

5G UNSAFE:

ICNIRP LIMITS UNPROTECTIVE

Two healthy previously unsensitised men working in offices near a new 5G base station developed symptoms typical for the microwave syndrome, e.g., headache, tinnitus, dizziness, balance disorder, concentration deficiency, and fatigue. The symptoms disappeared within weeks or immediately after changing to other offices with lower peak RFR. This provocation study was at exposures below ICNIRP 'safe' guidelines.

(Nilsson M et al.: "Development of the Microwave Syndrome in Two Men Shortly after Installation of 5G on the Roof above their Office" *Ann Clin Case Rep.*, 2023, [Article](#))



5G CAUSED EHS SYMPTOMS

In the first 5G health study, a 5G base station installed above their flat caused severe symptoms in two previously healthy persons within a couple of days. The symptoms corresponded to the microwave syndrome, e.g., neurological symptoms, tinnitus, fatigue, insomnia, emotional distress, skin disorders, and blood pressure variability. The deployment of 5G dramatically increased the peak microwave radiation exposure, from 9,000 $\mu\text{W}/\text{m}^2$ to $>2,500,000 \mu\text{W}/\text{m}^2$. The symptoms quickly reversed when the couple moved to a dwelling with much lower exposure.

(Hardell L et al.: "Case Report: The Microwave Syndrome after Installation of 5G Emphasizes the Need for Protection from Radiofrequency Radiation" *Annals of Case Reports*, 2023, [Article](#).)

Top experts: 'Substantial Scientific Evidence' that RFR causes adverse neurological effects and cancer

Four of the world's top experts in environmental health, including the former director of the U.S. National Toxicology Program (NTP), are calling for prevention and precaution in RFR public exposure. Dr Davis said the public discourse on RFR has been distorted by 'fundamentally flawed' reports by 'industry-affiliated scientists' claiming 'no health risk'. The FDA in 1999 requested the \$30 million NTP study which in 2018 showed 'clear evidence' that cellphone RFR is associated with cancer and DNA damage. 'Then when the results came out and some people didn't like it, the FDA began to trash talk their own study.'

(Ishai PB et al.: "Problems in evaluating the health impacts of radio frequency radiation" *Environ Res.*, 2023;

Suzanne Burdick: "Top Scientists Find 'Substantial Scientific Evidence' RF Radiation Causes Cancer" *The Defender*, 3rd March 2023)



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ES-UK NEWS

Thank you

We are most grateful to all our supporters who give so generously to keep our charity able to provide information and support for those adversely affected by wireless radiation and EMFs. Thank you also to all those who keep writing to their MPs, local councillors and the media and patiently inform health workers and environmental officers of the problems of EHS.

New ES-UK Resources

Electrosensitivity – Overview: [link](#). pp.17-20.

This gives a brief summary of the causes, scientific evidence and symptoms of Electrosensitivity. It includes physiological mechanisms, biological pathways and subconscious systemic effects, along with international limits and legal cases.



How do radio frequency radiation and electromagnetic fields affect human beings?

An animated video with voice-over by Science Animated, published in December 2022, 2 min. <https://www.youtube.com/watch?v=SLK3iAV-3eQ>

Other new ES-UK Resources

11.7.2 [Ultrasound](#)

15.3 [WHO and ICNIRP – 75 studies on ES/EHS](#)

17.1 [Wired or Coded Tel. Handsets and Fibre](#)

Electrosensitivity UK (ES-UK)

www.es-uk.info

Aims: 1. To help people suffering from Electrosensitivity (ES).
2. To educate the public about ES and related areas.

Registered Charity No.: 1103018

Founded 2003

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Support ES-UK

Paypal (on the website)

Cheques to: Electrosensitivity UK, to:
The Treasurer, BM Box ES-UK, London,
WC1N 3XX

from whom you can obtain Standing Order,
Direct Debit, Gift Aid and Legacy
declaration forms.

Please donate £25 or more per year for
printed newsletters and general support
of the charity if you can afford it.

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Professor Emeritus Magda Havas

Professor Emeritus Denis Henshaw

Professor Associate Olle Johansson

Resources: www.es-uk.info ■ [Letters to doctors and psychiatrists on Electrosensitivity](#), by Dr Andrew Tresidder ■ [Video on EHS](#)
■ [Resources: Disability, Guidelines, Housing, Planning, Public Health, Shielding.](#) ■ [ES Directory \(suppliers\)](#) ■ [ES-UK Leaflet](#)
■ [ES and EHS: A Summary](#) (2013) ■ [Selected ES and EHS Studies](#) (studies with links) ■ [Newsletters](#) (including past copies)

Newsletter: electrosensitivity-uk@protonmail.com Mailing: S Dacre, Editor: M Bevington. Post: BM Box ES-UK, London, WC1N 3XX

ES NEWS

Conference: Yeovil, 13th May 2023

A conference in memory of Jenny Fry (3/10/99-11/6/15), 'The Inconvenient Reality', will be held on Saturday 13th May 2023 at a Wifi-free venue near Yeovil, Somerset, 10:00am – 5:30pm.

Guest speakers (to date) include: Debby Fry (mother of Jenny), Barrie Trower, Michael Bevington, Dr Andrew Tresidder and Brian Stein.

The purpose is to raise public awareness of both human and environmental harm from current



wireless technologies by providing sound, evidence-based information, in turn encouraging precaution and the development of safer systems and devices.

We also aim to provide ES people with the chance to socialise in a relatively safe

environment whilst providing the tools to state their case to others with confidence and conviction.

Tickets: £25 including refreshments and further information from Peter on 01935 423002.

Alasdair Philips

We wish Alasdair Philips the very best for the future as he retires from running EMFields, *writes the Editor.*



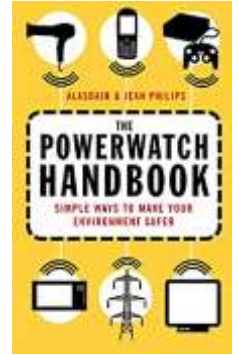
Since 1986, Alasdair, BSc(Eng), DAgeE, MIAgeE, MIEEEE, qualified both in Electrical and Electronic Engineering and in Agricultural Engineering, has been one of the leaders in the UK and often

across the world in understanding the health challenges of RFR/EMFs. Through EMFields he has also developed meters to help people with ES who need to know the exposures near them.

Alasdair's interest in the health effects of EMFs began in the 1980s when he was the newsletter editor for the group Electronics and Computing for Peace which was investigating EMF weapons used by the military. This included the 'zapping' of the women peace protesters at Greenham Common, an RAF airbase for American Cruise missiles. They measured microwave beams, amplitude modulated at extremely low frequencies, aimed directly at the women by the US military. This was confirmed to Alasdair by senior Home Office officials at Whitehall in 1996.

In addition, since 1994 Alasdair has been the unpaid director of the UK NGO Powerwatch which he helped set up with Neil Mayhew in

1988. He wrote the invaluable and seminal 'Powerwatch Handbook' with his wife Jean in 2006, and many online articles, often the first on particular topics.



He also tried to maintain strong relations with various government bodies, such as the Department of Health's SAGE and its HPA's EMF Discussion Group, despite occasional unwillingness and apparent ignorance on the part of some officialdom. He was a trustee of Children with Cancer UK, 2016-2020, overseeing research and helping organise international conferences.

He and Jean helped set up ES-UK in 2003 and Jean was the first chair. I remember in 2006, when I was sensitised by Wifi installed in my workplace, that my late uncle, a fellow of the Institution of Electrical Engineers (IEE) later the Institution of Engineering and Technology (IET), asked his Institution who was the UK's expert on the health effects of RFR/EMFs. Their immediate and categorical answer was Alasdair Philips.



We all owe Alasdair a very great debt of gratitude.

Eco community safely distanced from RFR towers and 'smart' meters

A real estate development company with over 25 years experience building resorts, private homes and eco communities in Central America has a site for a "hard wired" eco community in Nicaragua - currently the #1 affordable expat location for people who care about health and freedom. Nicaragua is one of the friendliest and safest counties in Central America.

The plan is 100 homes that will range from Tiny House size to 2-3 bedrooms with shared organic gardens, a solar farm power supply and filtered well water - all surrounded by teak forest within

walking distance to miles of pristine beach. Phone and internet access will be via a safe, secure, high performing broadband fiber optic Ether network.



The immediate goal is to demonstrate to the developers that hard wired neighborhoods are indeed 'the real estate ask of the future' so this Nicaragua community can launch ASAP and other communities like it in many other locations.

(Nick Pineault, 17th February 2023)

Impossible UKHSA advice 'own choices about reducing RFR' but masts, Wifi in schools & shops

"A friend of mine used to go running with her smartphone in her bra and before she knew it had stage 4 breast cancer. In his later years my father had his wirelessly connected iPad on his lap much of the time. He lost the power in his thighs and got dementia. Of course, there may not have been a causal link, but how many people know the Specific Absorption Rate (SAR) of their phone?"

The Government knows about the risks, but has done little to educate the public. Its advice is that 'excessive use of mobile phones by children should be discouraged' and that 'adults should be able to make their own choices about reducing their exposure should they so wish'." (2020, UKHSA)

(Gilliam Jamieson: "When will they come clean over the radiation risks of 5G?" Conservative Woman, 12th December 2022)

ES and then cancer from cellphone tower

Rich Farver was exposed to RFR from a communications tower at San Diego State University. He first began to suffer ES symptoms such as headaches, unrelenting fatigue and memory loss, which his mother Virginia noticed in October 2007. Then he suffered nausea and bleeding in the brain just before he was diagnosed with an aggressive glioblastoma multiforme (GBM) tumour in March 2008. His surgeon called it a cellphone tumour. Rich soon passed away.



A High Performance Wireless Research and Education Network (HPWREN) tower was installed in 2002 at San Diego University. It has a range of 200 miles. It

has been given US government immunity for any deaths arising and therefore is not shown on maps of cell towers.

By August 2007 cancer clusters were occurring around it, but SDU twice refused to allow a toxicology study. Rich spent 3 years in room 131 as teachers' assistant but the cell tower was outside room. It is now used for storage.

(Virginia Farver interviewed by Stephanie Locricchio: "The Death of Rich Farver - Cell Tower Connection" Children's Health Defense, CHDTV, 20th September 2022, 55 min., [link](#))

Teenager's ES symptoms from Wifi and mobiles

Bodee Honeycutt, 17-years-old, reports on the torment of ES symptoms from Wifi and mobiles in school. He and his mother moved to North Carolina in 2020 and from December he felt really down and depressed but didn't know the reason. In 2021 Bodee couldn't think properly but still didn't know why. He was on his phone a lot and knew about concerns over Wifi but didn't understand or believe it. His mother didn't know what was the cause of his underperformance at school until she saw two articles linking Wifi with depression, skin rashes and other symptoms. He said he felt better not sitting under the router.

They then pursued achieving a 504, showing he needed accommodation for his EHS, the first for EHS. This could be like changes to the environment for wheelchair users where others can walk up the ramp if they wish, or a peanut allergy requiring a school to ban all peanuts.

Ironically, a private school refused to accommodate Bodee on the grounds that other pupils needed access to a mobile in case of anxiety, although it seemed unable to accept that mobiles also help cause anxiety. In the end the accommodations offered were inadequate and he had to have home schooling.



His school accepted his medical letter with its EHS diagnosis, and that he needed accommodations. They eventually replaced earlier routers with a slightly safer solution where the router only emits contact radiation when required rather than all the time, but it still radiates at high levels when in use.

He commented that once he realised he was actually being harmed by Wifi and was diagnosed with EHS, he realised other teens were being affected and becoming depressed as he had been. The RFR in classrooms was from 37,000 $\mu\text{W}/\text{m}^2$ to 1.7m $\mu\text{W}/\text{m}^2$, when it should be $< 3 \mu\text{W}/\text{m}^2$.

(interviewed by Stephanie Locricchio: "17-Year-Old Testifies at School Board Against Wifi Harms", CHDTV, 4th October 2022, 50 min., [link](#))

QUESTIONS IN PARLIAMENT ON EHS: WRONG AND MISLEADING ANSWERS

Question on 21st June 2022

Mr Laurence Robertson MP
(Conservative, Tewkesbury)



“To ask the Secretary of State for Health and Social Care, what recent assessment he has made of the potential health impact of the PSTN [Public Switched Telephone Network] switch-off on people suffering from Electro-Hypersensitivity; and if he will make a statement.”

Answered on 27th June 2022

Maggie Throup MP
(Conservative, Erewash)



“No specific assessment has been made. The UK Health Security Agency (UKHSA) advises that international guidelines on limiting exposure to EMFs should be complied with to ensure there are no consequences for public health.

[Misleading: these guidelines are ICNIRP’s unprotective arbitrary heating-only limits based on Schwan’s myth of 1953. Protective international guidelines include Bioinitiative 2012, Building Biology 2015, EUROPAEM 2016, IGNIIR 2018, and Seletun 2010 – Ed.]

Research has been conducted to investigate whether certain people are particularly sensitive to exposures to EMFs from mobile phones, leading to symptoms which affect their health.

[It has been shown since 1733 that some people are particularly sensitive to EMFs and since 1893 to RFR as from mobile phones – Ed.]

The UKHSA advises that EMFs below recommended guideline levels do not cause symptoms and cannot be detected by individuals, even those who consider themselves more susceptible to EMFs.

[Wrong: provocation tests since 1991 show conclusively that some people can detect EMFs and RFR - Ed.]

This advice is based on reviews of scientific evidence, including a review undertaken by the independent expert Advisory Group on Non-ionising Radiation published in 2012.

[This AGNIR report was shown to be inaccurate and unscientific, written by people with clear conflicts of interest, and unworthy of consideration -Ed.]

The UKHSA will continue to monitor the evidence as it emerges.”

[Misleading: the UKHSA follows ICNIRP, to which its employees belong, which still arbitrarily denies non-thermal effects and therefore does not monitor the evidence fully and effectively -Ed.]



Question on 31st October 2022
Christina Rees MP (Independent, Neath)



“To ask the Secretary of State for Health and Social Care, what research his Department is conducting on EHS and the impact of wireless networks on the health of people with that condition.”

Answered on 8th November 2022
by Will Quince MP (Conservative, Colchester, Minister of State DHSC)



“The Department commissions research on non-ionising radiation through the National Institute for Health and Care Research (NIHR) and the UK Health Security Agency. While the NIHR is not currently supporting specific research on EHS”

[It has been known since 1893 that RFR causes adverse ES symptoms and that RFR causes cancer from 1945, confirmed by the US FDA’s NTP \$30m which found ‘clear evidence’, their top category, that mobile phone RFR cause cancer. The WHO’s IARC classified RFR as a 2B cancer agent in 2011. The issue is no longer harm from RFR, but why the UK government, DHSC, UKHSA and Ofcom are discriminating against people with EHS - Ed.]

Question on 31st October 2022 by Christina Rees MP (Independent, Neath)



“(1) To ask the Secretary of State for Business, Energy and Industrial Strategy, what assessment he has made of the potential merits of requiring energy suppliers to offer consumers with EHS, non-broadcasting, legacy meters in place of smart meters. [You can refuse a smart meter – Ed.]

(2) To ask the Secretary of State for Business, Energy and Industrial Strategy, what assessment he has made of the potential effect of the (a) smart meter and (b) 5G rollout on people with EHS.”

Answered on 8th November 2022 by Graham Stuart MP (Cons., Beverley and Holderness, Minister of State for Climate)



“Smart meters use radio waves in the home to allow remote readings to be taken from gas and electricity meters. There is no evidence that radio waves produced by smart meters pose a health risk.

[Wrong: there are hundreds of peer-reviewed studies showing that RFR as from smart meters (some of which use ordinary mobile phone mast signals) causes cancer, EHS symptoms, infertility, cardiovascular problems etc. – Ed.]

“In respect of 5G, UK Health Security Agency (UKHSA) advice states that there should be no consequences for public health.”

[Wrong: 5G is a RFR 2B carcinogen and RFR has been known to cause ES since 1893 and cancer since 1945. 5G causes EHS symptoms – see p.1-Ed.]



International gathering of EHS people on 18th June 2022.

Make masts visible: ‘avoid like the plague’

Dr Andrew Goldsworthy:

“All mobile phone masts should be made as conspicuous as possible, perhaps painted bright yellow with coloured stripes, so that people with heart pacemakers, epilepsy or just plain EHS could avoid them like the plague.”



Electro-hypersensitive people

It is urgent to raise collective awareness on the health danger of RFR, which concerns everyone, and on EHS, the disability that EMFs cause.

In June, about a hundred of us gathered in one of the last areas protected from RFR in Wallonia. Why? All of us develop symptoms near wireless telecommunications devices and antennas: Wifi, 4G, Bluetooth headsets, DECT wireless telephones, mobile phone masts near the home...

For many of us, the first symptoms could not be diagnosed quickly because they were confused with other pathologies. This led to very disabling symptoms: headaches, burning ears, concentration problems, tingling in the limbs, tinnitus, sleep disorders, nausea and the feeling of a burning brain, extreme fatigue, failing short and long-term memory...

Very often, these symptoms forced us to stop a job whose premises were saturated with Wifi, to move home, to go in search of housing sheltered from radiation. Only one effective remedy exists: the absence of EMFs and RFR exposure.

Unfortunately, in the field, health professionals are not sufficiently and/or correctly trained to detect this emerging environmental health problem, even though it inconveniences one in twenty people in Switzerland and France.

(One hundred electrohypersensitive people: “Wireless technologies but not without risks” Ilesoir.be, 28th October 2022)

AA5G and claim of no 5G risks; COMARE

**Judgement: - 'nothing to be warned of'
- 'UK to be a world leader in 5G technology'**

Victoria Angell, who launched the website Action Against 5G, argued that ministers were not complying with a duty to provide information about 5G health risks. However, Mrs Justice Mary Stacey, after considering arguments at the High Court hearing in a full Court 73 in London on Monday and Tuesday 5th and 6th February 2023, in a written ruling published online on Wednesday 8th March 2023, ruled against her.

Ms Angell, and two other women, had taken legal action against Health, Environment and Digital Culture, Media, and Sport ministers. Ministers disputed claims made against them.

The judge said the case concerned the "claimants' perceptions of the public health risks associated with 5G". She said the three claimants considered that their health "has been, or could be, affected by proximity to 5G". Michael Mansfield KC, for the claimants, argued that ICNIRP does not say that RFR is safe and that therefore the public should be informed about its risks so that they can choose how to respond.

Mrs Justice Stacey said issues she had considered related to the extent to which the Government was "under a duty to provide information and reasons to the public about 5G, based on their view of the scientific evidence". The judge said the claimants had questioned whether the Government's information complied with aspects of the European Convention on Human Rights relating to the right to life and the right to respect for private and family life.

She said she had to consider whether 5G posed a "threat to life, or to private and family life". "Absent an identified threat or risk, there is nothing for the public to be warned of."

She stated that the Government wanted the UK to be a world leader in 5G technology.

(Brian Farmer: "Campaigner loses court fight over adequacy of Government information about 5G" Irish News, 8th March 2023; Patricia Burke with Karen Churchill: "UK Update: Feb 6 & 7 Action Against 5G Court Case" Natural Blaze, 21st Jan. 2023; Gillian Dymond: "Will this 5G challenge fall on deaf ears, too?" Conservative Woman, 6th Feb. 2023; P. Burke: "The UK 5G Legal Action and the EU - Helping Us Secure a Safer Future" Safe Tech International, 9th Feb. 2023)



Vicky Angell and Karen Churchill

**Did the judgement prove that
the UK government is consistent in its claim
there are no risks from 5G and its RFR?**

Some notes by the Editor.

The judgement by Mrs Justice Stacey stated that the issues were "confined to the extent" to which the government was under a duty to provide information "based on their view of the scientific evidence" (§8). Therefore, the assessment of risk and the level of risk (§8) were for the government, not the claimants. Thus, the argument was essentially about whether the government's information on RFR health risks from 5G was "inconsistent with its own view" (§60), not about the actual RFR health risks.

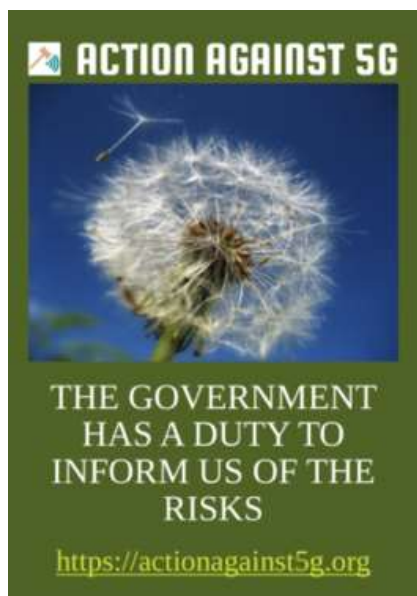
There have been only two studies on health from actual 5G so far. Both showed harm through RFR causing EHS symptoms at non-thermal levels (see page 1 for more details). However, both were deemed to have been published too late for inclusion in the government's view and in this case with its judgement.

Therefore, the only evidence on the government's view of risk came from its earlier statements. From the judgement and reports of the case it seems that the government's case relied on its statements which affirm that it follows the views of the WHO and its agencies such as ICNIRP and IARC. The UK government and WHO/IARC/ICNIRP have not conducted any research into the risks of EHS from 5G and therefore could not make any valid claims about 5G health risks except from their earlier views on RFR. The UK government's own partly secret

COMARE, a pro-industry DHSC ‘front’ committee responsible for RFR, of which Dr Mann is a secretary, has apparently not researched 5G health risks. Thus, the government cannot quote official statements from its own COMARE, but only from the WHO/ICNIRP.

The judgement asserted “Absent an identified threat or risk” (§73). Yet, in reality, the WHO, its agencies like ICNIRP and IARC, and the UK government have all identified threats and risks from RFR and thus 5G before 2004 and since 2011 and 2018. They have not changed their published stance to that of no “threat or risk”, as opposed to “unlikely”, or published that 5G and its RFR are proven actually “safe” for all people including for long-term exposures and for people with EHS.

Therefore, the WHO, its agencies and the UK government admit a risk from 5G and its RFR but are “inconsistent” in failing to communicate it, as asserted by the claimants in the judicial review.



The WHO, which works through its agencies ICNIRP and IARC, has performed two reversals of opinion on whether RFR as in 5G is a health risk (see Table below). WHO/IARC/ICNIRP currently states that RFR as from 5G is a health risk.

The UK government since 1999 has followed WHO/IARC/ICNIRP as regards non-thermal RFR health risks. Therefore, the UK government is “inconsistent” in its claims that it follows WHO/IARC/ICNIRP and its own earlier warnings if it also claims that RFR from 5G is “safe”.

RFR Risks: WHO/IARC/ICNIRP, UK government		
1	to 2004	<p>WHO/ICNIRP and UK accepted mainstream scientific evidence of RFR non-thermal health risk or fact of EHS, cancer etc.</p> <ul style="list-style-type: none"> - WHO's ICNIRP's General Principles stated risk/fact that some people are vulnerable below RFR heating levels, 2002. - UK Stewart Report advised RFR health risks to children, 2000.
2	2005-2010	<p>WHO/ICNIRP and UK denied RFR non-thermal health risks.</p> <ul style="list-style-type: none"> - WHO's Backgrounder on EHS, 2005. - UK Irvine report on EHS, 2005.
3	2011 on	<p>WHO/IARC/ICNIRP and UK accepted mainstream RFR non-thermal health risks.</p> <ul style="list-style-type: none"> - IARC's RFR 2B carcinogen risk classification, 2011 - WHO's reclassification of EHS as a potential RFR risk, 2018. - UK Chief Medical Officers' warning of risk in children's use of mobile phones, 2011.

Two other aspects of the judgement:

- (a) The “Veerbeek [Verbeek?], Oftedal et al Report 2021” of which Dr Mann was a co-author “is consistent with Dr Mann’s evidence that ... the roll out of 5G is safe...” and would therefore “fail the relevance test” (§14).
However, in this 2021 WHO report EHS was classified as a “potential adverse effect” or RFR “risk”, which is “inconsistent” with communicating the claim of “no risk” or “safe”.
- (b) The description of EHS symptoms as “unexplained” (§79) is not the view of the UK government and WHO/IARC/ICNIRP
From 2005 to 2018 they considered EHS symptoms a nocebo response, and until 2004, and from 2018, they considered EHS is, or possibly is, caused by RFR.
The mainstream definitive view, especially since the 2021 scientific worldwide consensus report, sees EHS as certainly caused by RFR.

COMARE and 5G damage to health

The 'front' government committee supposedly on ill health caused by RFR and EMFs is the partly secret Committee on Medical Aspects of Radiation in the Environment (COMARE).

Gillian Jamieson reports:

"I was staggered when they told me two years ago: "COMARE has not previously reported on possible health effects from EMFs and at present there are no requests from government departments for the committee to provide advice on this issue."

COMARE 'does not have a 5G strategy'

Furthermore, their July 2019 minutes reveal that "COMARE has not been asked to look at 5G concerns and therefore does not have a 5G strategy". This year COMARE confirmed to me that the position remains the same.

To be clear, this means that the Government is going full steam ahead with 5G without even trying to find out if this is safe. It prefers to rely on the safety exposure guidelines of a self-selected group, ICNIRP, whose conflicts of interest have been exposed by two MEPs in a 90-page document. Despite thousands of studies confirming likely harm from EMFs in the microwave range over the last 25 years, ICNIRP's guidelines have remained almost the same since the late 1990s.

Eighteen years ago, I lived about 20 yards from a phone mast. After two neighbours living on either



side of it died of motor neurone disease, I realised that my own symptoms of extreme fatigue and many weeks of disabling flu-like symptoms might have been caused by living next to the mast for three years.

Government's failure 'a scandal'

The Government has not even tried to investigate the health implications of exposure to radio-frequency radiation. This is a scandal."

(Gillian Jamieson: "Full steam ahead for 5G – and let's not even think about the damage to health" Conservative Woman, 29th November 2022)

'5G is safe' conspiracy theory to be banned?

'It is uncontroversial that clear and accurate public information and guidance is extremely and increasingly important to counter inaccurate rumours, disinformation and unfounded conspiracy theories which are so easily spread on social media'. (Judgement §76)

READERS' COMMENTS

Hilltops and increased RFR

"I saw in recent Newsletters that people experienced increased Covid symptoms when driving over hilltops, where there is higher RFR from masts, and also had more ES symptoms on reaching the top ridge of a hill. I remember that I, as driver, and simultaneously our three young children in the back seat behind me all suddenly yawned as we drove over the top of a hill on a busy A road. I then saw a phone mast in the trees below. Its



radiation would have caught us as the car went over the top of the hill."

Email hacking

"I was not surprised about the 'Hacking of Trustees emails' on page 3 of the last Newsletter. About three times I have tried to send ES-UK an email from the wired public library computers I use, and all came up with UNDELIVERABLE. I had no problems with other websites!"

Computers switching on Bluetooth – liability?

“I’ve discovered that my computer sometimes switches back on Bluetooth when I’ve previously switched it off. Is the computer maker liable for the cancers and ES it causes me - presumably like mobile manufacturers and mast companies?”

Schools: flat earth?

ICNIRP heating myth?

“If schools don’t teach that the earth is flat because Rowbotham’s Bedford Level experiment in 1838 didn’t allow for atmospheric refraction, should schools still teach ICNIRP’s heating myth which doesn’t allow for established non-thermal effects?”



Colorectal cancer among young people – mobiles in jeans pockets?

“Doctors are aware of a steady increase in rectal and colorectal cancers among young people but they don’t know why. What about the incredible sudden peaks of radiation when a group of young people all move at the end of a lecture or class, even if their mobiles are off, as all the mobiles automatically update their geolocations from nearby masts? Many youngsters keep their mobiles in jeans pockets. The mobile manufacturers warn against this.”



Temporary traffic lights radar:

‘headache and fuzzy spaced-out feeling’

“I had to wait for perhaps 1-2 minutes just in front of one of a set of temporary traffic lights. It was a long sequence for a 4-way junction. My car was on a slope facing down the hill towards the lights just a few feet away. By the end of the wait I felt awful, with a headache and fuzzy spaced-out feeling, presumably the effects of the radar.”

Don’t touch! Don’t come near me!

“I am sometimes so sensitive I can feel an ES shock when someone who’s been in Wifi or using a mobile touches me, after I’ve kept out of RF radiation. I have even felt ES symptoms when such a person sits next to me – very unpleasant when next to them at a meal.”

Booster jab

“The latest Covid booster jab made my ES symptoms worse.”

Road madness

“When joining a very busy dual carriageway from a much quieter road, one of my muscles suddenly cramped painfully. There was a phone mast near the junction. The effects disappeared after the mast was out of range. Another time it was pains in my left hand.”

Radiometer

Raymond reports:

“When I bought the radiometer [price £11.50], I found the vanes rotated clockwise in daylight, but anticlockwise in the dark facing a mobile phone mast about 2 miles away. It only did this in line of sight of mast. In complete darkness you can’t see the vanes spinning.”



The vanes in the Crooke’s Radiometer are dark and light on opposite sides. Light and radio waves striking these vanes leads to unequal forces which cause the radiometer to revolve inside its vacuum globe. The reason for the rotation has been the cause of much scientific debate since its invention by chemist Sir William Crooke in 1873.

LED lights need an ‘off’ switch

Anne Johnston’s letter, Times, 25th November 2022:

“I have had to tape over the headache-inducing LED lights on my cooker hood, and the internal light in the fridge. I’ve yet to work out how to deal with the unbelievably bright light in the tumble drier, other than to cover the plastic window with cardboard. I would happily trade all the missing socks for an ‘off’ switch.”

Plea for zone without RFR

Lis Nonbo from Denmark writes:

“I have a 45-year-old son who is dying because he is very sick because he has EHS. I am looking for a White Zone where my son can rent a place, or a place where he can stay somehow with a tent, shelter, caravan, car. etc. in a national park, mountains, forest, etc. where it is possible to stay. A place where there is no radiation, so it is impossible to use a mobile phone regardless of which telecommunications provider you use etc. (not a gray zone). At even less than 0.0001 M/W

m², he gets very sick. Cornet and Safe & Sound Pro 2 meters are useless because he is so sensitive. I hope and pray that there is someone who can help finding such a place, or knows someone who knows where there is a White zone in your country or in Europe (not a gray zone) before my son dies.”

Paint available

Jimmy has 15 litres of Y Shield max 54 to give away, buyer to pay postage. Please contact ES-UK.

FILMS, VIDEOS and BOOKS

ELECTRIC MALADY

In cinemas from 3rd March 2023. From 3rd April on Curzon on Demand, then iTunes and Amazon. Information from www.conic.film/films/electricmalady

“a ghost exiled from the wifi age...a portrait of endurance before the imponderable, where music, beauty, family and empathy are the keys to hope”

★★★★ TOTAL FILM

“One of the year’s most thought-provoking and innovative documentaries” SCREEN QUEENS

How do you get off the grid when the grid is now everywhere?

Artist and filmmaker Marie Lidén invites audiences into the isolated world of William, a young man who’s spent a decade reluctantly retreating from modern life. A one-time master’s student and aspiring musician, his adverse reaction to the electrical radiation from our interconnected digital age has led him to a remote cabin in the Swedish wilderness where he’s cut himself off from most forms of technology.

Hidden in a foil-encased bedroom, beneath layers of copper-lined fabric, William speaks openly to Lidén about suffering from the condition known as electrosensitivity. Shot partly with a hand-cranked Bolex camera, what emerges is a lyrical and empathetic portrait of loneliness and isolation — and a loving family’s efforts to save their son’s life.



‘A voice for the marginalised’

Electric Malady, directed by Edinburgh School of Art graduate Marie Lidén and produced by Glasgow-based Aconite Productions, was BAFTA nominated for outstanding debut by a British writer, director, or producer.

It was inspired by the experience of Lidén’s mother who suffered from EHS. Lidén said she hoped the film would give a voice to those suffering from EHS. “In many cases, these people’s stories are marginalised because they cannot communicate the way we do through the internet or even using phones,” she said.

(Nan Spowart: “Electric Malady explores electromagnetic hypersensitivity” The National, 26th February 2023)



'How do radio frequency radiation and electromagnetic fields affect human beings?'



Science Animated for ES-UK, 17th December 2022, 2 min.

<https://www.youtube.com/watch?v=SLK3iAV-3eQ>

'Why EHS is no Fairy Tale'

A magical animated film about EMF-induced disability, for Europeans for Safe Connections (ESC) www.signstop5G.eu. Sean Carney, with a personal account of EHS spoken by Corrielle van Vuuren, 20th December 2022, 15 min.



https://www.youtube.com/watch?v=_as2BIAE8s0

'Find Out if You're Suffering From EHS'



Dr Partha Nandi, with Mary Karen McMelllan, 5th September 2022, 7 min.

<https://www.youtube.com/watch?v=1sWCnHxBXOI>

Dimitris J. Panagopoulos (ed.), *Electromagnetic Fields of Wireless Communications: Biological and Health Effects*, CRC Press, 2023, 544 pages, £170 hardbook and £127.50 eBook.

Chapter 8: EHS as a world-wide man-made electromagnetic pathology: a review of the medical evidence, by Belpomme D, and Irigaray P.



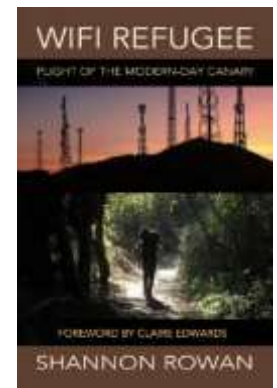
Shannon Rowan: *Wifi Refugee: Plight of the Modern-Day Canary*,

Shannon Rowan/Amazon, 2022, 440 pages.

This book is a great achievement. It includes numerous accounts by people injured by RFR and EMFs. It also introduces some of the science and politics behind this massive assault on humans and all nature. There are four parts, Canary Origins, the Canaries, Canaries in Flight, and Crossroads., with an Appendix entitled 'Solutions' in 26 sections.

The forward by Claire Edwards describes the person behind the heating-only myth which has caused this unimaginable suffering. This was Schwan, secretly brought to the USA under Operation Paperclip to work for the US Navy after WWII. He had worked under the Nazis for the Kaiser Wilhelm Institute for Anthropology, Human Heredity and Eugenics, so Edwards asks:

'Is it any surprise, then, that then the US Navy asked him to advise on guidelines for EM radiation, he withheld his full knowledge of the biological effects and proposed guidelines that insisted on only thermal effects?' This means that 'EMF exposure limits across the world are set so high that it is almost impossible to exceed them. It's akin to claiming that you care about road safety while setting car speed limits at a million miles per hour.'



When will Ofcom protect people with EHS?

Letter to Lord Grade of Yarmouth,
Chair, Ofcom Board
From Michael Bevington,
Chair of Trustees, Electrosensitivity UK
17th January 2023

Dear Lord Grade,

I recently asked the DCMS a question which their Ministerial Support Team did not answer. It suggested that I contact Ofcom directly as an independent regulatory authority. My question is: • When will Ofcom begin to protect people with electromagnetic hypersensitivity (EHS)?

The condition of EHS is now well established and accepted by scientists and the courts as physiological, with relevant biomarkers and metabolomic profiles, and not psychological. The international consensus report by 32 leading experts confirmed that EHS is physiological ([link](#) Belpomme D et al, Int J Mol Sci., 2021). This mainstream definitive consensus report makes Ofcom's Statement on EMF/RFR dangers from October 2020 outdated and counter to the current mainstream scientific evidence.

In addition, Ofcom's reliance on UKHSA's mistaken adoption of ICNIRP's minority heating-only guidelines, based on false assumptions such as Schwan's thermal myth of 1953, is also shown to be outdated and counter to the majority scientific viewpoint. This is confirmed by the scientific evidence in the 2022 report by the 17 mainstream international expert scientists from the International Commission on Biological Effects of Electromagnetic Fields (ICBE-EMF) ([link](#) ICBE-EMF, Environ Health, 2022)

I should be most grateful if the Ofcom Board could answer my question, as would the 1.6% of the UK population severely disabled by Ofcom's selection of ICNIRP's current unprotective heating limits. These people could then plan ahead to re-establish their employment, homes, social and family life, all lost through Ofcom's harmful RFR exposures.

Reply from Ofcom's Chairman and Chief Executive's Office:

"I'm emailing from the Chairman's office here at Ofcom, and wanted to confirm receipt of your letter dated 17th January to Lord Grade.

I've ensured that our Spectrum team has seen a copy of your letter. Ofcom's view on EMF exposure in relation to radio spectrum is documented on our website, and is consistent with our previous correspondence with Electrosensitivity UK."

Reply by the Chair of ES-UK Trustees to Ofcom's Chairman and Chief Executive's Office response:

"Thank you for your response and help. As soon as Lord Grade and the Ofcom Board can answer my question on the timing of Ofcom's implementation of protection for EHS, we should be most grateful to know.

The existing 2020 Ofcom safety statement has now been outdated by the recent scientific consensus on EHS. The livelihood and health of many people depend on when Ofcom adopts protective measures for EHS."

Ofcom's Impact Assessments on ES/EHS?

"Ofcom's mission is 'making communications work for everyone'. "Before making a decision we assess the impact of that decision on the people of the UK. We commit to undertaking market research to get the views of particular communities that we think may be particularly affected and ensuring the views of under-represented groups are made clear to our senior decision makers."

(Ofcom: "Making Ofcom work for everyone: Ofcom's diversity and inclusion strategy", January 12 2021, p.4, .16)

WIRED OR CORDED TELEPHONE HANDSETS AND FIBRE-OPTIC CABLES

If you have EHS, explain to your telephone/internet provider that you cannot use wireless.

BT's VoIP 'Digital Voice'

British Telecommunications (BT) will withdraw Openreach's Public Switched Telecommunications Network (PSTN) on 31st December 2025. Then wired telephones will be provided over the internet using Voice over Internet Protocol (VoIP) or 'Digital Voice'.

There will be two ways the internet can reach your house: fibre and/or copper.

1. Fibre and Copper

Fibre to the Cabinet (FTTC)
or **Single Order Generic Ethernet Access (SoGEA)**

If the internet goes by fibre to the cabinet in the street (FTTC), and then by the existing copper wire network to the house, this is called **Single Order Generic Ethernet Access (SoGEA)**. SoGEA provides broadband only. It can be connected to a wired telephone handset through a VDSL2 (very high-speed digital subscriber line 2) router, using the telephone socket in the back.

2. Fibre only, Full Fibre

Fibre to the Premises (FTTP)
or **Fibre to the Home (FTTH)**

In FTTP or FTTH, the internet goes by fibre to the cabinet in the street and then on by fibre to the Premises or the Home via a Toby Point junction in the pavement outside the property.

On reaching the property there is then an Optical Network Terminal (ONT) or fibre-optic modem for the fibre internet connection from fibre to ethernet.

Then an ethernet cable links the ONT to the router. The wired telephone handset is then plugged into the telephone socket in the back of the router, as for SoGEA.

House telephone wired network

1. Fibre to the Cabinet (FTTC) or SoGEA

If broadband is still delivered via the existing incoming copper wire or FTTC, since the incoming wire cannot be disconnected as the router needs to connect to the master socket or Network Terminal Point (NTP), it will require a new extension socket to be fitted adjacent to the NTP and the extension wiring transferred to it. This new socket can then be connected to the green tel. socket on the hub as with FTTP, using a tel. wire with a phone plug at each end.

2. Fibre to the Premises (FTTP)

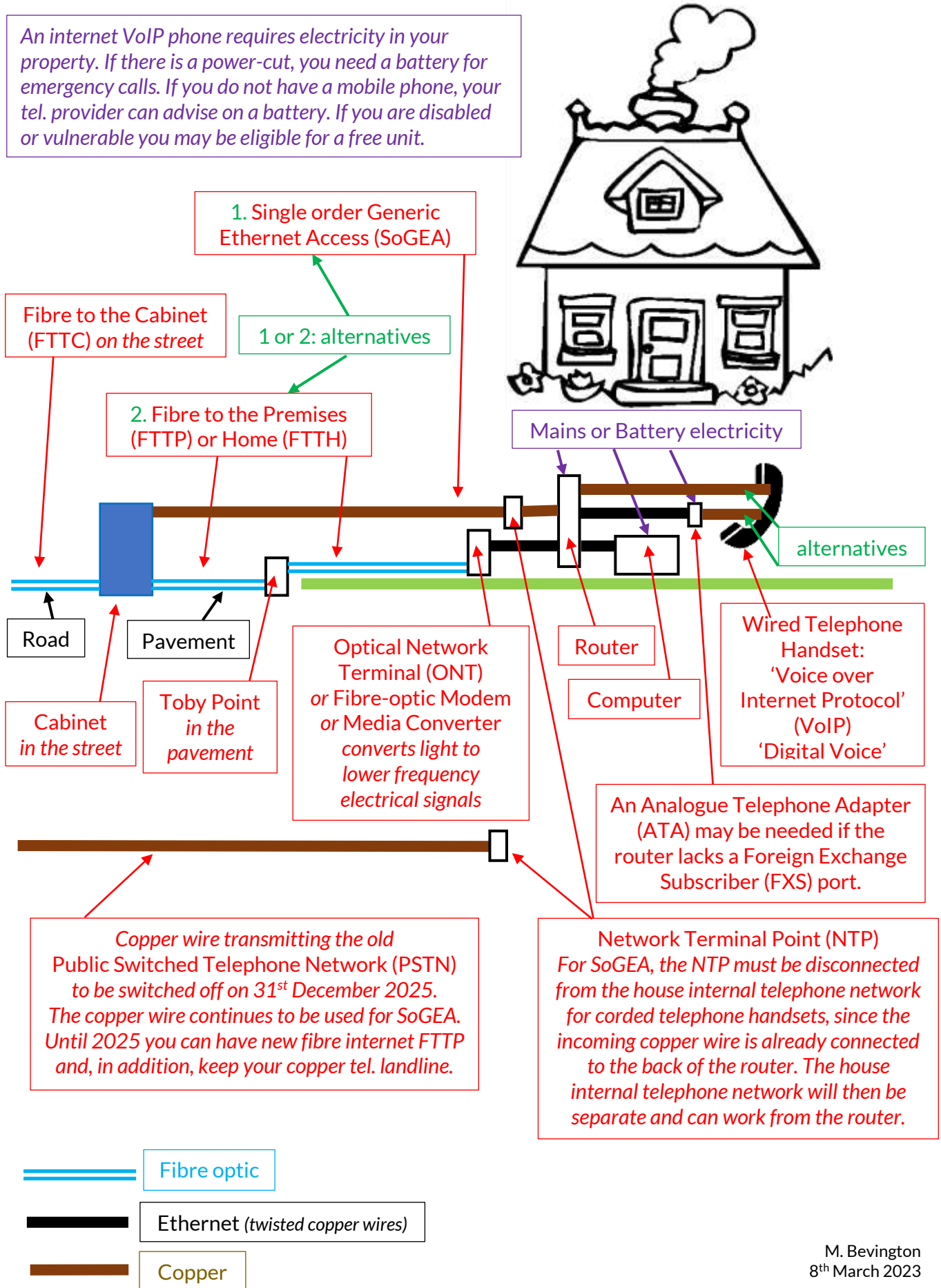
To use corded phones in the property's existing telephone extension wiring, disconnect the old incoming copper telephone wire from the master socket and connect the green socket on the hub to any of the phone sockets using a tel. wire with a phone plug at each end.

Routers with a wireless On/Off switch

Ask for an ordinary router with a physical on/off button to switch off all forms of wireless, like Zen Fritz!Box and Coop. Gigaclear Linksys routers have dual bands at 2.4 and 5 GHz with beam-forming but turn off wireless by a wireless mobile app, which is unsuitable for ES people. **Beware:** BT's Smart Hub2 has a built-in DECT wireless base station and wireless Wifi is switched on at setup.

A SIMPLIFIED DIAGRAM TO EXPLAIN THE NEW INTERNET TELEPHONE SYSTEM

An internet VoIP phone requires electricity in your property. If there is a power-cut, you need a battery for emergency calls. If you do not have a mobile phone, your tel. provider can advise on a battery. If you are disabled or vulnerable you may be eligible for a free unit.



M. Bevington
8th March 2023

ELECTROSENSITIVITY: KEY FACTS

Electrosensitivity is the condition of being physically affected by radio frequency radiation, voltage transients ('dirty electricity', VLF), and/or power lines and ELF.

- **Radio frequency radiation (RFR)** is emitted by mobile phones, phone masts, Wifi, smart meters, Bluetooth, Fitbits, radio and TV masts etc.
- **Voltage transients** ('dirty electricity') and very low frequency can be emitted from induction cooker hobs, battery chargers, CFL and some LED lights etc.
- **Power lines** (extremely low frequency) emit electric and magnetic fields (EMFs), as do transformers, electric motors, hair dryers, shavers and washing machines.

Electrosensitivity is a spectrum condition:

- Everyone is electrosensitive since all cells in the body can react to magnetic and electric fields.
- Some people are more consciously sensitive than others.
- Some people become hyper-sensitive and are severely disabled by this environmental condition.

Electrosensitivity is also called:

- Electromagnetic Intolerance Syndrome
- Environmental Intolerance
- Microwave Sickness
- Radio Wave Sickness

Electrosensitivity covers a wide range of conscious and subconscious reactions, like other environmental allergies or sensitivities, such as to particular foods, pollens or amounts of sunshine.

- The conscious adverse symptoms of Electrosensitivity (ES), like headaches, physical weakness and muscular pains, were first recorded from 1733 by scientists researching the effects of electricity.
- More disabling Electromagnetic Hypersensitivity (EHS) was first recorded in 1746.
- In the 19th and early 20th centuries telegraph lines, electricity supplies and radio caused conscious symptoms among workers. Simultaneously, most people were affected subconsciously by the 'diseases of civilisation'.
- Since then, conscious effects, and subconscious ones like disturbed sleep, cancers, infertility and heart problems, spread more widely, with computers, mobile or cordless phones, Wifi and smart meters.

HISTORY: SCIENCE

1733: ES: non-thermal adverse symptoms, EMF
1746: EHS: hypersensitivity specific symptoms, EMF
1893: ES: specific non-thermal adverse symptoms, RFR
1930: Non-thermal effects primary, heating secondary
1932: EHS: hypersensitivity specific symptoms, RFR
1945: ES symptom of cancer from non-thermal RFR
1945: Non-thermal RFR used by military in warfare
1991: ES shown in provocation tests, screened subjects
2000: More brain tumours on side of head near phone
2002: More ES symptoms near mast than further away
2003: Risk of cancer x 3 nearer mast than further away
2014: Genetic variants associated with EHS
2015: Cerebral blood hypoperfusion in people with EHS
2017: 3d fMRI scans show brain damage in EHS people
2018: NTP study confirms mobile phones cause cancer
2019: 'Bystander' RFR effect, like ionising radiation
2019: Subconscious human magnetoreception shown
2021: Consensus scientific paper confirmed real EHS
2022: Ecological assessment confirms proof of EHS
2023: 1st 5G health study: ES symptoms from 5G mast

HISTORY: REGULATORY

1935: First RFR guidelines, non-thermal and thermal
1974: Health & Safety at Work Act protects ES workers
1990s: Insurers: RFR high risk only, like cancer asbestos
2001: IARC classifies ELF EMF as a 2B cancer agent
2001: Geneva: mast dismantled, residents compensated
2002: WHO/ICNIRP recognise 'sensitive' ES people
2006: UK employers remove RFR for ES people
2007: UK £15k compensation for EHS discrimination
2009: EU Parl.: biological, not ICNIRP heating, limits
2009: EU Parl.: protect EHS and grant them equality
2010: Equality Act protects people disabled by ES
2011: IARC classifies RFR EMF as a 2B cancer agent
2012: NHS consultants and GPs diagnose physical ES
2012: Courts accept ES and award compensation/fines
2013: H&SC Act: local authority duty to improve health
2021: US Court: FCC must assess non-thermal effects
2021: Court: ES person is interested party in siting mast
2022: US city bans phone mast to prevent ES symptoms
2022: UK court: removal of Wifi/phones for EHS person
2022: US: \$187,300 for RFR injuries to Havana officials

E(H)S = Electromagnetic (Hyper)sensitivity EMF = Electromagnetic Field(s) RFR = Radio Frequency Radiation

ELECTROSENSITIVITY: KEY FACTS

Radio Frequency Radiation - Adverse Biological Effects		uW/m²
See: Arthur Firstenberg, Some Biological Effects of Radio Waves , 2022		
Biological Effects	Genetic alterations - E. Coli	0.0000000000000001
	Human sensitivity	~ 0.00000000000001
	Altered EEG	0.00000000000001
	Immune effects - mice	0.000000000001
Background Level		~ 0.0000000001
Adverse Biological Effects	Conditioned 'avoidance' reflex - rats	0.00000001
	Premature aging - pine needles	0.000000024
	Smaller growth rings - trees	0.000000024
	100 yards from home Wifi	0.0000004
	Disturbed sleep, abnormal blood pressure, digestive problems, weakness, pain, anxiety	0.000002
	Growth inhibited - beans	0.0000027
	100 yards from a mobile phone, peak power	0.000004
	1 mile from a mobile phone mast	0.00001 - 0.0001
	Disturbed metabolism, structural changes: liver, spleen, testes and brain - rats, rabbits	0.00006
	Slowed heart, changed EEG - rabbits	0.00006
	Irreversible infertility - mice	0.00017
	Childhood leukaemia, < 12 km from TV mast	0.0002
	Impaired motor function, memory and attention; altered sex ratio (fewer boys)	0.0003
	Blood-brain barrier impaired by mobile phones	0.0004
	Altered calcium flux in brain tissue	0.0006
	Tinnitus, buzzing and other auditory effects	0.0002
	Leukaemia, skin melanoma and bladder cancer, near TV and FM mast	0.0005
	Head and chest exposure from a laptop on a table	0.0008
Metal redistributed in the lungs, brain, heart, liver, kidney, muscles, spleen, bones, skin	0.001	
International Scientific Limits: Bionitiative, Building Biology, EUROPAEM, IGNIR, Seletun		0.1 - 100
Adverse Biological Effects	Head and chest exposure from a mobile phone on a table	0.15
	Exposure to genitals from a laptop on the lap	17.0
	Exposure to brain from a mobile phone against the brain	20.0
ICNIRP: Arbitrary, unscientific, unprotective, thermal-only limits, averaged over 6 or 30 minutes		≤40,000,000

ABBREVIATIONS

ASSESSMENTS	LED light-emitting diode	PHYSICAL AGENTS
EIA environmental impact assessment	ONT optical network terminal	CME coronal mass ejection (geomagnetic field)
HRA health risk assessment	SM (wireless) smart meter	EF electric field
CONDITIONS	METRICS, NON-THERMAL	ELF extremely low frequency
CFS chronic fatigue syndrome	G-S Graham-Stetzer (transients)	EMF electromagnetic field
EHS electromag. hypersensitivity	Hz Hertz (frequency, cycle per sec)	GEC global electrical circuit (atmospheric electricity)
EI environmental intolerance	kHz kiloHertz (frequency)	MF magnetic field
ES electrosensitivity	mG milliGauss (magnetic field)	RFR radio frequency radiation
FI functional impairment	MHz megaHertz (frequency)	VHF very high frequency
HS Havana (EHS) Syndrome	nT nanoTesla (magnetic field)	VLF very low frequency
MCS multiple chemical sensitivity	THz teraHertz (frequency)	PRINCIPLES
ME myalgic encephalomyelitis	V/m Volts per metre (electric field)	ALARA as low as reasonably achievable
MS multiple sclerosis	METRICS, THERMAL	HFP health first principle
MWS microwave sickness	dBm decibel-milliWatts (each 3: x2)	NDP non-discrimination principle
DEVICES	SAR specific absorption rate (heat)	NOEL no observable effect level
ATA analogue telephone adaptor	uW/m ² microWatt per metre squared (power density, heating)	PP precautionary principle
CLF compact fluorescent light	W/kg Watts per kilogram (SAR heat)	

ELECTROSENSITIVITY: KEY FACTS

CONSCIOUS SPECIFIC SYMPTOMS

- Anxiety
- Asthma
- Cancer
- Confusion
- Cramp
- Depression
- Diarrhoea
- Dizziness
- Fatigue
- Hair loss
- Headache, brain pain
- Heart palpitations
- Indigestion
- Irritability
- Light sensitivity
- Memory loss
- Menstrual changes
- Muscle/nerve pains
- Nausea
- Noise sensitivity
- Nosebleeds
- Restless legs
- Sinusitis
- Skin rashes
- Sleep disturbance
- Smell sensitivity
- Thirst, Tics, Tinnitus
- Visual effects

SUBCONSCIOUS SYSTEMIC EFFECTS

- Brain wave disturbance, especially Alpha
- Cancer: bioelectrical dysregulation, DNA breaks
- Cell cycle disturbance, mitochondrial dysfunction
- Cell membrane depolarisation, ion channel effects
- Fertility reduced, changes in offspring, more females
- Heart: changes to rate, variability, cerebral perfusion
- Immune system changes: chronic inflammation
- Nervous (peripheral and central) system effects:
 - Demyelination, axonal and microglia
 - Hippocampus: enzymes, proteins
 - Hormonal: cortisol, testosterone
- Skin: mast cell degranulation, allergic sensitivity

CAUSES

- Bluetooth, TETRA, Wifi
- CFLs, LEDs, transients
- Cordless DECT phones
- Mobile phones, masts
- Powerlines, transformers
- Smart meters, Fitbits

MECHANISMS

- Cilia. Hairs. Cryptochromes
- Demyelination. DNA signalling
- Genetic variants. Glial/synapses
- Magnetite. NALCN. Pineal gland
- Radical pair mech. Retina. SCN
- Voltage-gated channels. Fgf14

PATHWAYS (like some Ultrasound effects)

- Antioxidant glutathione. Metabolism
- GABA. Hormones: melatonin, thyroid
- Metal implants, dental amalgam, fluoride
- Oxidative stress (like ionising radiation)
- Protein expression: ERK, Hsp70, p53 etc.
- Signalling: Ca, CaSR, NMDA, T cells, TGF

ILLNESS AND FUNCTIONAL IMPAIRMENT FROM EHS

- Electrical Hypersensitivity (EHS), established since 1746, is an environmental systemic spectrum syndrome.
- EHS is caused by the patient's exposure to RFR/EMF.
- EHS makes people ill with a range of symptoms which vary as the condition and its causes change in severity.
- Symptoms are disabling, causing functional impairment under the Health & Safety 1974 and Equality 2010 Acts.

EHS SYNDROME: CLINICAL DIAGNOSIS

- Clinical history: cause/effect from exposure/symptoms.
- The absence of symptoms when the RFR/EMF source is removed (positive reverse provocation testing).
- Multiple biomarkers, but only a few may be elevated or suppressed, depending on the syndrome stage; GC-MS.
- Brain blood perfusion and 3d fMRI scans, where the potential benefits outweigh health risks of an MRI scan.

PREVALENCE IN UK 67m POPULATION

- 0.65%, 435,500 people: work restricted because of EHS
- 1.2%, 800,000 people: severe electrical hypersensitivity
- 3.6%, 2.4m people: moderate electrical sensitivity
- 100% subconsciously sensitive, 80% chronic inflammation

TREATMENT: AVOIDANCE OF RFR/EMF

- Avoid RFR: e.g. masts, mobiles, smart meters, Wifi
- Keep: 10m from mobiles in use, 100m from Wifi
- Live: 500m from masts, 600m from powerlines
- Protect sleep: e.g. military nets, shielded rooms.

NON-IONISING (RFR/EMF) and IONISING RADIATION

Both cause oxidative stress and cancer; sensitivity varies. 24 hours of mobile phone harms DNA like 1,600 X-rays. Both: primary non-thermal effects, thermal secondary. Both: hormetic (change low/high dose), no threshold.

RESEARCH INTO ES AND EHS

ES research started in 1730 at the Royal Society, London. Centres for research into ES and EHS include: ARTAC Paris, Breakspear Herts, EMC Dallas USA, DARPA Caltech USA, HUSM Lleida, CES Moscow, UC San Diego USA, Toronto WCH, JMU Virginia USA.

NATURAL RFR/EMF EFFECTS

All life in the Earth's biosphere is electrically sensitive to natural geomagnetic and global electrical circuit changes at levels far below most man-made electrosmog.

ICD-10 CODES

- ICD-10: W90.0 (RFR); W90.8 (ELF); Z58.4 (radiation).
- EHS, known since 1746, does not have an ICD-10 code.

ELECTROSENSITIVITY: KEY FACTS

MAINSTREAM

NON-THERMAL & THERMAL SCIENCE

- scientifically based proof, from evidence
- established long-term and short-term non-thermal and heating adverse effects, known since 1733
- protective: prevents ES symptoms, e.g. cancer, EHS
- protective of all wildlife in earth's biosphere
- mainstream, independent, unbiased: [Consensus 2021](#)

INTERNATIONAL PROTECTIVE SCIENTIFIC GUIDELINES

Bioinitiative 2012,
Building Biology (sleeping areas) 2015,
EUROPAEM 2016,
IGNIR 2018,
Seletun 2010

IMPARTIAL MAINSTREAM ORGANISATIONS USING ESTABLISHED SCIENTIFIC EVIDENCE

These organisations include experts on real ES.

- Bioinitiative Group <https://bioinitiative.org>
 EHT: Environmental Health Trust, USA <https://ehtrust.org>
 EMF Scientist: International EMF Scientist Appeal [link](#)
 EPA: Environmental Protection Agency, USA
 ES-UK: Electrosensitivity UK <https://www.es-uk.info>
 EUROPAEM: European Acad. for Environ. Medicine [link](#)
 IARC: International Agency for Research on Cancer [link](#)
 ICBE-EMF: International Commission on the Biological Effects of Electromagn. Fields (ICBE-EMF) icbe-emf.org
 ICEMS: Internat. Commission on EM Safety www.icems.eu
 IEMFA: International EMFs Alliance <https://www.iemfa.org>
 IGNIR: Internat. Guidelines on Non-I. Rad. <https://ignir.org>
 NTP: National Toxicology Program, USA [link](#)
 PHIRE: Physicians' Health Init Rad. & Envir. phiremedical.org

ARBITRARY, UNSCIENTIFIC THERMAL-ONLY 1953 MYTH

- arbitrary and unscientific claim: no proof, no evidence
- based on Schwan's invalidated short-term heating-only myth of 1953, confirmed as unscientific in 1957
- unprotective, allowing ES symptoms e.g. cancer, EHS
- unprotective of all wildlife in earth's biosphere
- used as a 'front' for the radiation industry cartel.

ARBITRARY, UNPROTECTIVE THERMAL GUIDELINES

FCC 1998, ICNIRP 2020

'FRONT', 'SHAM' AND SINGLE-VIEWPOINT GROUPS, UNPROVEN DENIALS, 'JUNK' OR FLAWED SCIENCE

Many are secret 'captured agencies' with no experts on EHS.
 DHSC: Depart. for Health & Social Care; agency: UKHSA
 - UKHSA: Health Secur. Ag.; under DHSC; advises Ofcom/DCMS
 - COMARE: Com.on Med.Aspects of Radiat. & the Envir.
 - AGNIR (1990-2017): Public Health England (PHE)'s Advisory Group on Non-Ionising Radiation, under DHSC
 FCC: Federal Communications Commission, USA
 GLORE: Global Coord. of Res. & Health Pol. on RF EMFs
 ITU: Internat. Telecommunications Union: UN agency
 SCHEER: Eur.Comm: Sci. Comm. on Health Env & Em Risk
 ICNIRP: Int. Com. on Non-Ioniz. Rad. Prot.: WHO agency
 WHO: World Health Organizat. EMF Project: UN agency
 WHO is subject to Int. Atomic Energy Agency (IAEA);
 IAEA is subject to Int. Comm. on Radiol. Prot.(ICRP)
 WHO/ICNIRP recognised ES risk to 2004 and from 2018.

WHO WRONG: CONFUSES EHS AND EPH

WHO Backgrounder 296 (2005) confuses two different conditions, (a) physiological EHS, known since 1746, and (b) psychological EPh (Electrophobia, IEI-EMF), a nocebo effect known since 1903. EPh's prior conditioning cannot apply to how children and unaware adults develop EHS.

Radio Frequency Radiation Guidelines							
	Background level	Non-thermal and Thermal			Thermal only		
		Long- and short-term, 4 - >24 hours			Short-term only, 6 - 30 minutes		
		Peak			Averaged		
		Scientific			Arbitrary, Unscientific		
	Safe for humans	Protective for most humans			Unprotective for humans		
	Safe for wildlife	Includes some wildlife			Excludes wildlife		
	Johansson et al. 1997	USSR 1935	Bioinitiative 2012	EUROPAEM, IGNIR 2016, 2018	USA Schwan 1953	USA, ICNIRP 1982, 1998	ICNIRP, WHO 2020
V/m	~ 0.0000002	6	0.03 - 0.05	≤ 0.002 - 0.2	194	61	≤ 123
uW/m ²	~ 0.0000000001	100,000	3 - 6	1 - 100	100,000,000	10,000,000	≤ 40,000,000
dbm	< -90	-1	-46 to -43*	≤ -70 to -31*	+ 29	+ 19	≤ + 25
W/kg	< 0.00002	Seletun 2010	0.0003	1980, 1984	0.08 whole body, 1.6/2.0 head, 4.0 limbs		

*The threshold for mobile phones (5G, 4G, 3G) is lower, at -100 dBm.

Further information: www.es-uk.info