and I asked for the WiFi in the school to be turned off and that we receive the school’s risk assessment for WiFi devices and the Certificate of Indemnity from the school’s insurance provider and underwriters confirming cover for any damages or adverse health effects from WiFi.” Mark and I offered to pay to have the Ethernet installed in the school but it was turned down.” A Freedom of Information request revealed no WiFi risk assessment on file.

Alisa explained: “We took the boys out of school as a precaution. Their health and welfare is the responsibility of their parents. We won’t take any risks with that especially when the risk of WiFi is unnecessary. Within one week we noticed a vast difference in their health. Their headaches, nausea, the runny nose and what appeared as allergy symptoms cleared up and they were all able to concentrate and focus. What they learned stayed in. They were happy and healthy.”

Dr Sarah Starkey, a neuroscientist, was to join the National Education Union to call for WiFi precautions in schools. She said: “The UK has taken no action to protect the public following the classification by the WHO IARC of all RF signals as a possible human carcinogen. Indeed, PHE is withholding appropriate specialist advice by having no mention of the IARC classification of RF signals on its current website. The UK has not yet listened to the concerns of over 200 scientists calling for action to better protect the public from RF radiation.” (Jilly Beattie: “Wi-Fi Health Fears Prompt Parents to Remove Children from Primary School” Belfast Live, May 23 2018)

### **Wifi school: “Ostrich with head in the sand”**

Paulette Rende, a Mississauga mother, is protesting the Dufferin-Peel Catholic District School Board so her son, who has EHS, can go to school. She says her son, Alex, 17, a student at St. Paul’s Secondary School has a “broad spectrum of symptoms”, including: headaches, congestion, heart palpitations, anxiety and nausea. “To the detriment of students and teachers, the provincial government has been that ostrich with its head in the sand, ignoring the glaring gaps in health and safety guidelines.”

(Marta Marychuk: ““Ostrich with its head in the sand”: Mississauga mom demands Catholic school board accommodate son’s Wi-Fi injury” Brampton Guardian, June 13 2018)

# ENVIRONMENTAL POLLUTION

## **Local Authorities: responsible for improving Public Health and reducing Environmental Pollution**

Since 2013 local authorities have been responsible for improving public health and reducing environmental pollution. They need international biological guidelines for man-made electromagnetic pollution, e.g. Bioinitiative 2012 and EUROPAEM EMF Guidelines 2016.

## **Local Authorities: inconsistent responsibilities**

Under NPPF 2012 local authorities have a core responsibility to improve public health. However, section 46 instructs them to disregard established public health risks from phone masts if the masts are within ICNIRP 6 short-term heating guidelines. This is inconsistent and nonsensical. Firstly, the ICNIRP short-term heating guidelines cover only six minutes' exposure. Most people living and sleeping near phone masts do so for more than six minutes. Secondly the danger of phone masts is not heating – this is based on a mistaken hypothesis of Schwan in 1953 – but long-term biological effects like cancers, neurological and cardiovascular harm, and infertility effects. The government needs to switch to the appropriate biological guidelines.

## **“Politicians generally ignore” unseen pollution**

A Guardian editorial underlined the reasons for political inaction on air pollution: “A problem that cannot be seen is one that politicians will generally choose to ignore.” Anthropogenic RF radiation (RFR) needs to be recognised as the pollution that it is, and all those who care about the environment and public health need to realise that the wireless revolution is causing massive biophysical changes to our planet, changes to which living beings are not biologically adapted.

Prof. Olle Johansson of Sweden's Karolinska Institute notes that man-made EM levels are currently permitted to exceed natural background levels by up to a quintillion ( $10^{18}$ ) times. As is the case with air pollution, fetuses, babies and children appear to be particularly vulnerable to man-made EMFs. IARC's 2011 Monograph on RFR and health states: “In children using mobile phones, the average deposition of RF energy may be two times higher in the brain

and up to ten times higher in the bone marrow of the skull than in adult users.” The American Academy of Pediatrics states: “Children are not little adults and are disproportionately impacted by all environmental exposures, including cell phone radiation.”

Even ICNIRP, whose contested exposure guidelines the UK follows, recognises that some parts of the population such as children are potentially more vulnerable than others: “Different groups in a population may have differences in their ability to tolerate a particular NIR [Non-ionizing Radiation] exposure. For example, children, the elderly, and some chronically ill people might have a lower tolerance for one or more forms of NIR exposure than the rest of the population”.

The greater vulnerability of children is implicitly recognised by the UK Department of Health, which recommends that children should only use mobile phones for essential purposes and that all calls should be kept short. Fostering restraint in the use of mobile devices should be accompanied by clear and widely disseminated public health advice. More stringent, biologically-based exposure guidelines are also necessary, along with restrictions on further wireless roll-out—especially that of smart meters and 5G.

In the meantime, as a society, we need to promote the use of existing safe, wired alternatives: ethernet cables to connect to the internet, corded landline phones, fibre-optics.

(Annelie Fitzgerald: “From Dieselgate to Phonegate: We need to wake up to another pollution crisis” TruePublica, July 20 2018)

## **Smartphones “heating up the planet”**

A study recently published in the Journal of Cleaner Production, suggests, after a meticulous and fairly exhaustive inventory of the contribution of ICT, including devices like PCs, laptops, monitors, smartphones and tablets, and infrastructure like data centres and communication networks, that the relative contribution of ICT to the total global footprint is expected to grow from about 1% in 2007 to 3.5% by 2020 and reaching 14% by 2040. That's more than half the relative contribution of the entire transportation sector worldwide.

(Lotfi Belkhir: “How smartphones are heating up the planet” The Conversation, March 25 2018)

# ENVIRONMENTAL COSTS, HEALTH TAXES, LIABILITY AND INSURANCE

## **Health taxes: wireless like cigarettes, alcohol and sugar?**

When will governments tax talk mobile calls much more than texts, Wifi routers much more than wires and cables, “free” Wifi in shops, hotels, transport, universities and schools, or 5G downloads and uploads instead of wired internet? Society needs to change its relationship with harmful wireless, just as it has with harmful tobacco, alcohol and sugar.

“Non-communicable diseases (NCDs) are the leading cause of premature death in most of the world, and lower income households in most societies bear a disproportionate share of the associated preventable deaths. ... The Lancet Taskforce on NCDs and economics highlights the role of fiscal policies in encouraging healthy diets and lifestyles to reduce the largest contributors to preventable NCDs—namely, smoking, harmful alcohol consumption, and obesity.”

(Lawrence Summers: “Taxes for health: evidence clears the air” The Lancet, 2018)

## **Trials for ecocide and crimes against humanity: glysohate classified 2A**

The International Agency for Research on Cancer (IARC) reclassified glysohate as a Class 2A probable carcinogen in 2015. Monsanto was put on trial for “crimes against nature and humanity” on October 16 2016 (World Food Day) at a tribunal

in The Hague, Netherlands. As reported by Corporate Europe Observatory: “The tribunal concluded that

(1) Monsanto has violated human rights to food, health, a healthy environment and the freedom indispensable for independent scientific research; (2) ‘Ecocide’ should be recognized as a crime in international law; (3) Human rights and environmental laws are undermined by corporate-friendly trade and investment regulation”. (Dr J Mercola: “Harvest of Greed”, June 2018)

## **2A glysohate needs precautionary principle, not corporate profits**

In 2015 WHO’s IARC classified glysohate as 2A human carcinogen.

“Dr Douma concluded that the EU institutions are obliged to either apply the precautionary principle where the risks are uncertain or to provide adequate motivation if it is not applied.”

The United Nations Conference on the Environment and Development (UNCED), held in Rio de Janeiro in 1992, had in its final declaration as Principle 15: “In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities.”

In November 2017 the European Union voted to relicense glysohate for five years, despite 1.3 million

signatures and the overwhelming majority of Europeans wanting to ban glysohate. The EU policy is to err on the side of safety, not corporate profits.

(European Commission: “Communication from the Commission on the precautionary principle”; EU: Directorate General for Internal Policies: Policy Department A: Economic and Scientific Policy Workshop: “EU’s Pesticide Risk Assessment System: The Case of Glyphosate” 2016.)



## **\$4.69 billion award for known cancer risk**

A jury has awarded \$4.69 billion to 22 women and their families who alleged that decades of daily use of Johnson & Johnson’s asbestos-laden talcum powder products caused their ovarian cancer. The jury award includes \$550 million in compensatory damages and \$4.14 billion in punitive damages against the company. “For over 40 years, Johnson & Johnson has covered up the evidence of asbestos in their products,” said Mr. Lanier. “If J&J insists on continuing to sell talc, they should mark it with a serious warning.” Six of the plaintiffs have died and were represented at trial by husbands

and family members. ("St. Louis jury returns \$4.69 billion verdict in first trial linking baby powder, asbestos and ovarian cancer" The Lanier Law Firm, July 12 2018)

### **Lawsuits for fraud, negligence, conspiracy, and failing to warn consumers about the cancer risks**

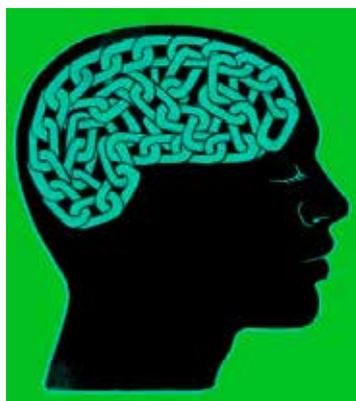
Like the tobacco companies a generation ago, Johnson & Johnson and its cosmetics lobby have known about the link between its talcum powder and cancer for 40 years, distorted research about the talcum-cancer connection, and lied to the public about the dangers. The big lie was exposed when, for the second time in three months, jurors blasted Johnson & Johnson with an 8-figure verdict in a trial charging that the company knew that its talc-based Powders cause ovarian cancer. For decades, according to the plaintiffs, J&J and its lobby the Talc Interested Party Task Force (TIPTF) distorted scientific papers to prevent talc from being classified as a carcinogen. As a result, J&J is facing now 1,200 lawsuits in Missouri and New Jersey, charging it with fraud, negligence, conspiracy, and failing to warn consumers about the cancer risks. (Larry Bodine:

"Behind the \$55 Million Verdict: Johnson & Johnson Knew About Talcum Powder Cancer Risks Since the 1970s" Huffington Post, May 4 2016, December 6 2017)

### **Shareholders, but not users, told of mobile phone cancer risks**

"Top mobile firms are warning - shareholders about the potential health risks of phones but keeping the information from customers. Companies including Blackberry, EE, Nokia and Vodafone have told

investors they could face legal action from device users if research eventually finds links between their products and cancer. Yet they fail to warn users of any potential risk in their ads and packaging." British Telecom, owner of EE, in its 2017 annual report states: "We can't provide absolute - assurance that research in the future won't establish links between radio frequency emissions and health risks." Nokia states: "There have been some research results that indicated the possibility that electromagnetic waves emitted from mobile devices and base stations have adverse health effects, such as increasing the risk of cancer." (Grace Macaskill: "Top mobile phone firms warning shareholders over devices' possible cancer risks - but fail to tell customers" Mirror, June 3 2018)



### **"Wireless industry CEOs lied to the public"**

On 28 March 2018, the scientific peer review of a landmark United States government study concluded that there is "clear evidence" that radiation from mobile phones causes cancer. Not one major news organisation in the US or Europe reported this scientific news. But then, news coverage of mobile phone safety has long reflected the outlook of the wireless industry. For a quarter

of a century now, the industry has been orchestrating a global PR campaign aimed at misleading not only journalists, but also consumers and policymakers about the actual science concerning mobile phone radiation. Indeed, big wireless has borrowed the very same strategy and tactics big tobacco and big oil pioneered to deceive the public about the risks of smoking and climate change, respectively. And like their tobacco and oil counterparts, wireless industry CEOs lied to the public even after their own scientists privately warned that their products could be dangerous, especially to children. (Mark Hertsgaard and Mark Dowie: "The inconvenient truth about cancer and mobile phones" Guardian, July 14 2018)

### **Corporate manslaughter and manslaughter caused by gross negligence**

Police investigating the Grenfell Tower fire say they have "reasonable grounds" to suspect that corporate manslaughter offences may have been committed. It means senior executives from the council and the tenant management organisation that ran the block are likely to be interviewed under caution. Organisations guilty of the offence of corporate manslaughter are liable to an "unlimited fine". Labour MP for Tottenham, David Lammy said the punishment for corporate manslaughter, a fine, would not "represent justice for the Grenfell victims and their families. Gross negligence manslaughter carries a punishment of prison time, and I hope that the police and the CPS are considering charges of

manslaughter caused by gross negligence.”

(“Grenfell Tower: Corporate manslaughter considered by police” BBC News, July 27 2017; Patrick Grafton-Green: “Grenfell Tower fire: Police say Kensington Council and TMO ‘may have committed corporate manslaughter’” Standard, July 27 2017)

### **Canada: recovering healthcare costs from tobacco companies**

British Columbia does not have to hand over the detailed health-care records of millions of people to tobacco company Philip Morris International, says Canada's top court. The unanimous Supreme Court decision clears a hurdle in the province's quest to sue cigarette companies for billions of dollars in health-care costs. The ruling is the latest chapter in B.C.'s legal fight to force cigarette makers like Philip Morris International to compensate the

province for the cost of treating tobacco-related illnesses, a battle that started in the late 1990s. (Catherine Turney: “Supreme Court rules B.C. doesn't have to disclose health records to cigarette maker” CBC News, July 13 2018)



### **No insurance against health harm from smart meters, WiFi, home wireless etc.**

In February 2015, Lloyds of London made its position clear with regards to exposure to non-ionizing radiation. This response was received on Feb. 18 2015, from CFC Underwriting LTD, London, UK agent for Lloyd's, published in an article

by RFSafe. “The Electromagnetic Fields Exclusion (Exclusion 32) is a General Insurance Exclusion and is applied across the market as standard. The purpose of the exclusion is to exclude cover for illnesses caused by continuous long-term non-ionising radiation exposure i.e. through mobile phone usage.” This also includes the use of electromagnetic radiation emitted from Smart Meters (AMR, AMI, PLC), from Home Area Network devices and appliances (including thermostats), from Wi-Fi transmitters, from wireless devices in schools, offices, and homes, and from wireless sensors and wireless-connected fire alarms. (Graham Vanbergen: “Mobile Phones – Insurance underwriters refuse industry cover, legal cases underway” True Publica, July 21 2018)

## **RESEARCH ON EHS &c.**

### **Real physiological EHS proved again: “A truly objective pathological disorder, as for cancer or Alzheimer's disease”**

A study by medical scientists based in France and Italy has shown objective markers among some 80% of people with EHS or EMFIS-bearing patients. There were 32 subjects (mean age 50.6 years, ranging 32-75 years; 22 females and 10 males), with nitrotyrosine (NTT) measured in only 14 of the 32; a concomitant series of 46 additional EHS self-reporting patients (mean age 49 years; female/male sex ratio: 71% female) for NTT giving a total number of 60 ElectroMagnetic Fields Intolerance Syndrome (EMFIS)-bearing patients.

The subjects were screened for (1) being free of chemical sensitivity and (2) having two biological inclusion criteria: (a) a mean decreased tissue pulsometric index in at least three middle cerebral artery-dependent tissue sections in the

temporal lobes, as demonstrated using ultrasonic cerebral tomosphygmography (UCTS); and (b) an increase in at least one of three inflammation-associated peripheral blood biomarkers (i) increased histamine, a mediator of inflammation; (ii) increased protein S100B, a marker of oxidative stress-associated blood brain barrier opening; and (iii) increased chaperone proteins heat shock protein  $\beta$ 1 (HSP27) or heat shock 70 kDa protein 1B (HSP70), markers of heat-shock cell stress-associated inflammation and/or immune response.

“The present study reports for the first time, to the best of our knowledge, that ~80% of so-called EHS self-reporting patients present with oxidative stress, and thus may be considered to be bearing a truly objective pathological disorder, as is the case for cancer, Alzheimer's disease, or other diseases or pathological conditions.”

“A major finding of the present study was that by using a limited number of oxidative stress

biomarkers, 70-80% of EHS self-reporting patients were able to be characterized by the existence of oxidative stress. Consequently, as is the case for numerous chronic pathological disorders, including cancer, diabetes, cardiovascular diseases, neurodegenerative diseases, and similar pathological syndromes including CFS and MCS, the present data strongly suggested that EMFIS may be characterized by some degree of chronic inflammation in addition to oxidative stress. This means that EMFIS (as for MCS and CFS) is a novel pathological disorder which merits recognition by the international biomedical community and classification as such by the WHO.”

CAUSATION: There remains no clear explanation as to the causal origin of oxidative stress in EHS self-reporting patients.

A. The hypothesis that a nocebo effect may have been initially causal in the onset of oxidative stress is unlikely, since this is unable to explain the molecular abnormalities.

B. The hypothesis that certain environmental stressors may be causally implicated in the onset of this pathology requires further investigation.

(i) Since it was previously demonstrated that MCS is frequently associated with EHS in EHS self-reporting patients, man-made chemicals may be these environmental stressors.

(ii) However, in the present study, all patients with MCS that may have been associated with EHS were excluded, thus EMF exposure, as reported by the patients, may be an environmental stressor. Numerous in vitro and animal experimental studies have reported that ELF radiation exposure, and more importantly RF EMF exposure, are associated with oxidative stress occurrence, with the resulting biological effects including alterations in differentiation, inflammatory responses and DNA damage; all these detrimental effects occur more frequently in the brain.

(Irigaray P, Caccamo D, Belpomme D: “Oxidative stress in electrohypersensitivity self-reporting patients: Results of a prospective in vivo investigation with comprehensive molecular analysis” Int J Mol Med. 2018. [Abstract](#). [Article](#).)

**“Sufficient data for EHS to be acknowledged as a well-defined, objectively characterized pathological disorder”**

There is presently sufficient clinical, biological and radiological data emanating from

different independent international scientific research groups for EHS, whatever its causal origin, to be acknowledged as a well-defined, objectively characterized pathological disorder. As a result, patients who self-report that they suffer from EHS should be diagnosed and treated utilizing presently available objective biological tests, among which are the concentration of peripheral blood biomarkers and the use of imaging techniques such as PET, fMRI and TDU and, when available, UCTS. EHS should be acknowledge by the WHO as a real and distinct neurological and pathological disorder (McCarty et al., 2011; Hedendahl et al., 2015) and thus be included in the International Classification of Diseases. ... the effects observed in humans cannot be due to only a nocebo or psychosomatic effect. ...

It is urgent that national and international bodies, particularly the WHO, take this significant public health hazard seriously and make appropriate recommendations for protective measures to reduce exposures. (Belpomme D et al.: “Thermal and non-thermal health effects of low intensity non-ionizing radiation: An international perspective” Environ Pollut., 2018)



**Wi-Fi is an important threat to human health**

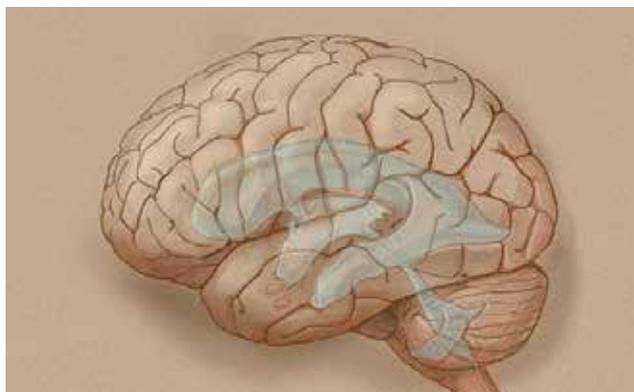
Repeated Wi-Fi studies show that Wi-Fi causes oxidative stress, sperm/testicular damage, neuropsychiatric effects including EEG changes, apoptosis, cellular DNA damage, endocrine changes, and calcium overload. Each of these effects are also caused by exposures to other microwave frequency EMFs, with each such effect being documented in from 10 to 16 reviews.

Therefore, each of these seven EMF effects are established effects of Wi-Fi and of other microwave frequency EMFs. Each of these seven is also produced by downstream effects of

the main action of such EMFs, voltage-gated calcium channel (VGCC) activation. ...

Five properties of non-thermal EMF effects are discussed. These are that pulsed EMFs are, in most cases, more active than are non-pulsed EMFs; artificial EMFs are polarized and such polarized EMFs are much more active than non-polarized EMFs; dose-response curves are non-linear and non-monotone; EMF effects are often cumulative; and EMFs may impact young people more than adults. ...

In conclusion, there are seven repeatedly found Wi-Fi effects which have also been shown to be caused by other similar EMF exposures. Each of the seven should be considered, therefore, as established effects of Wi-Fi. (Pall ML: "Wi-Fi is an important threat to human health" Environ Res., 2018)



### **“Need to explain the mechanisms behind increased brain cancer”**

A new study has raised concerns over the role of mobile phones in brain cancer after new evidence revealed rates of a malignant type of tumour have doubled in the last two decades. Charities and scientists have called on the Government to heed longstanding warnings about the dangers of radiation after a fresh analysis revealed a more “alarming” trend in cancers than previously thought. The research team investigated the rise of an aggressive and often fatal type of brain tumour known as Glioblastoma Multiforme (GBM). They analysed 79,241 malignant brain tumours over 21 years, finding that cases of GBM in England have increased from around 1,250 a year in 1995 to just under 3,000.

The scientists at the Physicians’ Health Initiative for Radiation and Environment (PHIRE) say the increase of GBM has till now been

masked by the overall fall in incidence of other types of brain tumour. The group said the increasing rate of tumours in the frontal temporal lobe “raises the suspicion that mobile and cordless phone use may be promoting gliomas”.

Denis Henshaw, professor emeritus at Bristol University, the scientific director of Children with Cancer UK and the second author of the paper, said: “Our findings illustrate the need to look more carefully at - and to try and explain the mechanisms behind cancer trends. You should always keep your eye out for the unexpected.”

(Henry Bodkin: “Mobile phone cancer warning as malignant brain tumours double” Daily Telegraph, May 2 2018. Philips A et al.: “Brain Tumours: Rise in Glioblastoma Multiforme Incidence in England 1995-2015 Suggests an Adverse Environmental or Lifestyle Factor” J Environ Public Health, 2018).

### **Mobiles have cognitive effects**

Swiss researchers have confirmed the potentially damaging impact of the frequent use of mobile phones among 700 adolescents over 12 months. A study found that the so called figural memory performance – the ability to remember abstract forms – can deteriorate if the brain is often subjected to high frequency EMFs, according to the Tropical and Public Health Institute.

The results are in line with findings from a 2015 study among more than 400 teenagers. The latest study found evidence that radiation has had a significant impact on the right half of the brain - where the figural memory is located -, among adolescents who hold the phone to their right ear when making a call. (“Mobile phone radiation can weaken brain performance” SwissInfo, July 19 2018)



# LED LIGHT DANGERS

## **Oxfordshire LEDs: “like an exclusion zone”**

A BBC1 South News report on proposed LEDs for Oxfordshire featured Glen Johnson from Didcot who suffers chronic migraines and loss of coordination from LEDs and said that there were “like an exclusion zone”. John Lincoln of Light Aware commented that certain LEDs caused health problems for some people.

(BBC1 South News, July 17 2018)

## **Oxfordshire recognises some people are more sensitive to LEDs**

Oxfordshire County Council is pressing ahead with a £3.8m scheme to install 3,200 new LED street lights, despite warnings the technology could damage eyes and impact on sleep. Public Health England issued the warning earlier this week in its chief medical officer's annual report. The council said it was aware of the report and acknowledged the 'need to balance' potential energy savings and potential health impacts. A Freedom of Information request revealed that the council had received 25 complaints about the new energy efficient lighting in 2017 - when it installed more than 3,500 new columns and LED lanterns. Council spokesman Paul Smith said the warnings related to 5000k lights with high levels of blue light and that the council was using different lights for residential areas and main roads. He said: "Since the county council started implementing LED lighting it has acknowledged the need to balance potential savings in energy use and potential health impacts and as such has specified a warmer light for residential areas - 3000k - and slightly bluer light - 4000k - for the wider strategic road network." But he said the council recognised some were more sensitive to such lighting than others and that modifications have been made and will continue to be made on a case by case basis. Public Health England's John O'Hagan, said: "The light spectrum may be enriched in the blue, which may be beneficial for keeping drivers alert, but many people will find the light uncomfortable. High levels of blue light are known to cause damage to the retina."

("New LED street lights could damage eyesight but plans for thousands more to go ahead" Oxford Mail, April 4 2018)



## **Judicial review proposed for Trafford LEDs**

In January 2014 Trafford Council delayed its controversial £9.3m plans to replace all its 27,000 street lights for a second time after a resident threatened to take them to the High Court for a judicial review. In a letter to Trafford, he pointed to recently-published academic research from the USA which links bright white light with disrupting the brain's circadian rhythms - which dictate sleep patterns. Disrupted circadian rhythms have also been linked with cancer. (Tom Brooks-Pollock: "Trafford council delays street light change for SECOND time after court threat" Manchester Evening News, January 19 2014)

## **Dim existing streetlights, don't fit LEDs**

Simon Nicholas believes local authorities should consider dimming existing streetlighting, which still has years of life left in it, rather than spending millions on brand new LEDs. "Manchester and Cardiff have both invested heavily in high-intensity discharge lighting over the last 15 years," he says. "Cardiff are spending £1.7 million to dim 22,365 lights and saving £312,000 a year. In Manchester they could save £570,000 [if they did the same]. Instead they're planning to save £750,000 a year on an LED rollout that's going to cost £33 million, and all the kit they've installed in the last 10 years goes in the skip. The lighting level will be less, the glare will be greater and generations of taxpayers will be paying for the debt."

(Robert Bain: "The man who's making Britain's councils look twice at their LED streetlighting specs" Lux Review, January 26 2015)

## **LEDs, blue light, melatonin, prostate and breast cancer**

Britain's new generation of street lights risk dramatically increasing rates of breast and prostate cancer, according to a new study. Scientists have warned officials to consider limiting the roll-out of LED (light-emitting diode) lights after an investigation indicated a "strong link" between the technology and the disease. Analysis of more than 4,000 people living in 11 separate regions of Spain established a link between heavy exposure to the LED lighting and a doubling of the risk of prostate cancer, as well as a 1.5-times higher chance of breast cancer. They believe the "blue light" emitted by the LEDs may be disrupting the body's circadian rhythm, which in turn affects hormone levels. Both breast and prostate cancers are hormone-related. The research team at the University of Exeter and the Barcelona Institute for Global Health said their findings may also implicate the night-time use of mobile phones and tablets, which also emit blue light, in cancer development. Previous research has indicated that exposure to blue-spectrum light decreases the production and secretion of the melatonin hormone. Melatonin plays a key role in regulating the day-night cycles and has several other key functions - for example it is a powerful anti-oxidant and has also an anti-inflammatory function. Manolis Kogevinas said: "The WHO's IARC has classified night shift work as probably carcinogenic to humans." The American Medical Association has already called on US cities to use the lowest-intensity LEDs where possible, as well as shading them to reduce glare. One in eight UK men are diagnosed with prostate cancer and women facing the same risk of breast cancer.

(Henry Bodkin: "New LED streetlights may double cancer risk, new research warns" Daily Telegraph, April 26 2018; Victoria Allen: "Blue light that comes from streetlights and smartphones may increase the risk of breast and prostate cancer" Daily Mail, April 27 2018)

## **Gloucestershire and PHE: LED health risk?**

Gloucestershire County Council has converted 43,177 of its residential street lights to LED. It says there are 18,833 street lights that still require conversion and it hopes to complete this by March 2019. But while the council insists that LED street lights are safe, Public Health England seems to suggest otherwise. Councillor Vernon Smith, the council's cabinet member for highways, said: "Public Health England have made it clear that

there is no risk of eye damage from LED street lighting."

(Robert Jenkins: "Health fears over 62,000 LED street lights being installed in Gloucestershire" Gloucestershire Live, April 3 2018)

## **220 complaints against Chester's LEDs**

A Freedom of Information response reveals LED street lights have generated more than 200 complaints against Cheshire West and Chester Council. CWaC, which is spending £1.7 million per year on the LED replacement project, has revealed most complaints concern the new LED lights shining into properties, especially bedrooms. For these complaints, the council says a shield can be installed on the front or rear of the lantern to block the light – the light can also be diffused by installing a louver on the bottom of the lens. The council says its LED lanterns have a colour rating of 3,900 to 4,200 kelvin, which is 'bright white' not blue light. Heritage LED lighting is available for historical streets where consideration will be given to the installation of 2,700 kelvin LED units which produce a yellow light or warm white. Everyone must accept that while the future may be bright it won't be orange as the only manufacturer making the traditional sodium lights will cease production in 2020 and switch to LED.

(David Holmes: "New LED street lights are cheaper and greener but not everybody is happy" Chester Chronicle, March 22 2018)



## **Local Authorities responsible for LED safety: PHE has 'no statutory role'**

"Local Authorities are responsible for the installation and safety of street lighting. Public Health England provides advice when requested, but has no statutory role".

(Prof. John O'Hagan, Group Leader, Laser and Optical Radiation Dosimetry Group, June 26 2018)

**PHE warns about LEDs: “some people are very sensitive” “headaches, migraine, malaise”**

PHE has warned that new streetlights installed on British roads could harm people’s eyesight and disrupt their sleep, resulting in a feeling similar to “permanent jet lag”. John O’Hagan, head of the PHE’s Centre for Radiation, Chemical and Environmental Hazards, said “Disruption of the circadian system can have a major impact on sleep quality and daytime alertness, which in turn impacts wellbeing and safety.” Residents have complained the new lights are shining into their bedrooms. Mr O’Hagan warned against installing the new lights “purely on the basis of energy efficiency and cost”. (Harriet Agerholm: “New LED streetlights could damage eyesight and disrupt sleep, warns Public Health England” Independent, April 3 2018)

**PHE: LEDs “a health hazard”**

Flicker from LED street lights could be becoming a health hazard, PHE says in its annual medical report and the phenomenon is “of concern”. Some of the LED sources assessed by PHE and others vary in illuminance at a frequency of 100 hertz. At the extreme, the LEDs switch on and off at 100 Hz (100 times per second). Prof. John O’Hagan, of Loughborough University and group leader at PHE, states: “Some people seem to be very sensitive to this light modulation, resulting in headaches, migraine and less specific feelings of malaise. However, most people will experience phantom arrays. [This] happens when you move your eyes quickly when behind a car with its brake lights on, particularly in the dark, and there is the risk of a stroboscopic effect. This effect may manifest itself as moving objects appearing to jump, rather than move smoothly. More seriously, rotating machinery, which could include the blades on a food mixer, may appear to be stationary if the rotation rate matches the modulation rate or is a multiple of it. Some LED installations have LED chips visible, which can form a source of glare. An extreme example is daylight-running lights on cars. These are clearly visible to other road users and pedestrians. At night, if they do not dim, they can be very dazzling and more so for young children who have higher transmission of light through to the retina and older people who will suffer from scattering of the light, particularly in the lens of the eye. This means that older drivers, in particular, will be

dazzled by oncoming vehicles with the risk that they may not see hazards until too late. The problem is exacerbated by fog.”

(Ray Molony: “Street light flicker is new hazard, says watchdog” LUX, April 4 2018)

**PHE tries to quell fears: LED streetlights “not a risk”**

PHE has emphasised that LED street lighting does not pose a risk to eye health. (Selina Powell: “PHE moves to quell LED streetlight fears” Optometry Today, April 7 2108)



**“100 Hz LED lighting should be avoided”**

Prof. Arnold Wilkins, emeritus professor at the University of Essex, warned of the dangers of 100 Hz flicker in 2017. Although people can only directly perceive fluctuations at frequencies up to about 70 Hz, human vision is adversely affected by light fluctuations up to 200 Hz. Visual performance is especially degraded by flicker in the 100 Hz to 200 Hz range and in general, younger people are likely to perceive lower level and higher frequency flicker than older observers. “There’s a huge range of susceptibility in the population with those [who get] migraines at one extreme. And it probably contributes to dyslexia but we don’t know for certain. 100 hertz should be avoided. The solution is to upgrade to high frequency control gear for fluorescent or LED. It’s a simple as that.” (Ray Molony: “Street light flicker is new hazard, says watchdog” LUX, April 4 2018)

**US cities switch to safer, lower intensity LEDs**

The American Medical Association (AMA) issued a warning earlier in 2016 that LEDs’ blue light can disturb sleep rhythms and exacerbate serious medical conditions. Some cities, such as New York, have switched to lower-intensity LED bulbs, which the AMA considers to be safe. Gloucester Mass. installed 3000K rather than 4000K LEDs. (“US cities take second look at LED after health warning” LUX Review, September 28 2016)

# ICNIRP AND WHO'S FAILURE TO PROTECT PUBLIC HEALTH

*The ICNIRP and the WHO EMF Project still form a minority clique holding to Schwan's mistake of 1953 that the only adverse health effects are from heating. This denial of the established and robust science for biological effects accepted by the USSR since 1958 is causing vast harm to humans and wildlife. The voices of the majority scientists are becoming ever more urgent in their warnings, whereas the ICNIRP and the WHO seem ever more intent on allowing the wireless industry to maximise its profits. Meanwhile the quality and length of human and wild life is being reduced and shortened and it will soon be damaged beyond repair. It is high time for world leaders, ICNIRP and the WHO to abandon ICNIRP's heating guidelines and adopt biological guidelines protective of the human race and the wildlife on which it depends. The ICNIRP recommended biological guidelines in 2002 but has not yet implemented them.*

## **WHO needs to protect against established non-thermal effects, including cancer, infertility and EHS**

*Governments should adopt biological guidelines, not ICNIRP's current heating ones.*

"In spite of a large body of evidence for human health hazards from non-ionizing EMFs at intensities that do not cause measureable tissue heating, the WHO and governmental

agencies in many countries have not taken steps to warn of the health hazards resulting from exposures to EMFs at low, non-thermal intensities, nor have they set exposure standards that are adequately health protective. ... the IARC rating should be raised at least to "probable" (Group 2A) if not "known" (Group 1).



Unfortunately the International EMF Project of the WHO has consistently minimized health concerns from non-ionizing EMFs at intensities that do not cause tissue heating. In this regard WHO has failed to provide an accurate and human health-protective analysis of the dangers posed to health, especially to the health of children.

Almost all members of the core group preparing the new Environmental Health Criteria (EHC) document for the WHO are members of ICNIRP, a non-government organization (NGO) whose members are appointed by other members. ICNIRP has a long record of close associations with industry.

When queried as to why the WHO would take

recommendations from such a group, WHO staff replied that ICNIRP is an official NGO which works closely with the WHO. Why this should exclude other scientific research groups and public health professionals is unclear, particularly since most members of ICNIRP are not active researchers in this field.

We are particularly concerned that a new WHO EHC document on RF-EMFs is scheduled to be released soon, and that the members of the EHC Core Group and the individuals whose assistance has been acknowledged are known to be in denial of serious non-thermal effects of RF-EMFs in spite of overwhelming scientific evidence to the contrary (Starkey, 2016; Hardell, 2017). ...

Safety limits for RF exposure have been based (until today) on the thermal effects of EMFs. But these standards do not protect people, particularly children, from the deleterious health effects of non-thermal EMFs. It is urgent that national and international bodies, particularly the WHO, take this significant public health hazard seriously and make appropriate recommendations for protective measures to reduce exposures. This is especially urgently needed for children and adolescents.

(Belpomme D et al.: "Thermal and non-thermal health effects of low intensity non-ionizing radiation: An international perspective" *Environ Pollut.* (2018) [PMID: 30025338.](https://pubmed.ncbi.nlm.nih.gov/30025338/))

## ICNIRP 2016 Draft: 6-minute heating limits

On June 5 2016 at the Mobile Manufacturers Forum Workshop Ghent, Belgium, Eric van Rongen, chair of ICNIRP, presented "ICNIRP's draft High Frequency [100 kHz – 300 GHz] guidelines" for the review of ICNIRP's heating guidelines from 2014-18.

In his presentation he claimed that "research has only found evidence of potentially harmful effects from: electrostimulation, electroporation, microwave hearing (thermal effect), temperature elevations above thresholds" but not from cancer and cellular effects.

He also claimed: "No evidence that HF-EMF causes such diseases as cancer. No evidence that HF-EMF impairs health beyond effects that are due to established mechanisms of interaction [i.e. heating, not biological effects]"

He also claimed that the "interaction mechanism" was "temperature elevation" and that "Temperature increases [are] taken to represent health effects, and restrictions set to avoid these" and a change of "> 1 °C in body core is defined as potentially harmful".

Therefore he proposed: "ICNIRP suggests an operational threshold of 4 W kg-1 (6 min avg.)". This led ICNIRP to suggest: "up to 6 GHz: operational threshold 10 W kg-1 for head, torso, testes, eyes and 20 W kg-1 for extremities" and "above 6 GHz: 400 W m-2". He also stated: "Microwave hearing can occur from brief HF pulses (300 MHz-10 GHz). ICNIRP threshold: 4 mJ kg-1 (0.1 sec

avg.)". Averaging time would remain as 6 minutes up to ~6 GHz. ICNIRP has stated that the anticipated exposure limit changes are very small.



## Why is ICNIRP producing 2018 RF Guidelines Draft at the same time as experts call for RF to be reclassified as a 2A or 1 human carcinogen?

The NTP and Ramzzini studies mean that Americans can legally be exposed to cancer-causing levels of radiation. As noted by Ronald Melnick, Ph.D., a former senior NIH toxicologist who led the design of the NTP study and current senior science adviser to the Environmental Health Trust, governments really need to protect the public by strengthening regulations. In light of these combined findings, Ramazzini researchers are now urging the IARC to upgrade its carcinogenicity classification for cellphones from a "possible" to a "probable" human carcinogen.

("Despite Clear Evidence of Harm, Mobile Phone Industry Fights to Keep You Ignorant of the Risks" Dr Mercola, July 31 2018)

## ICNIRP RF Guidelines draft consultation: "Just a gimmick"

Chris Portier stated that when looking at the reviews of the science published by ICNIRP, as well as by SCENIHR and SSI

(Swedish Radiation Protection Agency), none of these organizations provides the public with the science evaluation criteria they use. ICNIRP states that: "For time constrains, though, no individual replies will be formulated". This way ICNIRP evades responding to the specific points in the specific comments submitted during the public consultation. Nobody who submitted comment will know what comments were considered and what not, and for what reasons. But this lack of interest in opinions of others, non-ICNIRP scientists, is well known for ICNIRP. ICNIRP discusses only with the scientists it chooses itself. It does not debate science with anybody and everybody. And what's the rush? Why suddenly a few months to provide answers is too much of delay for the ICNIRP? The answer might be simple – telecoms would like to have guidelines ready because the launch of 5G networks was not only heralded for 2019 and 2020 but also it costs a lot of money if delays continue. (Prof. Dariusz Leszczynski: "ICNIRP's public consultation of the draft of the RF guidelines is just a gimmick" BRHP, July 25 2018)

## WHO: Failure to protect public health

The World Health Organization is failing the Earth's citizens in the most blatant, destructive manner. WHO is failing to protect its global citizens from this pervasive pollutant in four key ways: 1. industry infiltration 2. intentional ignorance 3. denial of the science 4. disregard for humanity.

(Olga Sheean: "WHO: Setting the standard for a wireless world of harm. A Call for Action and Accountability" January 27 2017)

# MOBILE PHONES – TO BE BANNED IN SCHOOLS, OR NOT?

## Rwanda bans mobile phones for school pupils

Rwanda's Ministry of Education announced on June 14 2018 that no more primary and secondary schools students will be allowed to own or use a mobile telephone at school, citing distraction. (Elisee Mpirwa: "Government outlaws use of cell phones in schools" New Times, June 15 2018)

## France bans mobile phones for school pupils

In France pupils will not be allowed to use phones on schools grounds after September 2018. The new law bans phone-use by children in school playgrounds, at breaktimes and anywhere on school premises. Legislation passed in 2010 already states children should not use phones in class. (Angelique Chrisafis: "French school students to be banned from using mobile phones" Guardian, June 7 2018)



## Schools banning mobile phones

Secondary schools are introducing strict new bans on mobile phones where all pupils aged up to 16 have to lock them away for the entire day after evidence that it makes children more sociable, alert and active. From September pupils aged 11 to 16 who own phones at the schools will be required either to hand them in or put them in their

lockers when they arrive for registration and only get them back when they leave in the afternoon.

(Chris Hymas: "Secondary schools are introducing strict new bans on mobile phones" Daily Telegraph, June 25 2018)

## Ban mobiles in schools

"On schools and smartphones, I'm an enthusiastic proponent of the nanny state. After Emmanuel Macron made it a key pledge in his presidential campaign, the French government is banning mobile phones in schools altogether after September. In the UK, the decision is left to headteachers: some ban them, others take a more permissive approach. France has got it right. An LSE study (Beland L-P et al, 2014) found that banning smartphone use in schools boosted results, particularly for young people from disadvantaged backgrounds. The researchers estimated it was equivalent to providing an extra five days of school for these young people." (Sonia Sodha:

"Yes, we can teach our children about technology, but let's just ban phones in school" The Guardian, June 17 2018)

## Chief Inspector supports ban on mobiles in schools

The chief inspector of schools has backed calls for mobile phones to be banned in schools. Amanda Spielman was to announce on June 22 2018 her support for any headteachers who choose to introduce policies that forbid children from using their phones. (Camilla Turner: "Chief inspector backs calls for mobile

phones to be banned in schools" Daily Telegraph, June 21 2018; Press Association: "Ofsted chief backs calls to ban mobile phones in schools" Northern Echo, June 21 2018; Editorial: "The Guardian View on Mobile Phones: Schools Are Better without Them" Guardian, June 22 2018)



## Hancock: confiscate mobile phones from school pupils

Children should have mobile phones confiscated at the start of the school day, according to Matt Hancock, the Culture Secretary, who will warn on Wednesday of the "risks" social media can present. Mr Hancock questions why pupils need to have phones at all. (Anna Mikhailova: "Exclusive: Teachers should ban mobile phones in classrooms, says minister" Daily Telegraph, June 19 2018)

## Hancock: UK refuses to ban mobile phones for school pupils

The UK culture secretary, Matt Hancock, does not allow his own children to have mobile phones but would not follow the French government's lead in legislating on the issue. He dismissed suggestions that the UK government should intervene more directly to control the exposure of children to new technology as France has done. (Alex Hern: "UK should not legislate to control children's use of technology, says culture secretary" Guardian, June 11 2018)

# WILDLIFE & INSECT ARMAGEDDON

## EMF threat to wildlife

An analysis of 97 studies by the EU-funded review body EKLIPSE concluded that from radiation from power lines, wi-fi, phone masts and broadcast transmitters poses a 'credible' threat to wildlife. The charity Buglife warned that despite good evidence of the harms there was little research ongoing to assess the impact or apply pollution limits. The charity said 'serious impacts on the environment could not be ruled out' and called for 5G transmitters to be placed away from street lights, which attract insects, or areas where they could harm wildlife. (Sarah Knapton: "Electromagnetic radiation from power lines and phone masts poses 'credible' threat to wildlife, report finds" Daily Telegraph, May 18 2018)

## "An insect Armageddon is under way"

In June 2018 tweets from the naturalist and TV presenter Chris Packham went viral after he commented on the absence of insects during a weekend at his home in the New Forest. "Our generation is presiding over an ecological apocalypse" he later said. Native ladybird populations are crashing; three quarters of butterfly species have dropped significantly in numbers; while bees, of which there are more than 250 species in the UK, are also suffering major plunges in populations. An insect Armageddon is under way, say many entomologists, the result of a multiple whammy of environmental impacts. They are "the little things that run the world" according to Edward O Wilson, who once observed: "If all humankind were to disappear, the world would regenerate back to the rich state of equilibrium that existed 10,000 years ago. If insects were to vanish, the environment would collapse into chaos." Without insects, hundred of species of birds face starvation. Michael McCarthy said: "Britain's farmland birds have more than halved in number since 1970. The spotted flycatcher, a specialist predator of aerial insects, has declined by more than 95%, while the red-backed shrike, which feeds on big beetles, became extinct in Britain in the 1990s." A study at Aberdeen University showed that the plunge in numbers of cuckoos in some areas of England was closely linked to declines in tiger moth caterpillars on which cuckoos feed. It was clear that fluctuating weather patterns were not

the cause. These grim drops in insect numbers were occurring in nature reserves where the landscape was highly protected. Professor Dave Goulson of Sussex University said: "Insects make up about two-thirds of all life on Earth [but] there has been some kind of horrific decline. We appear to be making vast tracts of land inhospitable to most forms of life, and are currently on course for ecological armageddon. If we lose the insects, then everything is going to collapse." (Robin McKie: "Where have all our insects gone?" Guardian, June 17 2018)

*[Heating from 5G-type radiation has drastic bioeffects on insects, and is used to kill insects (Thielens A et al., Sci Rep., 2018; Halverson SL et al., J Econ Entomology, 1996). Microwaves seem to reduce male fertility in insects, as in humans (Marec F et al. Mutat Res, 1985). – Ed.]*



## Individual sensitivity: porpoises and sound waves

"When we exposed porpoises to airgun pulses at ranges of 420-690 m with noise level estimates of 135-147 dB re 1  $\mu\text{Pa}^2\text{s}$  (sound exposure level), one individual displayed rapid and directed movements away from the exposure site and two individuals used shorter and shallower dives compared to natural behaviour immediately after exposure. The remaining individuals did not show any quantifiable responses to the noise exposure."

(van Beest FM et al.: "Fine-scale movement responses of free-ranging harbour porpoises to capture, tagging and short-term noise pulses from a single airgun" *R Soc Open Sci.*, 2018).

## **Three years to realise it was not a mental problem: the cause was wireless radiation**

History was never my favorite subject. I preferred English, theatre, religion — subjects where the imagination seemed unrestricted by the weight of historical facts. Of course, I had heard the truism about not being able to understand the present without knowing the past. I appreciated the idea intellectually. But it wasn't until my wife Godeliève Richard, a Swiss dancer / choreographer and visual artist, became sick in the spring of 2010 and we came to understand, after three torturous years, that the root of her suffering was her sensitivity to RF (radio frequency) wireless radiation of the sort emitted by cell towers, cell phones, computers trying to pick up Wifi, Wifi enabled routers, cordless phones, tablets, our electric meter, etc., etc., etc., that I became an avid student of history.

We began reading books, articles, websites. We watched documentaries. We spoke with activists. It took me several months to completely accept that EHS (Electromagnetic Hypersensitivity) was what had derailed our lives and stolen time and energy from our now three-year-old son. Members of our family and friends quietly confided their belief to me that this must be a mental problem. In a way, I wished they were right. How would we live? How would she survive?

Sometimes at four in the morning after another sleepless night when we were deciding whether or not to go to the emergency room, it seemed like death was a possible final outcome. Luckily, we found a solution for our home that has allowed her to sleep well again and begin to heal, however she still can't leave the house for more than a few hours at a time. Among other adjustments we have made, a doctor recommended a company making biotuners, a small rectangular casing placed on the fuse box in order to deactivate the harmful information from electrosmog.

One of my many layers of resistance to accepting that electromagnetic pollution or electrosmog was what had destroyed her health was a simple, naive faith in the regulatory powers of the U.S. government. This radiation is literally

everywhere. If it could be so dangerous, how could it be allowed on such a massive scale?

But after I found the startling analogy between RF and asbestos and cigarettes laid out on more than one advocacy group site, things began to click.

*"Doubt is our product since it is the best means of competing with the 'body of fact' that exists in the minds of the general public. It is also the means of establishing a controversy."*

— Tobacco executive internal memo, 1969

*"There really are people who feel pain, etc., related to EMF, etc., and rather than have them becoming hysterical, etc., I would quietly leave them alone."*

— Former California Public Utilities Commission President Michael Peevey in an email to Pacific Gas & Electric's Brian Cherry seized by California authorities, 2010.

(Jonathan Mirin: "All I Really Need to Know About EMF I Learned After My Wife Got Sick: A Brief History of Electrosmog" Spirit of Change, May 26 2015)

## **EHS in New Zealand**

"In 2009, Daryl, then 19, began a sales job in Wellington, working long hours daily using his cell phone. He soon started experiencing increasing incidents of headaches and dizziness. After six months, Daryl's deteriorating health symptoms escalated into blackouts.

With no medical explanation, yet too sick to continue working, Daryl left his job. The blackouts ceased, but other health problems persist.

Some years later Daryl learnt about electro-hypersensitivity (EHS). Sufferers develop a physical intolerance to wireless from mobile phones, wifi, cell towers, computers, smart meters, power lines and substations. Common symptoms include headaches, 'brain fog', dizziness, insomnia and in severe cases seizure disorders that diminish when the EMF source is removed. It all sounded familiar to Daryl. "I threw out my laptop and I barely use a [cell]phone now," he says "Avoidance worked like a miracle pill."

Yet inescapable wifi coverage such as in schools, shops, libraries, public transport and medical centres, means Daryl and others with

EHS struggle to cope. "I find the extreme brain fog and head throb a normal part of life now," he says.

To relieve his symptoms he gets out into nature whenever possible. Electro-phobia cannot explain that most sufferers, like Daryl, initially have no idea what is causing their ill health. Nor does the nocebo effect explain how plants, insects and animals are similarly affected.

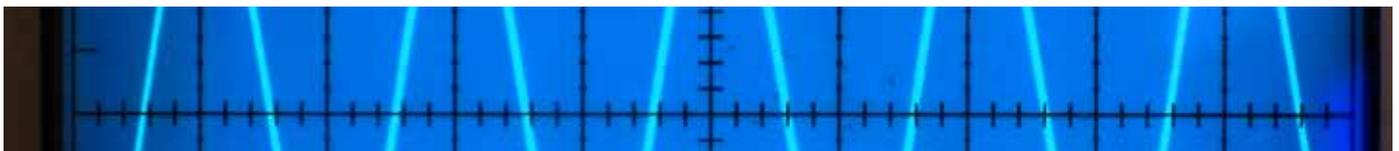
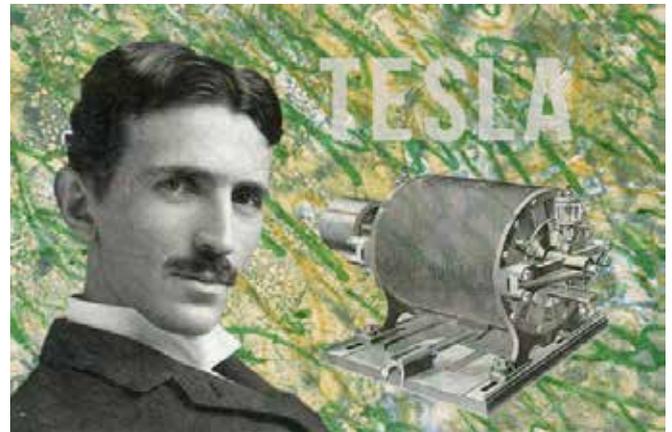
This isolating condition remains under the radar. "It's a lonely feeling, me amongst a society of tech-lovers. I never tell anyone, because no one understands if I try. I just keep it to myself."

Our demand for digital connectivity has forced some sufferers to leave work or move home, to avoid neighbouring wifi networks. They are further socially excluded and isolated by the indiscriminate use of wifi in numerous places, depriving them of their basic human right to health."

(Anne Gastinger: "Totally Wired" OrganicNZ, June 1 2018)

His whole body was constantly wracked by twitches and tremors. His pulse, he said, would vary from a few feeble throbs per minute to more than one hundred and fifty. Throughout this mysterious illness he was fighting with a powerful desire to recover his normal condition."

(John J. O'Neill: "Prodigal Genius: The Life of Nikola Tesla", 2009)



**Nikola Tesla (1856-1943), electrical engineer:**

"The peculiar malady that now affected him was never diagnosed by the doctors who attended him. It was, however, an experience that nearly cost him his life. To doctors he appeared to at death's door.

One of the symptoms of the illness was an acute sensitivity of all the sense-organs. His senses had always been extremely keen, but this sensitivity was now so tremendously exaggerated that the effects were a form of torture. The ticking of a watch three rooms away sounded like the beat of hammers on an anvil. The vibration of ordinary city traffic, when transmitted through a chair or bench, pounded through his body. It was necessary to place the legs of his bed on rubber pads to eliminate the vibrations. Ordinary speech sounded like thunderous pandemonium. The slightest touch had the mental effect of a tremendous blow. A beam of sunlight shining on him produced the effect of an internal explosion. In the dark he could sense an object at a distance of a dozen feet by a peculiar creepy sensation in his forehead.



## Electrosensitivity UK (ES-UK)

[www.es-uk.info](http://www.es-uk.info)

Aims: 1. To help people suffering from electrosensitivity.  
2. To educate the public about electrosensitivity and related areas.

- for all people sensitive to electromagnetic fields and radiation -

Founded 2003

Registered Charity No.: 1103018

### Contacts

- BM Box ES-UK, London, WC1N 3XX
- Telephone: 0845 643 9748
- [enquirers@es-uk.info](mailto:enquirers@es-uk.info)

## Support ES-UK

Paypal (on the website)

Cheques, payable to ES-UK, should be sent to:  
The Treasurer, BM Box ES-UK,  
London, WC1N 3XX  
from who you can obtain Standing Order, Direct Debit and Gift Aid declaration forms.

A donation of £15 per year, or whatever you can afford, helps with the running costs of ES-UK.



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## Resources

Please see the website [www.es-uk.info](http://www.es-uk.info) for the following resources.

- *ES Directory*: an independent list of suppliers of equipment for ES people
- Letter to doctors on Electrosensitivity, by Dr Andrew Tresidder
- Letter to psychologists on Electrosensitivity, by Dr Andrew Tresidder
- Disability Letter
- *Selected ES and EHS Studies* (list of peer-reviewed articles and links)
- *Electromagnetic Sensitivity and Electromagnetic Hypersensitivity: A Summary* by Michael Bevington (new edition, 2013)
- Copies of past *Newsletters*
- *ES-UK Leaflet* (see right). This leaflet explains what ES is, with notes on its symptoms and causes (updated January 2018). Give it to anyone interested.



## Newsletter

Thanks to Gordon Flavell for the use of photographs © and to Brian Stein for printing and distribution.

Contributions for the ES-UK Newsletter on any subject related to Electrosensitivity are welcome. Please send them to the Editor:  
Michael Bevington, BM Box ES-UK, London, WC1N 3XX,  
or email: [michael@es-uk.info](mailto:michael@es-uk.info)

**Electro-sensitivity (ES) or Electromagnetic-Hypersensitivity (EHS)** is a physical intolerance which can develop from exposure to things like mobile phones, WiFi, mobile phone masts, computers, cordless phones, smart meters, low energy lighting, powerlines and substations.

- **Common symptoms**: headaches, skin problems, sleep disruption, lethargy, depression, memory loss, muscle pains, cardiac palpitations, irritability and some cancers.
- **Diagnostic tests** include: 3d fMRI, cerebral blood perfusion scans, heart rate variability, genetic DNA sequencing, a personal history tracking the onset of the hyper-sensitivity and EM exposure.
- **The key treatment**: avoidance of the radiation, especially in sleeping areas. Some sufferers use military-style shielding or protective clothing, or have to live in a remote area away from man-made radiation. As healthy a lifestyle as possible is also advised.
- **Numbers** of severely sensitive people are under 1%, but up to 40% of all adults are subconsciously sensitive to EM exposures because of long-term inflammatory conditions. Some EHS are also chemically sensitive.
- **The different condition of Electrophobia**, or a nocebo effect, is psychological and affects perhaps only 1% of people with real physiological EHS. Electrophobia requires prior psychological conditioning and therefore cannot apply to children, unaware adults and animals, all of which can suffer real physical electrosensitivity.
- **Electrosensitivity was first described** in the medical literature in 1932. It is now recognised legally as a disability in many countries. It began with electrical, radio and radar workers. Since then it has spread into the general population, as mobile phones, phone masts, wifi and wireless smart meters have become common. It is considered a functional impairment and under the Equality Act requires reasonable adjustments.