

Time to end the 'Cover-up' of Microwave and EMF Harm

For 70 years the United States and other countries have seen officials cover up microwave and EMF harm, writes the Editor.

This denial of established scientific evidence of non-

thermal effects may have caused more harm to all forms of life on earth than almost any other conspiracy or scientific denial in history.

Paul Brodeur, who died aged 92 on 2nd August 2023, was 'the original microwave pioneer' according to Louis Slesin, one of the world's leading commentators on this issue. Brodeur wrote three books on this Cover-up.

The first was the groundbreaking 'The Zapping of America: Microwaves, Their Deadly Risk, and the Cover-up' in 1977.

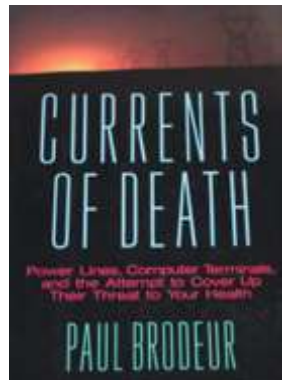
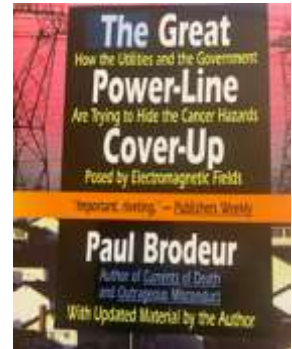
- Paul Brodeur: *The Zapping of America: Microwaves, Their Deadly Risk, and the Cover-up* (W.W. Norton & Co., New York, 1977, ISBN: 0393064271)
- Paul Brodeur: *Currents of Death: Power Lines, Computer Terminals, and the Attempt to Cover Up Their Threat to Your Health* (Simon & Schuster, 1989, ISBN: 0743213084)
- Paul Brodeur: *The Great Power-Line Cover-up: How the Utilities and the Government Are Trying to Hide the Cancer Hazard Posed by Electromagnetic Fields* (Little, Brown, 1993, ISBN: 0316109096)

The great 'Cover-up'

Helped and encouraged by Brodeur, Slesin founded 'Microwave News' in 1980.

Slesin shows that Brodeur has been proved correct:

- *Microwave radiation and power-frequency EMFs can lead to profound biological changes. The microwave-cancer connection, far from being fanciful, seems more than likely today.*
- *Beyond any reasonable doubt, there was, and continues to be, a cover-up. Powerful forces —initially the military-industrial complex, and now society as a whole— have insisted that the radiation cannot harm us except through heating.*



Brodeur on his 90th birthday
(Family photograph; Microwave News)
(Louis Slesin: "Paul Brodeur, Who Warned of Asbestos and EM Radiation Risks, Dies at 92" Microwave News, 20th August 2023; "Paul Brodeur: The Original Microwave Pioneer. Setting the Record Straight: A Personal Tribute" Microwave News. 8th October 2023)

Contents	page
ES news and Viewpoint by Peter Lloyd	2, 3
The Great Cover-up Conspiracy	4
DHSC: UKHSA's COMARE and EAHS: 'Conspiracy'	5
UK's Cover-up on RFR/EMFs: Richard Doll	6
Dr Cyril William Smith, 1930-2022	7

Scotland: Misinformation?	8
Helena Peck: Living with EHS	9
Baby, ES rash and 5G mast	10
Smart meters; 5G and EHS symptoms	12,13
Readers' Comments, Mobiles banned	15,16
Electrosensitivity: Key Facts	17

ES-UK NEWS

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

BM Box ES-UK, London, WC1N 3XX

Telephone: 0845 643 9748

enquirers@es-uk.info

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.

Trustees: Michael Bevington (chair)

Sarah Dacre, Brian Stein CBE

Dr Andrew Tresidder, Phil Watts

Medical Advisers

Dr Dietrich Klinghardt

Dr Erica Mallery-Blythe

Scientific Advisers

Dr Andrew Goldsworthy

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

Thank you

The charity's trustees are most grateful for gifts from all our supporters, however small or large. We aim to continue providing information and support for people harmed by RFR and EMFs.

Well done!

Congratulations to all those contacting their MPs, local councillors, the media, schools, universities, surgeries, hospitals, and occupational and environmental health officers about the difficulties of living with EHS amid the current extraordinarily high levels of RFR and EMF.



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

This animated video with voice-over by Science Animated is available on YouTube, 2 min.

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



ES SOCIAL 21ST SEPTEMBER 2023

Sarah Dacre, ES-UK Trustee, reports:

The 8th Annual ES Social took place midweek in September 2023, at a farm on the shores of Bewl Water in East Sussex. The location is well known for outdoor activities and visitors enjoy the woodland trails and good walking countryside.

The ES Social gave attendees the chance to meet old friends and to meet new people. As organisers, we hope that the annual ES Social gives many who may feel alone with the condition, the opportunity to meet new friends in a relaxed setting. There have been several deaths in the ES Community and many needed an update on how worsening health had impacted on both Tom and Rebecca earlier in 2023.



The highlight of the rural day out was the three-mile hike to the local pub, where we were able to sit outside in the pub garden. Graham was on hand to discuss any aspects of his useful 'Electrosensitivity – Tips for Healthier Living' document which has been available on the ES-UK web site since 2021.

If you would like to take responsibility for organising a local Social, please respond to

media@es-uk.info or post a note to the BM Box. You will need a safe site with suitable facilities, well away from urban sprawl, with camping or other suitable accommodation. You will need to ensure that the site is pylon free, WiMax and Phone mast free. We know that Ann from Leeds

organises a lunch in her home once or twice each year for between 5-8 and those who attend like the social element very much. Further, Hannah organises a camp-out in her Kentish woodland and a small group regularly attends who also attend the ES Social.

THE UNIFYING POWER OF VALUES

A personal viewpoint by Peter Lloyd

Any organisation, group or individual that functions at a peak level, needs to have a clear understanding of its values, and then act consistently with those values. But what are values exactly? Values are simply a set of beliefs about what is important in life – about what is considered right and wrong.

Some of the most admired, respected and influential people in our culture are those who take a stand for what they believe in, and who follow that up by living in accordance with those beliefs. It is this congruency – the alignment of actions with beliefs – that gives these individuals an undeniable strength.

The same is true when groups of people are united by a common set of values, and act en-masse in accordance with them: they become a powerful force that can reshape the perceptions of wider society, earning its understanding and respect in the process.

When you look a little deeper into value systems, not only are there values that we move towards, but also values that we move away from. Values such as love, integrity and passion are emotional states that we might actively seek out, whilst we will do our utmost to avoid feeling rejection, humiliation and depression.

So how do we elicit what our values actually are? We can do this in a methodical fashion by asking ourselves the following question, “What's most important/painful in life?”. Once answered, we can use our values as a personal compass to guide our decision-making process. This in turn leads to a more meaningful and purposeful existence, minimising the sense of conflict that arises from being pulled in differing directions.



How does this relate to those of us who are EHS? One of the biggest drawbacks to a community comprised of EHS people is that the very nature of the condition deprives us of easy access to both digital communications and group meetings. So it could be argued that the need for clear community values is even *greater* in those with EHS, and that by being cognisant of those values, we could act more cohesively at a community level accordingly. At the very least, a shared sense of purpose might be beneficial to all.



So what's most important/painful to us as EHS people? As a starting point, perhaps it might be helpful to ask ourselves what values we expect others (non-EHS people) to extend to us? On that basis, it would be hard to argue against the desire to be tolerated (subsequently allowing for understanding and then acceptance to ensue) and to be treated with compassion also. And maybe we might like for wider society to find sympathy with our plight on the grounds of inequality, and further, to avoid the temptation to succumb to the prevailing conceit: that we are mistaken about the causation of our EHS symptoms. But we can only expect that to happen if we live in accordance with these values ourselves.

Whether tolerance/compassion (towards values) and inequality/conceit (away from values) are deemed suitable community values, or not – any discussion as to their merits would at least force us to consider what our values actually are, or better, what they should be. And it's hard to find a downside in that.

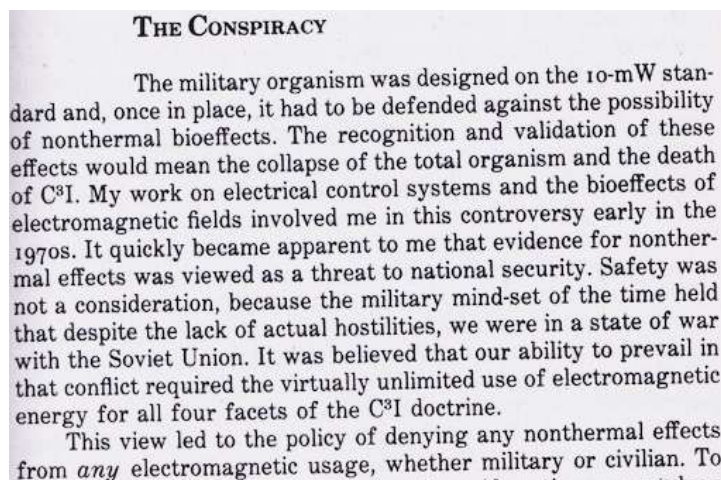
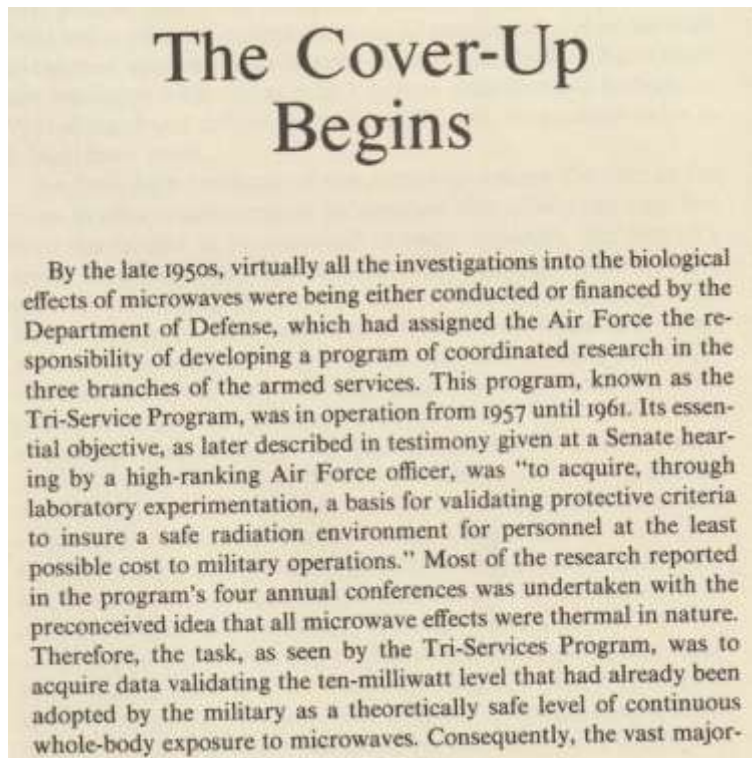
THE GREAT COVER-UP CONSPIRACY

Time to end 1950s heating-only 'Cover-up' and 'Conspiracy'
denying non-thermal adverse effects

By the Editor. See this Newsletter, pages 17-20, for further details and abbreviations.

The 'cover-up', as Brodeur called it in 1977 (*shown right*), and the 'conspiracy' or consistent 'policy of denying any non-thermal effects', as Robert Becker termed it in 1990 (*below*), derive from the U.S. military in the 1950s. Schwan, who was recruited by the U.S. Navy in 1947 through the secret Operation Paperclip after his work in Nazi Germany, proposed his invalidated thermal-only hypothesis in 1953, the same year in which non-thermal RF was shown to cause cancer.

The thermal myth aimed to save the military money by not requiring so much protection for its personnel. It also helped to hide its own research into developing microwave warfare. Dr Cyril W. Smith and Simon Best in 1989 (*bottom*) recorded how



the U.S. military 'damaged the health of its own personnel and citizens in its urge to protect its interests and to develop microwave and other Non-Ionising Radiation weapon systems'.

Non-thermal adverse symptoms from RF, other than cancer, were first shown in 1893, and EHS in Germany in 1932. In 1976 Allan Frey admonished those still denying non-thermal effects 'about the narrowness and rigidity of their thinking', while Brodeur noted how little they then knew about the 'interactions of RF energy with neural

function'. Similarly, the U.K.'s Central Electricity Generating Board until 1986 was guilty of 'scientific tunnel vision of the worst kind', according to Dr Cyril W. Smith.

Nevertheless, some 40% of the world's population now live under some form of non-thermal guidelines, at least for short-term exposure, and not ICNIRP's unscientific and unprotective thermal guidelines.

Publications illustrated, from top:

1. p.32, Paul Brodeur: *The Zapping of America: Microwaves, Their Deadly Risk, and the Cover-up*, (W.W. Norton & Co., 1977).
2. p.299, Becker RO: *Cross Currents: The Promise of Electromedicine, The Perils of Electropollution*. Jeremy P Tacher/Penguin. 1990 (2004 ed.)
3. p.209, Smith CW et al.: *Electromagnetic Man: Health and Hazard in the Electrical Environment* London: JM Dent & Sons, 1989.

artist. The history of research into electromagnetic field effects is no exception. The nature and progress of research in this area has been and continues to be strongly influenced by military interest and involvement. Considerable evidence has been amassed, much of it presented by Brodeur (1977), that the US military, in particular, has deceived committees, delayed safety standards, denigrated opponents and damaged the health of its own personnel and citizens in its urge to protect its interests and to develop microwave and other NIR weapon systems.

As evidence, both experimental and anecdotal, steadily accumulated after the Second World War and pointed to certain harmful effects on humans of exposure to specific levels of electromagnetic radiation, it is not surprising that the military began to take more than a passing interest in its use and potential. Indeed, through their classified research both Eastern and Western military establishments may well know a lot more about the harmful potential of MW radiation than one might prefer.

DHSC: UKHSA's COMARE and EAHS: 'conspiracy' or 'policy' of denial

The UK government still mistakenly follows the U.S. military cover-up and conspiracy instead of scientific rigour, honesty and openness. It insists that the Department of Health and Social Care (DHSC) follows ICNIRP and the DHSC uses its UK Health Security Agency (UKHSA) to advise ICNIRP's invalidated guidelines to other government departments, like the DCMS and its Ofcom. These still allow extraordinarily high levels of RF, despite RFR being a 2B cancer agent.



From 1990 to 2017 the UKHSA and its predecessors ran its AGNIR committee, a secretive single-viewpoint 'front', like ICNIRP, also holding Schwan's invalidated 1953 heating-only myth. AGNIR was disbanded after its 2012 report was shown to be massively unscientific.

COMARE: no voice for the people it harms

From 2017 the UKHSA made its COMARE committee 'responsible' for RFR/EMF. This is another secretive group which, like AGNIR, was established as a 'front' in 1985 after a childhood leukaemia cluster was found near the Windscale nuclear site at Sellafield in 1983 and the government wanted to go ahead with Dounreay.



COMARE once tried admitting observers to its meetings. However, it did not even allow them to attend all the discussions or see all its papers. It no longer opens all its meetings to any member of the public who wishes to attend.

The result is that in 2024 people in the UK harmed by the UKHSA's and COMARE's adoption of ICNIRP's unscientific and unprotective heating-only myth have no voice and are unheard.

COMARE's EAHS: no experts on EHS

The chair of COMARE's EMF and Health Subgroup (EAHS), established in 2022, is Frank de Vocht. He is an epidemiologist at the University of Bristol.



Neither he nor any one of the other six members apparently suffers EHS or are medical experts on real EHS. None was selected from among the 32 expert authors of the International Scientific Consensus on EHS of 2021 which affirmed that real EHS is a neuropathological disorder and different from a psychological nocebo response.



Also, none of EAHS' members is from the International Commission on the Biological Effects of EMF (ICBE-EMF). Its 'primary purpose is to make recommendations, based on the best peer-reviewed scientific research publications, that include, and go beyond establishing numerical exposure guidelines. We are dedicated to ensuring the protection of humans and other species from the harmful effects of non-ionizing radiation.' The ICBE-EMF thus aims to provide accurate evidence rather than the 'falsely promoted' acute heating hypothesis still used by ICNIRP and COMARE.

de Vocht co-authored a 2014 study which found a 10% reduction in female birth weight from EMF exposure, comparable to maternal smoking up to nine cigarettes per day. However, the study regarded the health significance as 'limited', apparently because few pregnant women live close to power lines with 'negligible' implications for possible risk reduction measures.

In November 2023 de Vocht was selected as a new commissioner at ICNIRP, the secretive single-viewpoint clique based in Germany. The new members will take over on 13th July 2024.



(de Vocht F et al, Bioelectromagnetics. 2014; "ICNIRP Revamp: Closer Ties to WHO EMF Project; Seven New Commissioners; Akimasa Hirata To Be New Leader" Microwave News, 11th December 2023)

UK's cover-up on RFR/EMFs: Richard Doll

Richard Doll was the first chair of AGNIR, EAHS' predecessor committee. AGNIR was abolished in 2017 after its published conclusions were shown to be invalid and unscientific.



Doll, famous for linking smoking and cancer in 1951, switched sides by 1955. He allegedly supported polluting industries on, for instance, the risk of cancer from Monsanto's Agent Orange, vinyl chloride, ionising radiation and non-ionising EMFs.

During the 1990s, Doll argued unscientifically in favour of high EMF exposures. He placed assumptions about costs and convenience above people's health. In 1992 Doll claimed that environmentalists represented 'an irrational ideology opposed to science, to industry and to progress', although he was being paid up to \$1,500 a day by Monsanto since 1979.

Doll wrong: no safe dose of IR and NIR

Doll's conclusion to his 1954 asbestos study was changed from 'insufficient data' to 'progressively less' risk in 1955. Doll withdrew his low-level ionising study in 1955 following pressure from the Atomic Energy Commission.

Doll then became the leading detractor of Alice Stewart's paper of 1956 on the harmful effects of low-level radiation exposure. However, subsequent evidence showed Stewart was right and Doll was wrong, and that there is no safe dose for ionising radiation, just as there is no safe dose for most man-made non-ionising radiation.

In 1956 Alice Stewart discovered childhood cancer from X-rays during pregnancy, through the Oxford Survey of Childhood Cancer. Doll's short-term study of 1960, which lacked a control group and was limited to a single cancer, found no adverse effect for pregnant women having X-rays. This response by 'low-level deniers' thus significantly retarded the safety of those exposed, allowing ante-natal X-rays to continue for nearly two decades. It took 40 years for safety guidelines and action. In fact, the adverse effects

of ionising radiation were established by 1899 and skin cancer in 1902. As with non-ionising non-thermal adverse effects, these low-level ionising effects were delayed by two or more years making them difficult to assess. They occurred at around 10-20 mGy, while recent studies show human gene induction at 1.2 mGy

(Ojima M et al., Radiat. Res. 2008).

Doll: detractor of Stewart

*'Veritas filia temporis' -
Truth is the Daughter of Time*

Doll's treatment of Stewart's 'unwelcome results' led to a refusal to examine the issue, and instead 'to dismiss someone's work, disregard it, to reduce the person's standing and cut off funding', as Jill Sutcliffe notes.

Doll was given a professorship and knighthood. Ironically, he had his name given to the building housing Oxford's Cancer Epidemiology Unit.



Only after Doll's detraction had abated a little, did Stewart's research become 'an accepted part of the scientific literature'. It could have been worthy of a Nobel Prize. In 1986 the Swedish Parliament awarded Stewart the Right Livelihood Award, for 'bringing to light in the face of official opposition the real dangers of low-level radiation'. In 1991 she received the Ramazzini Prize for Occupational and Environmental Medicine. In 1992 she was made an honorary member of the German Society for Radiation Protection.

In 1946 she became the first female fellow of the Royal College of Physicians aged under 40 and that year co-founded the British Journal of Industrial Medicine. After Doll's detraction of her 1956 paper she never received a UK national award. She was arguably the more outstanding and significant epidemiological cancer scientist with a greater international reputation.

(Sutcliffe J: "The truth will out: a reflection on the life and times of Alice Stewart" *Int J Radiat Biol.*, 2022)

DR CYRIL WILLIAM SMITH 1930-2022



Dr Cyril William Smith

(7th January 1930-4th April 2022)

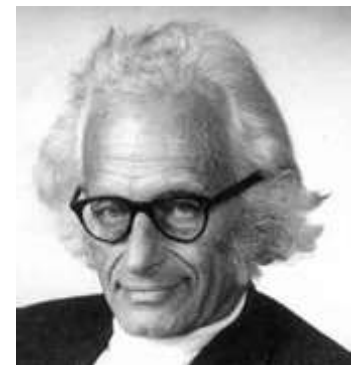
Cyril Smith BSc, PhD, DIC, CEng, FIET, CPhys, MInstP, MIPEM was one of the leading UK researchers into the biological effects of electromagnetic fields during the 1980s and 1990s.

He originated the term 'Electromagnetic Hypersensitivity'.

With Dr Jean Munro at the Breakspear Hospital, he helped develop the first accurate repeatable provocation tests for EHS in the 1980s.

From 1973, Cyril cooperated with Professor Herbert Frölich FRS until the latter's death in 1991, leading to the application of near-quantum and non-linear insights to living systems and coherence effects in water. They first identified the specific frequencies to which an individual was sensitive. They then reproduced the EMF exposure, proving that positive provocation tests of screened subjects could be repeated accurately.

Similar tests were used in 1991 at the Environmental Health Center, Texas, by Dr William Rea, who held the world's first professorship in environmental medicine at the University of Surrey in 1988. These achieved 100% success by screening for specific frequencies and rejecting 84% of subjects without consistent responses.



Professor Herbert Frölich FRS



From 1982 Cyril assisted diagnosis and therapy for electrosensitive patients at the Breakspear hospital in Hemel Hempstead, Hertfordshire, and continued diagnosing electrosensitive patients until shortly before his death.

In 1947 Cyril joined the home of radar at the Royal Radar Establishment, Malvern. From 1964 to 1989 he lectured at Salford University where in the early 1970s he started the first biomedical electronics undergraduate course in the UK.

After appearing in a 1978 BBC Horizon documentary, *The Vital Spark*, Cyril was contacted by residents of Fishpond, Dorset, who asked him to investigate reports of sensitivity to living under power cables. This was the year before Wertheimer and Leeper published their seminal study on childhood leukaemia and power cables. He spoke about Fishpond on the Channel 4 consumer programme *4 What It's Worth*.

Cyril wrote with Simon Best 'Electromagnetic Man: Health and Hazard in the Electrical Environment' published in 1989 and 1990 at 344 pages. It was awarded 'Book of the Year - 1990' prize by Lamberts and the *Journal of Alternative and Complementary Medicine*.



(Andrew Smith (son): Cyril Smith Obituary, *Guardian*, 13th July 2022;

Smith CW: "Electromagnetic and magnetic vector potential bio-information and water" *Homeopathy*, 2015)

SCOTLAND: MISINFORMATION?

Last five years have been 'torture'

Mr Bremner, 71, and his wife, 69, have lived at Gollanfield for 40 years. But the last five have been 'torture' due to a 'constant pulsating noise' which they can also feel through their bodies affecting them through disturbed sleep, fatigue, headaches and painful joints.

Mrs Bremner says she also experiences the noise in other locations, sometimes many miles away. 'As time went on it was keeping us awake. It's pinging through my body, like a stabbing pain, particularly my neck and ears. I've a computer I haven't used for about three years. My husband has an iPad but I don't like using that now. I don't have a mobile phone.'

She wants to raise awareness of the issue and hear from others affected. 'We are all now surrounded by modern technology.'



Mrs Bremner has been in touch with the charity Electrosensitivity UK (ES-UK). It was set up in 2003 and has grown steadily as growing numbers of people become sensitised to electromagnetic energy. It is in contact with about 1,000 people which, it says, is the 'tip of the iceberg', with about 4% of the UK said to have some electrosensitivity. Michael Bevington, chairman of the charity's trustees, said: 'Numbers continue to grow steadily, although it still takes many people a while to realise the cause of their symptoms. Increased use of wireless devices, including wifi, increased exposure during lockdown and working from home, with consequent established results, including increased anxiety among some children.' He said having spoken with Mrs Bremner he believes she and her husband may have electrosensitivity and discussed ways of alleviating symptoms. These include avoiding radiation, particularly from mobile phones, masts, wifi etc, and using meters to show least harmful areas. Some sufferers also use military-style silvered nets or protective clothing, to provide shielding.

Local councillor Glynis Campbell Sinclair visited the Bremners. She said: 'Unfortunately we were not able to identify a cause.' A Highland



Image Jason Hedges/DC Thomson

Council spokeswoman added: 'Environmental health officers have investigated this complaint. While EM radiation has been suggested as a possible source, this is not something that would fall within the remit of environmental health.'

RFR no longer environmental health?

In June 2023, the Scottish Government issued a statement on 5G. But ES-UK says studies on the effects of 5G masts showed people had electrosensitivity symptoms near 5G transmitters.

(John Ross: "'It's pinging through my body': Is modern technology making this woman and her husband ill?" Press and Journal, 15th August 2023)



Scottish Government's Statement on 5G:

The Scottish Government claims: 'In the UK and internationally, independent expert groups have examined the accumulated research evidence. The conclusions of these groups support the view that there is no convincing evidence that RF field exposures below international guideline levels cause health effects in either adults or children.'

[WHO LOST THE THOUSANDS OF SCIENTIFIC STUDIES SHOWING ADVERSE NON-THERMAL EFFECTS?]

Scottish government misinformation and cover-up

The mainstream

International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF) state that there is a considerable scientific literature showing convincing evidence of harm from RFR below ICNIRP's unscientific and unprotective heating-only guidelines - Ed.]



("5G and public health: position statement" Digital Directorate, Part of Business, industry and innovation: Statement outlining the Scottish Government position on 5G and health. 28th June 2023)

LIVING WITH EHS

Excerpts from an account by Helena Peck, aged 81:
'The alarm system was painful'

Four days after I moved house in September 2018 TalkTalk delivered me broadband which rendered me a shivering mess. They took it away, but not soon enough. My daughter has a friend whose son is an electrician, one who understands EHS and does not treat it with ridicule, and he removed from my house anything he considered would have a bad effect on me. The alarm system was painful and so was disconnected, as were the fluorescent lights, air extractors, electronic working of the garage doors and doorbell. I had to get rid of the radios although the simple wired TV was fine after Cathy, my Health Kinesiology practitioner, treated me. The aerial man refused to take away the previous occupant's dish aerial for satellite TV but a retired aerial man took it down and this eliminated the sensations it caused. Not so lucky with my gasman when the boiler needed renewing – he agreed to put it in the garage but I can only use it for instant hot water. So for heating I had a wood stove installed. Obviously I have no microwave oven and I don't use my ordinary oven as that has a fan heater. The smart meter in the house has been removed.

The effects of appliances in the neighbouring houses being switched on vary between a suffocating feeling, depression, IBS and sickness followed by a sweat coming on. If I collect this 'taser' from outside devices, I have to stand on an earthing mat or barefoot on the lawn. I also have earthing straps on my shoes. I get sound in my ears. The strength depends on the amount of electronics being used in the houses in the vicinity, mostly in the evening probably when they are at home using computers and TV. Passing under the wind turbines on the local main road makes me feel very sick.

'the microphone made me ill, sick and sweaty'

I had to stop reading the lesson in the church as the microphone made me ill, sick and

sweaty. I had to move away from the multi-coloured Christmas lights in church with eleven settings, which gave me a stomach-ache and filled me with electricity. Air conditioning in Minnesota gave me bad stomach-aches like those that happen with fluorescent lights, the Christmas lights and halogen lights.

I-Phones give me a bad stomach-ache and fill me with electricity. Wifi is all enveloping and intolerable. The few places I visit where it is installed I am allowed to turn it off as it would create 24 hours of more of misery, depression, brain fog and electricity. Satellite TV gives me stomach-ache.

Weekends are bad. I assume that it is the Rugby Club which is close by with floodlights or public address systems.



National Trust solar panels – disaster!

The National Trust visitors centre at Fountains Abbey has put solar panels on their shop – disaster! I visited the other day not realising about the solar panels and it was horrible, suffocating and gave me bad sweat. Never again. Some other solar panels which I regularly pass have never affected me in the past, but after experiencing the terrible effects of the National Trust solar panels these too then affected me badly.

I now can't visit my eldest daughter since she has solar panels on her house.

EHS is real. I have definitely ruled out hypochondria as suggested by a few people. I can go to places expecting to be tasered and I am not. Equally, I can go places knowing I won't be tasered, but I am tasered.

I think the high-tech companies should stop developing new devices and instead research how they can protect the population against the harm they produce.'

BABY, ES RASH AND 5G MAST

ES symptoms in new-born baby. Hospital irradiated by 5G

Excerpts adapted from an account sent to Arthur Firstenberg in the U.S.A.:

Baby Emiliano, my goddaughter's baby brother, was born in excellent health at the Duke Medical Center in spring 2023. When I returned 12 hours later, he had been moved to a different room and I became concerned because I myself developed dizziness, tremor, and headache within about 5 minutes of visiting his room.

I checked my RF meter because these are microwave sickness symptoms which I get when



the RF levels are high. The measurements hovered between 11 and 15 milliwatts per square meter! [11,000 to 15,000 $\mu\text{W}/\text{m}^2 = 2$ to 2.4 V/m] Personally I need the RF levels

below about 0.006 milliwatts per square meter [6 $\mu\text{W}/\text{m}^2 = 0.05$ V/m], so I can't imagine what it was doing to an infant who was only 12 hours old. When I opened the curtains I noticed there was a 5G pole outside on the street; also straight out of his hospital window you could see a rooftop cell array on top of another hospital building across a small green quad. This other building was shorter, which meant that the roof panels lined up horizontally nearer to the level of the baby's window.

By day 3, Emiliano had developed jaundice and soon was put in the Neonatal Intensive Care Unit, which also had very high radiation levels. His jaundice numbers continued to climb, and he developed a rash. I developed a rash too, a butterfly rash across my face and the baby had a full-body rash on one side of his body.

I told the nurse that I had a 5G rash, just like the baby. She had no clue what I was talking

about. She explained that lots of babies get this rash, but they don't know what causes it.

After several more days in the Duke Main NICU his condition continued to worsen. I was forcing myself to visit him in the hospital, despite my own rash returning along with the dizziness, tremor and headache. These would go away within 12-24 hours of leaving the hospital.

After many more days in the NICU, being irradiated 24/7, the baby developed a staph infection near his tiny fingernail. The infection began spreading down his finger and they were talking about amputating his finger. By then, I had been working for days to persuade his mother to have him transferred to Duke Regional, a smaller hospital in the northern part of Durham, and finally she asked to transfer him.

My reason is that I knew that Regional had much lower RF levels based on her prior visit there during early contractions when she had stayed overnight and background radiation levels in the room were between 0.003 and 0.01 [3 $\mu\text{W}/\text{m}^2 = 0.03$ V/m, and 10 $\mu\text{W}/\text{m}^2 = 0.06$ V/m]. Durham Regional is in a less affluent part of town, with lower-tech overall. They transferred the baby by helicopter and the baby's health improved immediately.

Within 48 hours of being transferred away from the high radiation at Duke Medical, the rash improved dramatically, the jaundice scores declined, and the staph infection began to improve. At Duke Regional there were no visible 5G poles or roof arrays outside the baby's windows. The baby recovered fully there and is home now.

(Arthur Firstenberg: "Babies are being killed by hospitals" Cellular Phone Task Force Newsletter, 21st September 2023)



NOT EHS, BUT CAN FEEL ES SYMPTOMS

A non-EHS neurosurgeon can feel ES symptoms near mobiles and masts:

- Parkinsonian gait stopped by removing cordless phone
- thyroid cancer; x3 miscarriage increase from everyday exposure
- tip of the iceberg: 300-500% increase in neurological deaths
- EMF inventory for assessing neurological risk
- cumulative effect: dangers of Bluetooth, electric cars
- RFR: the new tobacco and asbestos
- regulatory agencies don't put public health interests first
- people duped into believing devices are 'safe'
- blindness and lack of critical thinking about technology
- heating of plastic gel-filled SAM not a realistic model: 'criminal'
- iPhone 11 up to 3.8 W/kg



Dr Hillel Baldwin, a retired U.S. neurosurgeon in Arizona, recounts how his wife became gravely ill over five years ago. His wife is much better since they rid their house of wireless devices emitting probably carcinogenic microwave radiation, but she is still EHS today.

He now works closely with the Environmental Health Trust to help inform citizens, physicians and politicians of the dangers of EMFs.

Based on numerous independent data-driven studies, Dr Baldwin and many other scientists are convinced that this manmade radiation we use daily in homes, schools, businesses and even hospitals is partly responsible for the recent epidemic rise in the incidence of several central nervous system cancers, neurological diseases and neurodegenerative disorders.

He recommends unplugging your Wi-Fi and other wireless devices for a few hours or a few days: many people who do see an immediate improvement in their health and wellbeing.

(La Maison du 21e siècle André Fauteux: "Neurosurgeon warns patients and parents about wireless radiation dangers", YouTube, 22nd September 2023, 65 min. [Link](#))

PRACTICAL PROBLEMS

Excerpts from a report of 16th May 2023 by Nenske. She is 66 years old and has lived with her husband Jos for four years in an apartment in the middle of Schoonhoven in the Netherlands above a health centre.

'After the EMF measurement in April, three weeks ago, we have been busy implementing the practical adjustments suggested. For example, WiFi is on for a maximum of 10 minutes per day to receive the newspaper and messages. We check our mobile phones a few times a day without WiFi and then the phones immediately go back to airplane mode. Jos now mainly uses his wired PC instead of his iPad and mobile phone. A landline has been installed so that I can call without WiFi. Sonos wireless speakers remain out.

I notice relief. There is less tension in my body, which seems to decrease every day. I am less cramped. My energy no longer drops so much during the afternoon. It seems like a start. I

have also noticed results when turning off switches on the circuit board in the meter cupboard at night when it comes to sleeping.



The tinnitus, the high-pitched ringing in my ears, headaches and the tingling in my legs are still there every day. In the evenings I have muscle twitches in my legs. Sometimes there are those unexpected, nasty twinges in the legs and arms, but they seem to be subsiding now. I still suffer from tingling hands at night. My legs have recently started to feel better, less stiff and tight, and the tingling sensations are less intense.'

("Experience story of EMF measurement and learning process"
SchooneveldAdvies, 2023)

'SMART' METERS: BRITISH GAS SCARE TACTICS FRENCH COURT ORDERS REMOVAL

Claims of 'unsafe' meters used as a scare tactic: emails 'misleading and irresponsible'

British Gas is being investigated for sending 'marketing' emails to customers warning that their old meters urgently need replacing because they may catch fire. One panicked customer was told it was just a new advertising strategy to persuade customers to switch to 'smart' energy meters and he need not worry. A complaint has been lodged by another customer with the Advertising Standards Authority (ASA), claiming that British Gas's email was 'misleading and irresponsible'. The email is the latest tactic used by suppliers to persuade customers to change from analogue to wireless 'smart' meters.



The government made it a requirement for suppliers to install a set number of 'smart' meters each year, but customers do not have to accept one. Nobody can force you to have one. A source at one of the big suppliers said that firms were increasingly desperate to persuade people to switch to 'smart' meters and were now resorting to scare tactics. Thousands of emails and letters are issued each day, warning that old-style meters have become obsolete, may catch fire or are unsafe.

The Energy Ombudsman said consumers could refuse a replacement and suppliers 'should not give the impression that an analogue meter must be replaced'.

In 2022, The Times reported (Ali Hussain: Energy smart meter scare tactics" 26th June 2022) how David Mills, who lives near Bungay in Suffolk, received a letter from Eon saying his analogue electricity meter was no longer working 'safely'. When questioned, Eon said its meters were not unsafe. British Gas said it was unaware of any meters catching fire and that the age of a meter did not necessarily mean there would be a serious problem. It denied its emails were a marketing strategy.

(Ali Hussain: "'Your old meter may catch fire': British Gas investigated over marketing: Customer complains after being told his analogue system was a fire risk" The Times, 22nd September 2023)

French court orders removal of 'smart' meter: public service duty to protect users

On 28th November 2023 three judges in an Appeal Court in Lyons ruled that Joseph Cascina from Saint-André-le-Puy (Loire) had won his court battle to have his 'smart' meter removed.



He suffered headaches due to EHS triggered by the Linky 'smart' meter and hearing a 'constant whistling' in his head after its installation. He said: 'Life had become hell. When I left my home, the whistling stopped within an hour. And at my in-laws' house, where there is no Linky 'smart' meter, I didn't hear it either. But when I got back home, within a quarter of an hour, the sound started again.'

Mr Cascina, who had reported no symptoms prior to the Linky 'smart' meter's installation, asked Enedis to remove it. When the company refused, he took them to court in January 2023. The court in Saint-Etienne ruled that the meter should be removed based on the European Court of Justice's 'Principle of Precaution'. This states that 'in case of doubt as to the cause or extent of harm to individuals, institutions can require protective measures without waiting for the reality of the risks to be fully established'.

Enedis replaced Mr Cascina's Linky meter with an older model, but appealed. However on 28th November 2023 the Court of Appeal in Lyon upheld the original ruling. Denis Nicolier, spokesperson of the Stop Linky 5G collective, said 'Enedis, which has a public service mission, must protect users in the context of the Principle of Precaution.' An estimated 5% of the population, or 3.5million people in France could be affected by EHS, according to ANSES in 2018. (Richard Henshell: "Court orders removal of man's Linky electricity meter" Connexion, 27th December 2023; [link](#))

MICHELE RIVASAI, 1953-2023

**Michèle Rivasi,
1953 –2023**

'We are sorry to hear that Michèle Rivasi died suddenly at the age of 70 due to a heart attack on 29th November 2023.

She served as a French member of the European Parliament in the Greens/European Free Alliance group since 2009. She is highly praised by the people that have had the opportunity to work with her. Europeans for Safe Connections will always remember her courageous fight for acceptance of health effects of EMFs and her passionate advocacy for recognition of EHS.

She wanted to open up society for people with EHS to participate. She was the founder of the Association Zones Blanches with the aim to find safe places to live for people with EHS.

She also made an effort to change the view of the European Commission, whose interest in introducing 5G has always been merely an economic one without considering the adverse effects on health and environment. To compensate for this, she was one of the initiators of the EP reports on the environmental and health effects of EMFs in the light of the roll-out



of 5G. Furthermore, she initiated a report that clarified the bias and lack of independence of ICNIRP, the organisation that provides the EMF exposure guidelines.

She made a strong appeal to the European Commission, already now having plans for 6G and an Internet of Everything, to never again introduce a new technology without a full impact assessment on health and the environment.

May her messages echo on! Her inspiration, integrity and political stand will be deeply missed. Our thoughts go to all her family and her dedicated staff in the Parliament.



(Europeans for Safe Connections, 30th November 2023)

Europeans for Safe Connections

Online Newsletters are available at:
<https://esc-info.eu/en/newsletters/>

5G CAUSES EHS ILL HEALTH

An excellent series of six studies from Sweden published in 2023 showed Microwave Syndrome symptoms from 5G base stations: ICNIRP limits were totally unprotective.

- Hardell L et al.: "Case Report: A 52-Year Healthy Woman Developed Severe Microwave Syndrome Shortly After Installation of a 5G Base Station Close to Her Apartment" (Ann Clin Med Case Rep., 2023)
- Hardell L and Nilsson M: "Case Report: The Microwave Syndrome after Installation of 5G Emphasizes the Need for Protection from Radiofrequency Radiation" (Ann Case Report, 2023)
- Nilsson M et al.: "A 49-Year-Old Man Developed Severe Microwave Syndrome after Activation of 5G Base Station 20 Meters from his Apartment" (J Community Med Public Health, 2023)
- Nilsson M et al.: "Case Report: Both Parents and their Three Children Developed Symptoms of the Microwave Syndrome while on Holiday near a 5G Tower" (Ann Clin Med Case Rep., 2023)
- 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)
- Nilsson M et al.: "Radiofrequency radiation caused the microwave syndrome in a family living close to the base stations" (Journal of Cancer Science and Clinical Therapeutics, 2023)



UK government ignores 5G health science

The 5G case studies themselves, published this year, deal with acute health effects, i.e., symptoms which come on very quickly after exposure. All studies describe how previously healthy people very quickly developed symptoms of microwave syndrome after 5G phone masts were installed above or opposite their accommodation at distances of between five and 125 metres. Most of the symptoms disappeared within days of them moving to less irradiated accommodation, but reappeared when they returned.

Their symptoms included headaches, tinnitus, fatigue, insomnia, emotional distress, skin disorders, joint and muscle pain, cardiovascular abnormalities and blood pressure variability. Participants were asked to fill in questionnaires about their health before the 5G masts had been installed, after installation and after they had moved away to less irradiated accommodation. The results are produced in tables in the studies and show that some symptoms were unbearable while near the 5G mast and even more so for the female participants.

The results put a big question mark over the UK Government's statement: 'there should be no consequences for public health'.

Has our Government ignored the worldwide appeals and consensus statements made by independent scientists and doctors, calling for a revision of safety guidelines and a halt to the rollout of 5G on the basis of research on the much lower levels of pre-5G emissions? These include 433 scientists who have signed the [EU 5G appeal](#), 259 scientists from 44 nations



who have signed the international [EMF scientist appeal](#) and 164 scientists and medical doctors as well as 95 non-governmental organisations who have signed [the EMF Call](#). There is also the compelling [2020 Consensus Statement](#) of U.K. and international, medical

and scientific experts on the health effects of non-ionising radiation, signed by organisations representing 3,500 medical doctors throughout the world, initiated by the Physicians' Health Initiative for Radiation and Environment.

ICNIRP's guidelines, accepted in the U.K. and parts of Europe, only allow for thermal effects (i.e., assume that health will only be damaged if body tissue is heated). These limits do not allow for longer exposure or chronic effects and ignore studies showing health damage below the thermal threshold. The International Commission on the Biological Effects of Electromagnetic Fields [has concluded](#) that 'the assumptions underlying ICNIRP's exposure limits are invalid and continue to present a public health harm'. In addition, ICNIRP has been strongly [criticised](#) for having ties to the telecommunications industry.

(Gillian Jamieson: "Experts Raise Public Health Fears About Microwave Syndrome From 5G Masts" Daily Sceptic, 15th November 2023)

Stamford, Connecticut, U.S.A. rejects 5G on health grounds

Stamford's Board of Representatives have rejected a federally regulated plan to install 5G infrastructure on city-owned utility poles, citing environmental health concerns. 'If there's the smallest of chances — even the smallest — that this may cause harm, I don't see any reason why we should be passing this forward,' Rep. Jeffrey Stella, D-9, said. 'I'm just not willing to take a gamble with my four kids living in this city and my constituents' children living in this city without some type of concrete consensus. I don't understand why our country can't get our act together on this issue. It's not like we don't have the intellect and the scientific capability to do this, but every time you throw money into the issue, all of a sudden, health takes a backseat,' Rep. Sean Boeger, D-15, said. Rep. Jennifer Matheny, D-19, said 'I'm not ready to give up my health for a clear phone call.'

(Jared Weber: "Stamford reps reject 5G agreement, citing safety worries: 'This may cause harm'" Stamford Advocate, 12th November 2023)



READERS' COMMENTS

(a) Fridge freezer and my eyes

From Ray:

For a number of years when I woke up in the night with something which felt like grit in my eyes, I used to blame it on the street lights. One night when I woke up with the pain, I noticed that I could hear the fridge freezer running just the other side of the wall, and I was about 3 feet from the wall. I put aluminium foil on the wall: no more 'grit' feeling in the eyes. It also reduced the itchy eyes during the day.

(b) Wi-Fi and glaucoma

From Ray:

In 2009 I nearly lost my sight. My optician told me I had glaucoma and to see my doctor, who authorised a hospital appointment. At the eye clinic I could not read the eye chart. They gave me pin-hole glasses which made a slight improvement. I was told I had glaucoma and that I needed an operation urgently. In the meantime I found that Wi-Fi was affecting my sight. When I shielded myself from Wi-Fi, I got my sight back to normal. I met a professor who worked for the M.O.D and on radiation like Wi-Fi used as a weapon for warfare under the name High Frequency Electromagnetic Radiation. It is known to affect eyes and hearing and cause many health problems. Modern technology companies changed it to Wi-Fi because it sounded safer, which it is not. It's never been tested. Of course, there are many other reasons for sight loss that are not connected with EMFs. I went ahead with the operation on my right eye. It made no difference. I cancelled the operation on my left eye and I've had very few problems since. I had an eye test a few weeks ago and I was told that I had 20/20 sight.

Off to sleep! Wireless industry lobbyists should try EHS for themselves

'While walking round shops and shopping centres several times recently, I've suddenly yawned and felt very sleepy. Then, afterwards, I've noticed I happen to have been walking

towards someone speaking on their mobile phone but previously hidden out of sight, perhaps 10-15 feet away. It's a pity that the wireless industry lobbyists still denying real EHS don't get EHS for themselves and experience what day-to-day life with EHS is actually like.'



5G unsafe

'5G is definitely not safe, especially if you are electrosensitive or have an electrosensitive pet. I can vouch for this since I had two small terriers that normally sleep in my study about 50 metres from a lamp post with 5G antennas in the luminaire. These were installed about a year ago and, after a period of intermittent testing, have just gone live. When the masts were running, both dogs gave up sleeping in their comfortable beds and slept on the hard floor behind the door where, according to my Acousticom, the signal was considerably reduced.'



During that time, one dog developed cataracts in both eyes and is almost blind and the other, although her eyes seemed to be OK, developed what seemed to be the dog equivalent of Alzheimer's disease and couldn't find her way around the house, in which she had lived for over eight years, and had to be put down. Perhaps this is what we humans can look forward to if we continue to install 5G. To me, the effects can be best summarised as premature aging, which nobody wants.'

'Feeling' cancer from mobiles and Wifi: why aren't they banned?

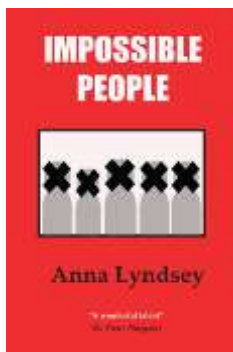
'I've had two bouts of cancer. In both cases I've felt RFR from other people's mobiles – at up to 8m away – and Wifi hurting the areas of my body affected by the cancers. Why haven't mobile phones and Wifi been banned long ago?'

Longwave Radio 4

'I wrote to the BBC about the closure of the longwave analogue transmitter. Living in Ireland and unable to use digital devices (I have a portable battery analogue radio) the only way I can get British news is on longwave R4. I can't watch digital TV and I am at local library to write this to you now. I have not yet received a reply from the BBC.'

'Impossible People'

Anna Lyndsey, author of the acclaimed memoir *Girl in the Dark* (Bloomsbury 2015), has published her next book *Impossible People*, a novel about electrosensitivity.



Filters and fire danger

Mary reports:

'I was sitting in my house when I smelt burning, but could not immediately find the source. A few moments later an evil smelling fine white mist appeared above the floor. To my horror a Stetzer filter, about ten years old, was issuing the smoke, from a hole in its side. I pulled the main switch to the house and it stopped smoking but remained red hot for a while. The fuse did not trip and neither did any circuit breaker. I have removed all the other filters from their sockets. If I had not been in the room there would have been a fire in the house. It should have been impossible for this to happen. Clearly the filters can be dangerous.'



MOBILES BANNED IN SCHOOLS

Health risks:

Russia bans mobile phones in schools

Dr. Oleg A. Grigoriev, Chairman of the Russian National Committee on Non-Ionizing Radiation Protection, reported that to reduce the risk to children's health, there are new restrictions on mobile phones for children in Russia. On 6th December 2023 mobile phones were banned in classes in Russian schools in the Education Law in the Russian Parliament – State Duma. The ban was established for the first time in the mandatory Sanitary Regulations from January 2021. This results from work from the team of Prof. V. Kuchma in the summer of 2020.

(Dr. Oleg A. Grigoriev, Chairman, Russian National Committee on Non-Ionizing Radiation Protection, 6th December 2023)

Mobiles to be banned in schools in England

'New guidance from the Department for Education will back head teachers in banning mobile phone use throughout the school day, including at break times, to tackle disruptive behaviour and online bullying while boosting attention during lessons. If schools fail to implement the new guidance, the government will consider legislating in the future to make the guidance statutory.'

(Department for Education and The Rt Hon Gillian Keegan MP: Press release: "Mobile phone use to be banned in schools in England" 2nd October 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 subconsciously to magnetic and electric fields.
- Some people are more consciously RF/EMF sensitive or perceptive than others.
- Some people become hyper-sensitive and are severely disabled by RF/EMF.

Electrosensitivity is also called:

- EMF 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.

SOLUTION: removal of man-made RF/EMF exposures causing intolerance

HISTORY: SCIENCE

1733: ES: non-thermal adverse symptoms, EMF
 1746: EHS: hypersensitivity specific symptoms, EMF
 1893: ES: specific non-thermal adverse symptoms, RFR
 1926: RFR non-thermal lethal effects on some mice
 1930: Non-thermal effects primary, heating secondary
 1932: EHS: hypersensitivity specific symptoms, RFR
 1945: Military use of non-thermal RFR in warfare
 1953: Cancer, an ES symptom, from non-thermal RFR
 1974: RF causes calcium flux; 1981: melatonin reduced
 1991: ES shown in provocation tests, screened subjects
 1995: RF causes DNA breaks, which can lead to cancer
 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: Scientific Consensus by 32 Experts on real EHS
 2022: Ecological study confirms proof of EHS
 2023: Health studies: EHS symptoms near 5G masts

HISTORY: REGULATORY

1935: 1st RFR guidelines USSR: non-thermal & thermal
 1957: US 'conspiracy' imposing Schwan's thermal myth
 1968: US law: public must be protected from RF/EMF
 1974: Health & Safety at Work Act protects ES workers
 1990s: Insurers: RFR high risk only, like cancer asbestos
 2001: WHO/IARC classifies ELF 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: WHO/IARC classifies RFR 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
 2017: US city stops phone mast after cancer cluster
 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 after ES symptoms harm
 2022: UK court: removal of Wifi/phones for EHS person
 2022: US: \$187,300 for RFR injuries to Havana officials

ELECTROSENSITIVITY: KEY FACTS

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

Radio Frequency Radiation: Adverse Biological Effects NB: Specific frequencies not listed See: Arthur Firstenberg, Some Biological Effects of Radio Waves , 2022; Powerwatch .		$\mu\text{W}/\text{m}^2$
Cosmic Background Level, ~1,800 MHz		~0.0000000001
Genetic alterations - E.Coli		0.000000001
Natural Background Level, all frequencies		0.000001
Human sensitivity		~0.000001
	Altered EEG	0.00001
	Immune effects - mice	0.0001
International Scientific Limits, Bionitiative, Building Biology, EUROPAEM, IGNIR, Seletun, etc.		≥ 0.1
Adverse Biological Effects	Conditioned 'avoidance' reflex - rats	0.1
	Premature aging - pine needles	0.24
	Smaller growth rings - trees	0.24
	100 yards from home Wifi	4
	Disturbed sleep, abnormal blood pressure, digestive problems, weakness, pain, anxiety	20
	Growth inhibited - beans	27
	100 yards from a mobile phone, peak power	40
	1 mile from a mobile phone mast	100 - 1,000
	Disturbed metabolism, structural changes: liver, spleen, testes and brain - rats, rabbits	600
	Slowed heart, changed EEG - rabbits	600
	Irreversible infertility - mice	1,680
	Childhood leukaemia, <12 km from TV mast	2,000
	Impaired motor function, memory and attention; altered sex ratio (fewer boys)	3,000
	Blood-brain barrier impaired by mobile phones	4,000
	Altered calcium flux in brain tissue	6,000
	Tinnitus, buzzing and other auditory effects	20,000
	Leukaemia, skin melanoma and bladder cancer, near TV and FM mast	50,000
	Head and chest exposure from a laptop on a table	80,000
	Metal redistributed in the lungs, brain, heart, liver, kidney, muscles, spleen, bones, skin	100,000
	Head and chest exposure from a mobile phone on a table	1,500,000
Exposure to genitals from a laptop on the lap	17,000,000	
Exposure to brain from a mobile phone against the brain	20,000,000	
ICNIRP: Arbitrary, unscientific, unprotective, thermal limits, averaged 6 or 30 min.		$\leq 40,000,000$

ABBREVIATIONS

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

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
 - e.g. brain, breast, prostate, skin, thyroid
- 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

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

FUNCTIONAL IMPAIRMENT AND EHS SYMPTOMS

- Electrical Hypersensitivity (EHS), established since 1746, is an environmental systemic spectrum syndrome.
- EHS is caused by the person's exposure to RFR/EMF.
- EHS disables people 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 RF/EMF toxicity; 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

SCIENTIFIC MAINSTREAM CONSENSUS NON-THERMAL & THERMAL EVIDENCE

- All scientific weight of evidence; not an arbitrary claim
- Established long-term and short-term effects
- Established non-thermal and thermal adverse effects
- All ES symptoms recognised as harm, e.g. cancer, EHS
- EMF/RFR harm to wildlife and biosphere recognised
- 32 international independent experts: [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 independent groups include experts on real ES
and accept the NTP and WHO/IARC cancer classifications.*

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

UNSCIENTIFIC THERMAL-ONLY CLAIM

MYTH-BASED 'CONSPIRACY' & MISINFORMATION

- Ongoing 'conspiracy' from 1957 to impose Schwan's unscientific short-term heating-only myth of 1953
- Arbitrary: no evidence 1°C rise causes e.g. cancer, EHS
- Unprotective against ES symptoms e.g. cancer, EHS
- Unprotective of wildlife and the earth's biosphere
- 'Cherry-picking' by biased industry cartel 'fronts'

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
and ignore the NTP and WHO/IARC cancer classifications.*

DHSC: Depart. for Health & Social Care; follows ICNIRP
- UKHSA: UK Health Security Agency; advises Ofcom/DCMS
- COMARE: Com.on Med.Aspects of Radiat. & the Envir.
- EMF and Health Subgroup (EAHS, 2022-); AGNIR (1990-
2017) Pub. Health Engl. (PHE)'s Advis.Gp on NI Rad.
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.

		International Radio Frequency Radiation Guidelines and Reference Levels							
		Non-thermal and Thermal effects			Thermal effects only				
Electric Field	Background level	Long-Term			[Not Long-Term] [WHO 2003: duration needed]				
		and Short-Term			only Short-Term (6 - 30 minutes)				
		Peak			Averaged				
		Scientific			Arbitrary, Unscientific				
		Safe for humans		Protective for most humans			Unprotective for humans, especially sensitives		
		Safe for wildlife		Includes some wildlife			Excludes wildlife		
[Red = Thermal Metric]	Johansson et al.	USSR	Bioinitiative	EUROPAEM, IGNIR	USA Schwan	USA, ICNIRP	ICNIRP, WHO		
	1997	1935	2012	2016, 2018	1953	1982, 1998	2020**		
V/m	~ 0.00002	6	0.03 - 0.05	≤ 0.002 - 0.2 *	194	61	≤ 123		
μW/m²	~ 0.000001	100,000	3 to 6	0.1 to 100	100,000,000	10,000,000	≤ 40,000,000		
dbm	< - 90	+ 20	- 26 to - 23	≤ - 40 to - 10	+ 50	+ 40	≤ + 46		
W/kg	(SAR) < 0.00002	Seletun (2010) 0.0003			1980,1984: 0.08 whole body; 1.6/2.0 head; 4.0 limbs				

* Wifi: 0.02 V/m (20 mV/m) = 0.03% ICNIRP. **Excludes Implants. †WHO does not hold jurisdiction over national health work. Further information: www.es-uk.info