ES UK
for all people sensitised by electro-magnetic fields and radiation

ElectroSensitivity UK
NEWS
SUMMER 2016 VOL.14, NO.2

New UK regulations for employees' EM exposure

The Guide by the Health and Safety Executive (HSE) to the UK's new regulations on electromagnetic exposure, which came into force on 1 July 2016, explains how employers must make a risk assessment and give "special consideration" to "employees at particular risk" below the ICNIRP's heating limits. Employees who have EHS, including teachers and lecturers, should be able to benefit from this, but others, like pupils and students, also need similar protection. See inside for further details.

Illness from EM exposures now accepted

This Newsletter includes several different ways in which it is now accepted that non-thermal electromagnetic exposure can make people ill:
UK's HSE Guide to EM Regulations includes non-thermal affects, such as vertigo and nausea, and recognises dangers for pregnant women.
UK newspaper and radio reports on Diana Boughton, Dan Reddington and Richard Kimberley show how people harmed by electromagnetic exposure try to survive.
A radio campaign by ES-UK in April 2016 introduced listeners to the dangers of electromagnetic exposure and the ways in which people with EHS try to avoid these dangers.
USA government 'definitive' NTP study shows cancer from mobile phones.

PHE still follows ICNIRP's clique

See inside for how Public Health England still follows the pro-wireless clique of ICNIRP activists in denying damage to health from electromagnetic exposure.

ICNIRP still in crisis; WHO EMF chief refuses to comment

The one-sided minority viewpoint of ICNIRP's activist clique denies it the scientific credentials to work with the World Health Organization, as explained inside. Meanwhile Dr E. van Deventer, head of the WHO's EMF Project, notorious for its support of the wireless industry, refused to address a question asked by Mona Nilsson at a recent conference in Sweden. This was about the orthodox majority viewpoint on EM dangers, as represented by the International EMF Scientist appeal to both the UN general secretary and WHO general director by over 200 scientists.

Pro-wireless censorship

See inside for how pro-wireless cliques of activists try to censor the science over health damage from electromagnetic exposure in Australia, Finland, Sweden, the UK and USA.

INTERNATIONAL COMMISSION ON NON-IONIZING RADIATION PROTECTION
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Contents

ES-UK NEWS

ES-UK radio campaign: new survey generates national interest

In April 2016 ES-UK commissioned the Relations Group to generate a national survey covering 2,000 people of attitudes in the UK to Electrosensitivity. It revealed that 86% had never heard of Electrosensitivity, while a third slept with their mobile on near the bed at night. Two trustees, Dr Andrew Tresidder and Michael Bevington, conducted some ten radio interviews, both live and recorded, aimed at local and regional radio stations across the UK. There were some excellent and sympathetic interviewers clearly fascinated by a new topic, with some people with Electrosensitivity interviewed as well. The broadcasts reached potentially over two million listeners and led to some positive feedback with further openings in the press and on radio to highlight this new survey and the difficulties people with Electrosensitivity are facing. Thanks especially to the generous donors who helped fund this worthwhile information campaign, which built on the campaign sending information leaflets to all NHS surgeries last year. Trustees are now considering other approaches, such as posters and adverts.

UK Health Radio: Electrosensitivity article

There is an excellent article on Electrosensitivity by Toni Turner in the 37th edition (May/June 2016) of UK Health Radio's e-magazine, Health Triangle, pages 12-14 (free registration). Called 'Electrosensitivity' the article starts with the problems Lynn Attwood faced and the help she received from ES-UK. It explains how the UK government, as once with smoking and lead in petrol, is lagging behind the majority science which now accepts Electrosensitivity and other non-thermal effects. It quotes Dr Andrew Tresidder, an ES-UK trustee, who said that 'A number of my patients have symptoms and illnesses that have been caused by exposure to electromagnetic fields." Lynn warns that she is just one of the canaries in the coal mine. The cumulative effect is coming your way soon."

ES on the radio: Dr Tresidder: six minutes' heating, a single photon of light?

On 9th May Dr Andrew Tresidder featured on BBC-Radio-Somerset's Phone-in with Ben McGrail. Paul Bates from Combe St Nicholas related his experience of headaches growing in frequency and severity over two years before Dr Tresidder correctly guessed that the problem was a WiFi router in the bedroom. Once the WiFi was switched off, the headaches disappeared within four days. Dr Tresidder also explained how safety always lags behind new inventions, whether seat-belts long after cars were invented, or the recognition of damage from smoking or asbestos. He explained how Public Health England follows a private German industry group (ICNIRP) which sets limits to prevent heating above one degree over a total of six minutes, whereas the eye can detect a single photon of light at much lower levels, where the human body reacts to information and not heating.

ES-UK and government

Trustees of ES-UK seek to keep PHE and government informed on the rapid development of science as regards EHS. Submissions have been made to a variety of consultations, including the Tailored Review of PHE and the UK's UN Human Rights consultation.

Thanks to MPs

ES-UK is grateful to those MPs who raise issues about the health effects of electromagnetic exposure. Even though PHE and other departments often continue to ignore the many studies showing dangers, it is good that they are reminded of the health difficulties faced by a growing numbers of people.

New selection of EHS studies: WHO confusion

A new selection of 200 studies on EHS has been posted on the ES-UK website. It shows how the Nocebo effect is irrelevant to real EHS, although the outdated WHO Backgrounder 296 still confuses the two different conditions of EHS and Electrophobia.

WiFi: Friend of Foe?

This was the title of a conference run by Stuart Deeks EMF Aware Sussex on 4 June at the Brighton Steiner School. Speakers were Dr Erica Mallery-Blythe, medical adviser to ES-UK, Brian Stein CBE, trustee of ES-UK, and Brett West.

Trustees at a meeting in July. From left: Brian Stein, Phil Watts, Sarah Dacre, Andrew Tresidder, Michael Bevington

ES-UK Christmas cards

Help promote the challenges of electrosensitivity! We are aiming to sell a minimum of 100 packs of cards this year to help fund the Charity. Please do help us achieve this target.
Photograph gifted to ES-UK by Philip Davis, a generous supporter of the Charity, taken at Watendlath, Cumbria.
Text inside: "Wishing you a Merry Christmas and a Happy New Year"
Order by 1st October 2016.
Cards are finished size A6 (148x105mm) with quality 350gm card and white envelope.
Sold in packs of 10:
1 pack - £7.00
2 packs - £10.00
3 packs - £14.00
4 packs - £18.00
5 packs - £22.00
Christmas Packs will be sent to you by 2nd class post within the UK before the 15th November. Late orders will be accepted if you do not need cards before this date.

Please make your cheques payable to ES-UK and send your order before 1st October to:
BM Box ES-UK
London WC1N 3XX
Or you can donate via Paypal on the website: www.es-uk.info and email the number and type of packs required and your name and address to media@es-uk.info.
All profits go to ES-UK.
Printing is part funded by Gordon Flavell.
We also have blank 'Swan' gift cards, useful for general notelets and birthday cards at similar rates.

UK NEWS

LightAware

We need to talk about light!
LightAware is a new charity, which aims to raise awareness about health problems related to new forms of lighting, and to stimulate investigation and discussion about how artificial lighting affects human health.
Lighting technology has changed dramatically in recent years with the development of new 'low energy' lights and the ban on incandescent light bulbs. But many people experience pain and ill health when exposed to new forms of lighting. Some with pre-existing health issues find their conditions exacerbated, including migraine, electro-sensitivity and skin conditions. Many people with no previous health issues also experience problems under new forms of lighting, from severe eye pain, headaches, skin burning and rashes to anxiety, edginess or a sensation of discomfort or 'wrongness' that's hard to locate.

It's not yet fully understood why new lighting causes such a diverse range of health problems, but high-frequency flicker, high levels of UV and electromagnetic radiation are all potential issues. Senior medics are expressing concern about the effect of new lighting on eyes, skin, circadian rhythm and nervous system, but there are still many questions unanswered.

LightAware believes the issue needs much greater scrutiny by medics, politicians and the media. We seek to raise awareness of this unreported issue and bring together a wide range of professionals from relevant areas such as lighting technology, neurology, dermatology, ophthalmology, architecture, psychology and more. We need a conversation about light, nationally and internationally. It's too important to be changed so drastically without due consideration and real understanding.

The spread of new forms of lighting has resulted in the social exclusion of light-sensitive people, who are unable to access many places of employment, recreation, education and healthcare. The problem is exacerbated by a lack of awareness and information. We want to enable access to civic life by encouraging service providers and businesses to become 'LightAware': knowing what type of lighting is in place, listening to people's lighting needs and creating a plan to accommodate them.

LightAware aims to become a clear and comprehensive source of information about this under-reported issue. The organisation will be a resource for light-sensitive people and for businesses, services and organisations seeking to be fully inclusive.
We believe no one should have to experience pain and suffering just to light their homes and live their lives.
We welcome advice on ES issues. We share with ES sufferers the issues of communicating the nature of the condition, and getting across that we are not ill, but the problem is

the new technology that makes us ill. See www.lightaware.org for our sample web page, or write to us at LightAware, 21 West Port, Linlithgow, EH49 7AY.
LightAware's charitable aims are:
1. To raise awareness about the effects of artificial lighting on human health and wellbeing.
2. To stimulate discussion and investigation into the effects of artificial lighting on human health and wellbeing.
3. The promotion of equality and diversity through encouraging provision of access to civic life for those excluded by sensitivity to artificial lighting.

PHIRE

Dr Erica Mallery Blythe, a medical adviser to ES-UK, has founded a new group, PHIRE (Physicians' Health Initiative for Radiation and Environment). Its website went live on 1 May 2016. It is supported some distinguished scientists involved with harm from electromagnetic exposure. It seeks to raise awareness of the dangers of EM exposure.

Leeds University: Disability law hub

"The University of Leeds is set to be a leader in the field of disability law with the launch of a Disability Law Hub. With more than a billion disabled people worldwide facing possible discrimination and exclusion, the new hub will be dedicated to research on disability law, as well as offering a wide range of teaching expertise at undergraduate, master's and doctoral levels. The hub, one of the largest groups of disability law scholars in the world, will be headed by Professor Anna Lawson and will comprise nine legal academics and several PhD researchers." (Frances Gibb: "Legal roundup: University of Leeds launches disability law hub" The Times of London, 19 May 2016)

EM dangers from Driverless Vehicles

Andrew Jones MP (Parliamentary Under-Secretary, Department for Transport), 09 May 2016: "United Nations Economic Commission for Europe Regulation No 10 seeks to limit the maximum emission of electromagnetic radiation from vehicles. Recognising the rapid changes in technology in new vehicles, the relevant UN-ECE technical committee has established a task force to consider the implications of new technologies such as those used by driverless vehicles. The Department is participating in the work of the task force."

Concern about our exposure to increasing levels of Wi-Fi

A letter published in Ethical Consumer (Issue 160, May/ June 2016) by Guy Wood, Haverfordwest, headed "Electrosmog blues":
"I wonder why there is not more concern about our exposure to increasing levels of Wi-Fi. This (microwave) radiation is, after all, classified by the WHO as a potential (2B) carcinogen, and the frequency is also linked to, inter alia, cardiovascular diseases, male infertility and behavioural problems. I know of four studies that link this frequency with impaired cognition, and two with impaired memory. I ask the Ethical Consumer to consider producing an up-to-date informational piece on these devices. Some old-fashioned investigative journalism might be needed in order to shine a light on the obvious vested interests, and on potential conflicts of interest, especially in relation to bodies tasked with regulation."

Smart meters not needed

"A transition to an intelligent electricity grid in Europe can take place without smart meters, industry players have said, in comments that will embarrass the European Commission, which pushed a Europe-wide plan to roll out smart meters years ago. There are other more efficient ways than smart meters to help develop intelligent power grids, said industry delegates at the annual convention of Europe's electricity association Eurelectric, held in Vilnius last week." (Elza Holmstedt Pell: "Smart meters 'not needed' after all for European power grid" EurActiv.com, 16 June 2016)

UK minister avoids blame: "I'm sorry. We knew there was a problem … We knew it caused disease. But we ducked the difficult decisions and we did nothing."

George Osborne, the chancellor of the exchequer, told parliament: "I am not prepared to look back at my time here in this parliament, doing this job and say to my children's generation: "I'm sorry, we knew there was a problem with sugary drinks. We knew it caused disease. But we ducked the difficult decisions and we did nothing." Britain joins France, Belgium, Hungary and Mexico which have imposed some form of tax on drinks with added sugar, while Scandinavian countries have levied similar taxes, with varying degrees of success, for many years. (Michael Holden, Sarah Young: "UPDATE 2-Britain's surprise tax on sugary drinks delights health campaigners" Reuters, 16 March 2016)

ES NEWS

EHS before microwaves discovered in the US Moscow embassy

Phil Watts explains how the evidence refutes the Nocebo effect or psychological interpretation of EHS, still claimed by the Department of Health: "The assessment of the cause of EHS by PHE and others, that it's all in the mind or from the power of suggestion, makes people think they are being affected by microwave radiation. The incident, at the American Embassy in Moscow, was well documented, and properly evaluated it dispels such junk science. The events leading up to the discovery of the transmitter are as follows. The Russian Boy Scouts association presented the American Ambassador with a wooden Friendship plaque, which was hung in the Ambassador's office. Hidden inside the plaque was a transmitter with no power source attached to it. Instead it was powered by microwave energy beamed from outside. The Americans did not know this. It was only after the Ambassador and 17 other staff complained of ill health effects while in the Embassy, that they started to investigate the cause of the problem. The staff had become EHS, sensitive to the microwave signals beamed at the Embassy. The Americans found a microwave signal beamed directly at the Embassy, from a distance of 300m, with a field strength of 7.25 Volts/metre. They were forced to use screening materials to protect staff. Once the screens were in place, the symptoms decreased. So clearly the psychological proponents of EHS have to concede that in this case the illness preceded the discovery of the cause, not, as they declare, illness only after discovering the microwaves."

Marion Bartoli: "Severe electro-sensitivity"

The Daily Telegraph, like most other newspapers, reported that the former tennis star Marion Bartoli, who won Wimbledon in 2013, very sadly now suffers from extreme chemical sensitivity and "severe electro-sensitivity". She explained her devastating condition on the ITV programme 'This Morning' on 7 July (Ben Rumsby: "Wimbledon 2016: Marion Bartoli admits to fearing for her life after blaming weight loss on mystery virus" 7 July 2016).

The Times censored Bartoli's "electro-sensitivity"?

The printed edition of The Times and the earlier electronic edition of the article ("Doctors baffled by bug that stops me eating, says emaciated Bartoli", July 8 2016) included the sentence: "The retired player said that she was having bad reactions if she touched electrical equipment, such as mobile phones." This sentence was later removed. In the ITV interview she mentioned her chemical and electrical allergy several times, and said she had to use gloves for her mobile phone and could not use it for more than five minutes at a time.

Virtual reality headsets still induce nausea

Some users of virtual reality (VR) headsets have reported feeling nauseous and woozy. Oculus and Sony both posted health and safety warnings outside their booths at the Games Developers Conference in San Francisco, cautioning attendees trying the Rift and PlayStation VR headsets that they may feel motion sickness, nausea, disorientation and blurred vision. Those effects were felt by many attendees. 'After a morning's worth of different Rift games, I felt disorientated, a touch nauseous and distinctly headachey,' wrote Keza MacDonald on the gaming site Kotaku; 'After five hours, I felt like I needed a lie-down in a dark room.' The low-latency VR headsets from Oculus, HTC and Sony are intended to right the nausea-inducing wrongs of their VR predecessors from 20 years ago, but many users still report feeling woozy after using souped-up systems, such as the Oculus Rift. Evan Suma, an assistant professor who studies VR at the University of Southern California said: 'The challenge is that people's sensitivity to motion and simulator sickness varies wildly.' (Sarah Griffiths: "Beware the perils of 'Oculus face': VR headset leaves embarrassing red marks and can cause wearers to feel 'seasick'" Daily Mail, 31 March 2016)

Virtual reality headset has 1 kHz magnetometer

Oculus Rift includes an Adjacent Reality Tracker (ART) which features a magnetometer (to measure the earth's magnetic field), a gyroscope and an accelerometer, all of which combine to track the Rift across all three dimensions. The original ART worked at 250 times a second (250 Hz), but in the Oculus it works at 1000 Hz, allowing tracking of very small head movements with a latency of less than 50 milliseconds. These chips are located to one side of the Head Mounted Screen, close to the left temple. [Motion sickness is the most obvious explanation for VR nausea, but magnetic fields at 1000 Hz (= 1 kHz) are particularly bio-active and known to cause nausea health effects in some people. – Ed.] (David Nield: "How Oculus Rift works: Everything you need to know about the VR sensation" Wareable, 29 March 2016)

Dangers of Fitbit Surge which uses a 2B cancer agent

Some people have reported feeling as ill in the presence of someone with Fitbit as in WiFi. It is said a Fitbit can emit up to 0.8 V/m, against a biological limit of about 0.006 V/m. From the details: Sample rate for GPS is 1 Hz. Surge syncs automatically and wirelessly to tablets, computers and 150+ leading iOS, Android and Windows smartphones using Bluetooth 4.0 wireless technology. Syncing range: 6 metres/20 feet.

Dangers of 4G's LTE: changes brain

LTE signals were planned in 2004 and were used first in Sweden in 2009. It has data transfers which are bigger and faster.

"The motivation of this study is to evaluate the possible alteration of regional resting state brain activity induced by the acute radiofrequency electromagnetic field (RF-EMF) exposure (30min) of Long Term Evolution (LTE) signal … The study provided the evidences that 30min LTE RF-EMF exposure modulated the spontaneous low frequency fluctuations in some brain regions." (Lv B et al, Clin Neurophysiol. 2014).

"Exposure to LTE EMF reduced the spectral power and the interhemispheric coherence in the alpha and beta bands of the frontal and temporal brain regions." (Yang L et al, Clin EEG Neurosci. 2016)

BBC gives children 2B cancer 'micro:bit'

"Harrogate Grammar School is one of the first to hand out the BBC microbit to its year seven students. The micro:bit is a pocket-sized codeable computer with motion detection, a built-in compass and bluetooth technology." ("School one of first in micro:bit move" Harrogate Advertiser, 12 May 2016) [Bluetooth is radio frequency radiation and thus a 2B cancer agent. It uses 2.45GHz and was developed by Ericsson in 1994, but it does not seem to have been fully tested for biological safety – Ed.]

EHS: OBJECTIVE DIAGNOSIS, FUNCTIONAL IMPAIRMENT

Prof Belpomme: "Objective diagnosis of EHS"; "EHS is not a psychiatric illness"

"A battery of tests is enough to diagnose hypersensitivity to electromagnetic waves. The results of a study conducted by Professor Belpomme have just been published in a scientific journal. He answers our questions. For several years, Professor Dominique Belpomme, originally an oncologist, has been interested in the phenomenon of intolerance to electromagnetic fields (cell phones, wifi etc.) and sensitivity to multiple chemicals, two syndromes which have many common points. His latest study, whose results have just been published in the journal Reviews on Environmental Health, December 2015, reveals abnormalities in blood and urine. Diagnosis is based on a battery of tests. A treatment can be offered.

Health Magazine: Can we now make an objective diagnosis of EHS?

Prof. Belpomme: Yes, that is what we are doing with the patients who come to us for consultation. I will sign no medical certificate without knowing the results of tests that we put in place. Clinical examination is not enough. We use blood and urine tests and brain pulsed Doppler ultrasound showing abnormal blood flow in the brain. These tests are routinely offered in Canada and parts of the United States. In France, they are not available in all laboratories and especially for the brain pulsed Doppler; we have only one functional machine and it is located in Paris.

Health Magazine: Do the results you publish provide insight into the mechanism of the disease?

Prof. Belpomme: Yes, there is an inflammatory process that exists in the brain: neuro-inflammation induced by electromagnetic fields. This is not a psychiatric or psychosomatic illness. This neuro-inflammation

releases various elements, including increased histamine in 40% of cases. There is also a stress mechanism, oxidation, identified through a biological marker, high nitrotyrosine in 28% of cases. But the phenomenon is probably even more complex with other possible markers.

Health Magazine: What are the hopes of treatment for patients?
Prof. Belpomme: With the identification of these markers, we were able to establish a treatment, anti-histamine H1 antagonists in people who have increased histamine and antioxidants when nitrotyrosine is too high. For re-vascularization of the brain, we call on ginkgo biloba and fermented papaya. We cannot talk about healing, but these treatments can reduce the intensity of symptoms. Six or seven times out of ten, there is a marked improvement with the resumption of work possible. Electrosensitive people nevertheless remain very vulnerable to electromagnetic fields and the need to avoid them as much as possible.

Health Magazine: Are these sick people now taken seriously by the medical profession?
Prof. Belpomme: Yes, today, 30% of patients are referred to us by physicians, including psychiatrists. The medical profession begins to move. We have a list of about a thousand doctors who sent or took care of patients and they themselves complete claims for the recognition of disability. (Sylvie Dellus: “Pr Belpomme : ‘L’électrosensibilité n’est pas une maladie psychiatrique’”, Santé Magazine, 11 January 2016, trans.)

EHS as a functional impairment: the environment is sick, not the person

Prof. Olle Johansson, associate professor, The Experimental Dermatology Unit
Department of Neuroscience, Karolinska Institute, Stockholm, writes: “As a Swede I cannot sign this since it would turn citizens into patients (cf. the 1999/2000 Swedish Action Plan for Persons with Impairments (“Den nationella handlingplanen för handikappolitiken – Från patient till medborgare”). The last part of this national Action Plan carriers a very important sentence: “Från patient till medborgare” = “From patient to citizen”.)

The Swedish approach to electro-hypersensitivity is to view it as a functional impairment, thus focusing on the environment as the culprit (which is the general definition, including the UN one, of functional impairments). This provides persons with this impairment a maximal legal protection, it gives them the right to get accessibility measures for free, as well as governmental subsidies and municipality economic support, and to provide them with special Ombudsmen (at the municipality, the EU, and the UN level, respectively), the right and economic means to form disability organizations and allow these to be part of national and international counterparts, all with the simple and single aim to allow persons with the functional impairment electro-hypersensitivity to live an equal life in a society based on equality. They are not seen as patients, they do not have an overriding medical diagnosis, but the ‘patient’ is only the environment - inferior and potentially toxic. This is very much like the French (!) Toulouse impairment tribunal which last year recognized that the plaintiff’s (Marine Richard’s) doctor’s evidence was ‘’irrefutable’, when he said symptoms go away when RF exposure ceases.

This does not mean that a subjective symptom of a functionally impaired can not be treated by a physician, as well as get sick-leave from their workplace as well as economic compensation, and already in the year 2000 such symptoms were identified in the Internal Code of Diagnoses, version 10 (ICD-10; R68.8/now W90), and have been since. But the underlying cause still remains only the environment.

Thus, ‘functional impairment’ and ‘medical condition’ are not mutually exclusive. They are different things.”

ES AND COMPUTERS ETC

Advice on computers, TVs, cars and solar panels

Theo writes: “If you are ES and using a computer there seems to me to be some really bad advice about. My advice is to get a 12V DC fan-less SSD ‘Thin Client’ or ‘Mini PC’ direct from China for around £100 (2GHz 4GB ram + Windows). The power supply is extremely important also. You must get a ‘Linear Mag’ power supply, sometimes called a regulated power supply with no fazed switching or micro-chip controller. This power supply will ensure no radio wave dirt getting into the computer box. Test it with a radio on AM. There will be a full magnetic field but only at the mag amp. This should be as far away from your work station as possible. Test your present computer hard drive for RF dirt. If you test a SSD memory it does none of that. Test a DC fan for dirt too. They are very dirty, much worse than AC. These 12V DC boxes do make radio dirt but because of their very low power consumption, based on mobile phone technology, it is as good as you can get. I shield mine with a sheet of aluminium foil and put a cake metal mesh over it too. They use so little electricity that they don’t get hot.

The next problem is mouse and keyboard. Test a wired keyboard with your radio; it can be as filthy as a plasma TV. You need to decide what is going to cause you more of a problem, the AM radiowaves or 2.4 GHz microwaves from a wireless mouse. I prefer the wireless mouse and keyboard.

I have tested a large number of desktop and laptop computers for electric and magnetic fields and dirty radio emissions. I think laptops should be banned. You are more often than not immersed in all three fields usually with a live electric field feeding it right into your body.(A number of computer manufacturers have recently been reformed to avoid liability after out of court settlements related to laptop health issues).

Half the body’s food goes into the body’s production and distribution of electricity through iron channels. This must be compromised and corrupted by invasive electrical forces. The body uses both AC and DC in nervous system functions. Remaining outside these fields is quite possible but not without changing the conventional way your computer is set up.

Most importantly check your monitor. Use a radio to see how far the field comes. This varies for different monitors and does not seem to be a function of brand or price. Get one that uses 12V DC. This is very difficult but is worth the effort. You can use the same power supply linear mag amp. This avoids the pulsed wave regulation that is so extremely dirty being done inside the monitor. Monitors do make a lot of radio waves. Do not sit in these radio waves. I use a cheap radio £3 from Ebay and never sit inside the field. Some web sites use small print and it can be a pain to have to set up big print options, but you need to maintain distance all the time.

Our friendly doctors who are so insistent there is no danger from EMR choose to use ‘Medical Monitors’ which are expensive but low radiation. They obviously don’t want to be exposed to ‘harmless’ radiation, even if it is expensive. There is a new development in China of E-ink monitors rather like the tablet readers. They are LCD liquid Crystal Display. They still have not separated the electronics to a box to be placed at a distance though. (www.dasung.com.cn)

My advice for TVs follows this logic too. Monitors are much less radio dirty than TVs. Use a 12v DC monitor with a TV box (connected so as to be as as far away as possible) and this will cut your exposure dramatically.

Cars are also a big problem for me. I cannot use petrol as the high voltages make so much radio muck. I have to use the old fashioned diesels. Not HDi. Test your vehicle with a radio. The muck coming out is intense. Mostly from the alternator. Testing the driving well with a Gauss meter is also worth doing. The foot-well can be totally clean. Lots of Fords are. Audis seem to be the worst but again each model is different. I love my Peugeot. You can run without an alternator for hundreds of miles no problems. I always carry spare deep cycle batteries. These can be charged with solar panels. This can make your car a very clean day out instead of very dirty.

Solar panels are the dirtiest things I have come across in the UK. They are just large radio transmitters. 100 feet in the UK typically makes more radiation than 250 000 feet in France. They specially lowered electrical standards (and USA) to allow for these dirty panels in the UK. It is the cheap pulsed phase modulators that make this radio filth. Most of the installations I have tested have been live with electrical fields in the UK. This is disgusting, not least because the people most heavily targeted by sales teams are the old and hence due to de-myelination of old age the most vulnerable. It is quite possible to buy a charge controller that makes no dirt. French systems put no dirt into the grid that I can find. The French health service monitor and can intervene with full powers to do what they deem necessary if a neighbor is making too much dirty electricity in their home and it is entering yours. The worst offenders are Plasma TVs and Nass Drives I think. Plasma TVs have been banned and are no longer produced but no one has been warned of the dangers of the exposures that have caused them to be banned.

Please if anyone can point me towards clean battery charging technology I would love to hear from you. You can come and see my zero radio wave cave in France if you want. Lent to me free by the Mare. 60 thousand people have cave houses around here. Electrosensibly as the French say."

"Less EMF and less RF computer! Headache free!"

Posted by Sarah Rachel on EMF Refugee, 20 March 2016: The Intel NUC computer kit is a low powered computer. The only one from which I have no symptoms; I have tried 20 computers, and returned 3 computers. I bought the DCCP847DYE, the hard drive, memory card and Windows 8, and brought them to Geek Squad and they installed it for me, and removed (crushed) the small LED light in the button (LED lights give me symptoms). I bought an external keyboard and roll ball mouse. I got a monitor of choice, which is an old Apple monitor, but a small TV screen can hook up to it (neither have LED lights in them; get the monitor that has only LCD, no LED because sometimes they can have both). We got a USB hub and adaptor to connect to the monitor. The Intel Nuc is no WiFi, Bluetooth, or Infrared so we run hardwired cable for internet. It is advertised as a low powered computer so it does not have interference. It is a desktop but has small laptop parts, and is the size of a wallet.

How to turn off a printer WiFi transmitter

From Dr Donald Hillman: For a HP Officejet 7500A Wide Width Wireless Printer: Turn the printer on and the Main Menu will appear. Use the arrow on the right of the screen to scroll to the next screen. From the 2nd Menu, choose "Setup." From the Setup Menu, choose "Network." From the Wireless Menu, choose "Wireless Radio." From the Wireless Radio Menu, choose "Off".
Other printers may have different menus. After choosing Network, you may have to turn "Wireless" to Off and "Wireless Direct" to Off.

Dangers of WiFi devices which "view inside the building"

From Alasdair Philips, director of Powerwatch UK: "Many printers default to wireless "on" and don't switch off when you don't connect to them wirelessly. Maybe they just pick up neighbouring WiFi routers and stay active in case they send them something – if so, that is quite ridiculous. I have an HP printer but it keeps re-enabling its WiFi every time it downloads an update from HP. There are now very effective passive wireless radar imaging systems that rely on DECT cordless phone and WiFi signals to covertly image people inside buildings and to ensure that these external "view inside the building" passive radar systems usually work well. I have seen two systems demonstrated and they work remarkably effectively as long as you have at least one, and preferably two active microwave sources inside the building. I believe that that is probably why almost all home-based WiFi and DECT systems do not use transmit amplitude control to minimize the RF transmitted. The bigger the signal, the better the imaging."

READERS' COMMENTS

Is there a law contradicting the Equality Act?

I recently met a church buildings manager who also had a degree in electronics. He said that even though he would like to turn off the 'hearing loop' in the ceiling of his church which is designed to help the hearing-impaired and uses Radio Frequency (RF) signals in the process, in order to help me with electro-sensitivity when I visit, he claimed he was unable to by law. Apparently when a place is being used by the public the hearing loop must be turned on. Does the law need to be changed to accommodate electro-sensitives when there are no hearing-impaired people actually attending a particular event?

Glasses to protect from phone masts for motorway driving

In the Readers' Comments of the Newsletter I noticed mention of Anne Silk who was working on mesh glasses that would reflect RF radiation. I had a problem with becoming unusually tired and irritable after driving on motorways even though I was wearing protective clothing from head to foot but I wore my ordinary prescription glasses. I realised that the radiation was probably entering my skull via my eye sockets. I contacted Anne and she was able to help with RF reflecting lenses which have worked very well when driving. They have solved my problem of being affected by mobile phone masts along the motorways.

Please switch off!

I work in an office with plenty of signs asking for mobiles to be switched off or onto airplane mode. Most people know about my intolerance and always keep their mobiles off. When a colleague called in for chat and sat down about five feet away, I soon felt as if my head was swimming so much that I would topple over. Eventually, rather embarrassed, I asked him if just possibly he had left his phone on. He apologised and reached into his pocket to switch it off. Immediately I returned to normal.

Some EHS still using mobiles?

A comment on www.norad4u.com blog on 4 April 2016: "How come EHS people are still using their cell phones and wireless devices? As an EHS person that knows that the cellphones and wireless devices emit lots of RF radiation, and that RF exposure is a big contributor to EHS (makes you feel bad), I find it hard to understand why EHS people are still using them. I have talked to people who left their house, who got into a camper van, who live in a tent, but they still use their cell phones and wireless devices. I feel it is my obligation to say that stop using cellphones and wireless devices is the first stage of coping with EHS. If you continue to use them, your condition will most likely not improve and you will not be able to get control of the situation."

'Green Space' health effects – just what the doctor ordered

I was recently able to spend a week in a 'green' place with little or no mobile phone signals and no WiFi. It was bliss. No sudden pains, headaches, muscle problems, forgetfulness etc. Even the floater in my eye was less of a nuisance – not surprising since it appeared when I experienced an electrical overload. It was rather a shock to return to my home in polluted England and experience the usual EHS symptoms again. I can see why doctors insist that the first requirement for people with EHS is to get away from the polluting electrosmog.

Mobiles and cancer?

I was very sad to see an obituary of Sarah Corp, the Channel 4 foreign affairs news producer, who died aged 41 from lung cancer, although she never smoked, but “much of her time was spent attached to two mobile phones – one clamped to each ear – as she communicated with fixers, translators and television crew” (Times, 14 May 2016).

Do cordless phones kill more people than WiFi and mobile phones?

Cordless phones are particularly lethal. They have become notorious for their constant radiation which can damage people who live in or near a flat or house with these devices. An elderly relative was given a cordless phone and a healthy neighbour in the next flat suddenly died six weeks later for no apparent reason. Why didn’t Bell Laboratories test them for safety properly when they invented them in 1965, or AT & T and Carterfone when they were allowed from 1968, and patented in 1977? Are the manufacturers liable for the many deaths and illnesses which the radiation from these devices can cause?

The worst moment in my life

By Lynn Attwood (age 55)

I lay floating in the hot salt water bath,
head back in the water staring up at the ceiling.
Salty tears meet the bath water.
I’m begging God to let me live.
I feel close to death.
The crushing pain in my head is exhausting.
My hearing is fading.
My eyesight is fading.
My energy is fading.
My body functions are fading.
My memory is fading.
I feel like I am disappearing.
This is the tenth night of the disappearing act.

Ten days ago I thought I had a handle on it-this invisible force.
I really thought I knew my limits.
I’d been so careful.
There in the meeting room I felt a searing pain in my head.
The crushing in the temples increased over the next two days.
Take note of your body’s early warning system.
If your nose spots or gushes with blood everyday.
If the will to do those simple jobs become Mount Everest.
If crushing headaches are normal for you.
If nausea and dizziness are normal.
It tricked me good and proper.
But, I’m one of the luckier ones.
I got informed-but sometimes it still tricks me.
I’m one of the ‘Canaries in the coal mine’.
The cumulative effect is coming your way soon.

NEW UK EM EXPOSURE REGULATIONS

People with EHS and the UK's new EM exposure Regulations

The UK's new Electromagnetic Employer Regulations came into effect on July 1 2016. As interpreted by the HSE Guidance, writes the Editor, they appear deliberately worded to allow for EHS, who are 'employees at particular risk'.

The sequence of action is as follows.

1. An employee at particular risk informs the employer.
2. The employer carries out a risk assessment.
3. The employer must give special consideration to the safety of employees at particular risk, even if the employer is in compliance with the [ICNIRP heating] exposure limits.

Three firsts:

1. UK EM 'guidelines' have the weight of the law for the first time.
2. Health effects from non-thermal EM exposure are included for the first time in UK law.
3. People with EHS now count as 'employees at particular risk'.

(a) Health and Sensory effects:

The HSE's 2016 "Electromagnetic fields at work: A guide to the Control of Electromagnetic Fields at Work Regulations 2016" mentions, for 1 Hz to !0 MHz: "Sensory effects: Nausea, vertigo, metallic taste in the mouth, flickering sensations, and Health effects: nerve stimulation, effects

on the central and peripheral nervous system of the body: tingling, muscle contraction, heart arrhythmia." These sensory and health effects occur both at high levels within the Action Levels and at lower levels for people susceptible to this type of exposure, and that therefore it is odd to limit employer responsibility only to the former levels and not allow for the latter group of people, if the aim is to guard against these effects.

(b) Employees at particular risk:

The HSE Guidance states (p.16-17) that a risk assessment is needed where "you have employees at particular risk ... you must carry out an assessment of any risks to your employees arising from EMF exposure". This is for exposures below ALs and ELVs. In Section 49 the HSE Guidance states that for employees at particular risk "You must give special consideration to the safety of employees at particular risk (even if you are in compliance with the exposure limits)". In Section 50 the HSE Guidance defines "an employee at particular risk" as "an employee who has declared to the employer a condition which may lead to a higher susceptibility to the potential effects of exposure to EMFs. This includes expectant mothers who have informed you of their condition and workers who have declared the use of active implanted medical devices, passive implanted medical devices or body-worn medical devices." In the original HSE Consultative Document (CD276) of 2015 the list of employees at particular risk included not only expectant mothers and those with medical implants, but also people with tattoos (which can apparently contain metallic colouring) and those with metallic dental amalgam restorations, although the latter two examples have been omitted from the finalised version of the Guidance.

(c) Non-thermal effects included

The Guidance refers to RF non-thermal effects in the list of relevant exposures in Table 7, for people with medical implants. These include WiFi and Bluetooth, cordless phones, mobile phones, headphones, walkie-talkies etc.

UK Regulations support biological limits, not ICNIRP heating-only limits

The new UK Regulations require employers to give special consideration to the safety of employees at particular risk, even if the employer is in compliance with the ICNIRP heating-only exposure limits. The new Regulations, therefore, are more in line with the vote of 2009 by the European Parliament that the ICNIRP limits are 'obsolete'. For 'employees at particular risk', the Building Biology heating limits are 0.1 microW/m2, perhaps equal to 0.002 V/m.

All short-term health effects

According to the European Agency for Safety and Health at Work (EU-OSHA), the EU Directive 2013/35/EU, which was integrated into UK law on July 1 2016, "covers all known direct biophysical effects and other indirect effects caused by electromagnetic fields." The Agency also pointed out that the Directive currently only addresses short-term effects and does not concern possible long term effects." ("EMF Exposure Laws for UK due to be Published in 2016" In Compliance News, 28 December 2015)

"Various EU countries have set much lower levels than ICNIRP" "assessing EMFs from 'others' will present a challenge"

Howard Venning, managing director of Aspen Electronics, offers help: "The important thing to remember is that this directive will put the responsibility for ensuring workers are protected from the risks associated with EM fields on employers and as such anyone employing staff should be interested in this addition to EU Health & Safety law. It is interesting to see how various EU countries have in recent years set their own, much lower, levels. After all, the ICNIRP guidelines are just that, guidelines. As such organisations have reviewed the ICNIRP levels and decided that they too would like to see lower safety levels. Examples include countries such as Belgium, Italy and Poland, plus local authorities such as Cambridge City Council. Whilst it will be relatively easy assessing sources of EMFs which are under your control, assessing EMFs from "others" will present a challenge unless you are prepared to make some measurements yourself." (Richard Wilson: "Compliance is vital with new electromagnetic field exposure rules" Electronics Weekly.com, 30 November 2015)

PHE AND ICNIRP'S OUTDATED MINORITY VIEWPOINT

People with EHS are still denied their equality and health rights because of small clique of pro-wireless activists which dominates groups like ICNIRP, SCENIHR and the WHO's EMF Project, and which PHE follows. Many of PHE's statements are out of date, referring, for example, to the one-sided and minority viewpoint AGNIR report of 2012, based mainly on studies published in 2003-2010. There are major problems in democracies where such small minority cliques can dominate society's treatment of a growing number of people made ill by environmental pollution. Government should protect its population, not knowingly make them ill.

Talking to authorities: fallacious assumptions by ICNIRP and PHE which ignore individuality

Guy Wood examines the logical and legal implications of an individual or 'idiopathic' disabling sensitivity.

"I am electrically sensitive. I live in Pembrokeshire, and have become concerned, naturally, about the plan to install free WiFi in towns across the country. I engaged the Council, and got the usual attempted brush-off (which inevitably employed PHE's dubious generalities about this radiation). Further debate is pointless with these entities, so my approach now is to cite the Equality Act of 2010, along with the UN Convention on the Rights of Persons with Disabilities (which appears to accept the concept of individuality, and to understand the problem of compromising a natural environment). Interestingly, the Council just does not seem to 'get' the Convention. I look forward to see what 'accommodation' I will be offered (!).

However, this all took me right back to some basic philosophy. Specifically to the problem of induction (reasoning from the particular to the general), famously examined by David Hume. The upstart is that there is no justification, on the basis of one set of observations, to apply any conclusions drawn

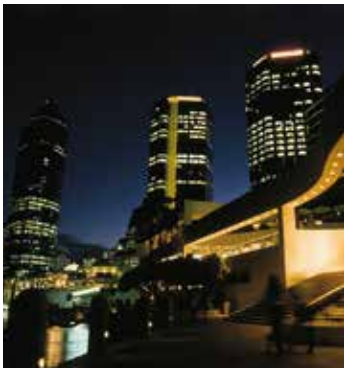
to all other possible cases throughout time and space. The sample cannot be said, with certainty, to be representative. Even if the research is not contentious, only probabilistic statements are valid. So my predicament cannot begin to be addressed properly without, for example, me being thoroughly examined myself or me being able to call for other expertise. We have valuable – indispensable – experience of our own, too. Revision, actually, is integral to any field of inquiry. If such procedures are not followed, then it is akin to being judged in a court of law without being able to present evidence on one's own behalf. It is that serious.

Hence, no-one can blandly state that WiFi is somehow OK for me, or you, or anyone; more especially when such a remark is based on dodgy and highly selective findings.

However they may stonewall us, this is their logic, and they need reminding of it."

PHE and ICNIRP's denials: "Follow the money"

"Independent research studies are also starting to come down on the side that EHS is very real. One report - entitled 'Electromagnetic hypersensitivity: fact or fiction?' - decided that it is, indeed, a fact. And more tellingly, the lead author, Professor Stephen Genuis at the University of Alberta in Canada, concluded that "many scientists now recognize that hypersensitivity to EMR (electromagnetic radiation) can be a debilitating medical condition that is affecting increasing numbers of people throughout the world". Follow the money. The cynic might suggest that the reluctance to recognize EHS as a genuine health concern - and EMFs as the cause - boils down to one simple issue: money. Aside from the vast amounts that would have to be paid out in compensation to EHS victims, governments have received enormous sums from the telecoms industry, which has also happened to fund the majority of research that has failed to identify EMFs as a health hazard. The UK government, for instance, garnered £2.3 billion from the auction of the new 4G mobile phone licences in 2013 … Here in the UK, we use the ICNIRP safety guidelines that were devised in 1998 to protect against tissue heating (thermal) effects. But, argues Dr. Mallery-Blythe, those standards are obsolete and based on science that has been undermined by thousands of studies that demonstrate serious non-thermal biological effects at intensities far below this level. Other countries, and most other members of the EU, have abandoned the ICNIRP guidelines for far lower safety levels of radiation. She hopes that the UK will take urgent action to protect their citizens as other nations are now doing." (Bryan Hubbard: "EMFs: sense and sensitivity" What Doctors Don't Tell You, May 2016).



PHE: ignores study showing EHS evidence from smart meters

Department for Energy and Climate Change, 11 April 2016: Christopher Chope, MP: To ask the Secretary of State for Energy and Climate Change, what (a) evidence her Department holds and (b) research her Department has undertaken on the effect of smart meters on people with electromagnetic hypersensitivity. Andrea Leadsom (The Minister of State, Department of Energy and Climate Change): "DECC takes its advice on matters related to public health from Public Health England. PHE has conducted and reviewed research on the effects of smart meters and has stated that the radio waves produced by smart meters do not pose a risk to health, including to those who identify themselves as electromagnetically sensitive."

[Although the minister of health says PHE keeps new science under review, PHE here failed to refer the only medical study on evidence for smart meters adverse effects, from 2014, showing that smart meters cause ES symptoms and can cause EHS. Lamech F: "Self-reporting of symptom development from exposure to radiofrequency fields of wireless smart meters in Victoria, Australia: a case series" 2014. PHE's comment in July 2016 referred to their website page dated 2012. On 29 Nov. 2011 the DECC made smart meters voluntary, partly because of the evidence of health effects. – Ed.]

Government's response to Council of Europe Resolution 1815 (2011): nil

05 May 2016: Department of Health: Electromagnetic Fields: Health Hazards: "To ask the Secretary of State for Health, what steps the Government has taken in

response to Resolution 1815 of the Parliamentary Assembly of the Council of Europe on measures to reduce exposure, particularly of children, to electromagnetic fields, agreed on 27 May 2011." Jane Ellison MP (Parliamentary Under-Secretary, Department of Health), 10 May 2016: "… The Government has not responded specifically to this Resolution."

Government "maintains precautionary advice on mobile phones"

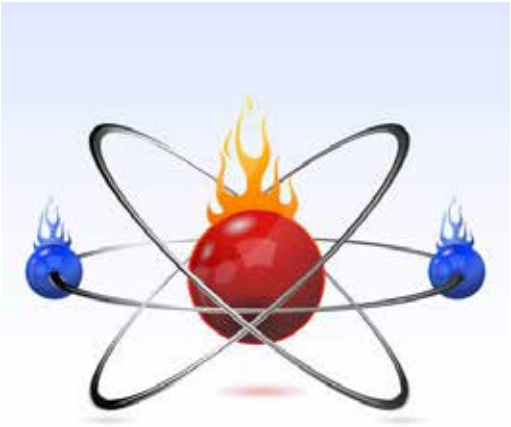
05 May 2016: Department of Health: Mobile Phones: Health Hazards: "To ask the Secretary of State for Health, what steps the Government took in response to the report of the Independent Expert Group on Mobile Phones, chaired by Sir William Stewart, published in 2000; what steps the Government has taken in response to that report's recommendations on limiting children's use of mobile phones; what research the Government has commissioned or undertaken since that report on that issue; and whether any such research supported or contradicted the findings of that report." Jane Ellison, 10 May 2016: "The Government published a detailed response to the Independent Expert Group on Mobile Phones (IEGMP) report's recommendations and set in place a range of measures to address concerns about mobile phones and health … Precautionary advice to mobile phone users has been maintained."

ICNIRP's failure to achieve its aim: 'protection'

The ICNIRP (The International Commission on Non-Ionizing Radiation Protection) is a private Germany-based group of self-appointed and like-minded scientists who typically refuse to accept the non-thermal effects established since the 1950s. Its Statutes of 2008, section 4, include as one of its aims: "giving guidance for the protection of workers, members of the public, patients and the environment." Clearly ICNIRP is failing to achieve this, since increasing numbers of the general public in the UK and elsewhere are suffering from real physical EHS, and not just the WHO's Electrophobia. Even if ICNIRP claims it warned governments in 2002 that vulnerable people, such as those with EHS, need non-thermal limits below its 1998 heating limits, it still fails to recommend biological non-thermal limits to the WHO and governments, despite the confirmation of real EHS in, for instance, the Rev Envir Health of 2015. What is the point of a safety organisation which fails to insist on safety?

ICNIRP's heating-only danger: one degree in six minutes

The UK government still follows the heating-only limits for electromagnetic exposure proposed by the private group ICNIRP, writes the Editor. These say that EM exposure is dangerous only if it heats the body by more than one degree within six minutes.
(a) Exercise experiment: at least one degree in six minutes: Try this easy experiment: take your temperature before you start your exercise routine and then measure it after, say, five minutes. Your body temperature will very probably have increased by over one degree, perhaps by two degrees.
(b) Therefore either ICNIRP's heating hypothesis is invalid, or it should ban all human exercise: This simple experiment means that ICNIRP should be banning all human exercise, on the grounds that it is as dangerous as their hypothesis about how EM exposure damages humans only by heating by one degree over six minutes.
(c) Since ICNIRP does not ban all exercise, it should abandon its invalid heating hypothesis: ICNIRP should therefore abandon its minority and invalidated heating hypothesis and adopt the majority viewpoints accepting the established ways EM exposure affects cell membranes, melatonin levels, free radicals, ROS, gene expression, DNA alterations, inter cellular communication, genetically reduced myelin, neural communication, the blood-brain barrier, cardiac muscles, etc, all part of quantum biology for the last 100 years. In fact, EHS symptoms do not occur after exercise raising body temperature by one degree, whereas they can occur without heating, thus invalidating ICNIRP's basic claim that only heating is dangerous.



Absurdity of ICNIRP's heating-only hypothesis now recognised

The absurdity of ICNIRP's minority heating-only hypothesis was explained at the November 2014 ICNIRP/ACEBR/ARPANSA conference at Woolongong Australia. Dr Vitas Anderson allegedly called WHO/ICNIRP current limits "garbage and unforgiveable", because SAR is based on the obsolete thermal hypothesis. ICNIRP's Whole Body Average SAR limit for the metabolic rate is 0.4 W/kg, whereas the rate for sleeping is 1.2, walking 2.6, housework 4.1 and wrestling 11.9, while "RF suits provide a 10 dB reduction in heat but the added heat load of wearing one is greater than that!" Recent suggestions for setting EM exposure limits are using established DNA damage and confirmed effects on animals at non-thermal levels.

World Health Organization

Time for UK's PHE and WHO to follow HSE and abandon absurd heating-only claim

The UK's PHE and the World Health Organization should follow HSE's lead over 'employees at particular risk' and also abandon such an absurd hypothesis as ICNIRP's heating-only claim. It's time to follow the real science, not the minority clique of pro-industry activists and regulators who dominate ICNIRP. ICNIRP has made itself irrelevant to the current debate on EM exposure. Since it is a one-sided clique still trying to maintain the heating-only hypothesis, it has nothing to say about real physical EHS, a condition discovered in 1932, established in the east in the 1950s, and now established in the west too, along with other non-thermal EM biological effects from, eg geomagnetic events like solar 11-year cycle, thunderstorms, MRI non-thermal effects etc.

ICNIRP crisis continues: joint ICNIRP/WHO guidelines impossible

Documents from the meeting in South Africa of May 2016 suggest that ICNIRP is facing a crisis. It began as a private, unrepresentative group, spun out of the pro-radiation industry IRPA. It has kept to the invalidated heating-only hypothesis since its formation, a minority viewpoint maintained only by pro-radiation industry governments and their small clique of activists. According to evidence from the meeting (slides), this clique and minority approach to the science means that ICNIRP cannot now join the WHO in formulating guidelines, since the WHO requires a more open approach than that of a minority pro-industry clique.

"Joint ICNIRP/WHO Guidelines? Not Possible: Substantial discussion occurred regarding potential joint Guidelines, BUT, as per the previous slide, WHO would require their whole method to be jointly adopted." This is explicitly stated in the next slide, where WHO would require the majority viewpoint on EM exposure, which now includes long-term non-thermal biological effects, such as the WHO IARC's 2B cancer ratings of 2001 and 2011. The serious nature of ICNIRP losing its way in shown by the International EMF Scientists Appeal to the United Nations and WHO in 2015, now signed by over 200 scientists representing the majority viewpoint.

WHO should replace ICNIRP with the Bioinitative Group or EMF Scientists group

It does not make sense for the WHO, which is supposed to represent the majority scientific viewpoint, to retain the minority viewpoint ICNIRP as its advisory group on EM exposure, when ICNIRP accepts that it fails to meet WHO standards. Either ICNIRP should be reformed, with a majority of members accepting non-thermal effects, or be dis-associated from the WHO. The WHO should then link with a more medically and scientifically representative group to serve the interests of everyone, and not just a few pro-wireless governments and companies.

EMFscientist.org

ICNIRP: "excessively homogeneous, lack of plurality, exacerbate biases"

"There are several good reasons for governments not to uncritically follow the recommendations made by private scientific organisations such as the ICNIRP. Private scientific organizations such as the ICNIRP often have an excessively homogeneous composition. The system of co-optation used to elect their members favours such homogeneity. That lack of plurality tends to reduce both the quantity and the quality of the available information that serves the basis of their judgments, to stifle critical dialogue, to exacerbate the common biases and positions of their members and to produce extreme outcomes, polarized in the direction of those biases and points of view." (Pascual GD, Europ J Risk Regulation, 2013)

Police ill from masts; Repacholi: "no health reason"

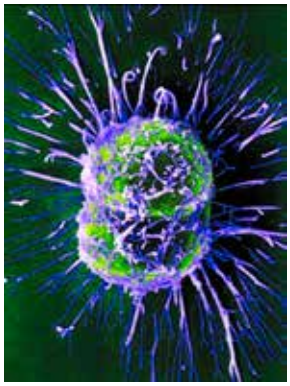
In India, you also find tower clusters. Some traffic police have complained of being unable to continue working beyond a week at a stretch, at one such location in Mumbai.

Repacholi [chairman emeritus of ICNIRP]: "There is no health reason why police could not work in areas where there are many base stations." (Rouham Sharma: "A Towering Problem", Infrastructure Today, February 2016)

'Carcinogen' = 'capable of causing cancer'?

'Carcinogen' = 'A substance capable of causing cancer in living tissue' (Oxford Dictionaries).

'Repacholi [chairman emeritus of ICNIRP]: "IARC did classify RF as possibly carcinogenic. However, this has been widely interpreted as meaning that RF exposure could cause cancer. This is not true."' (Rouham Sharma: 'A Towering Problem', Infrastructure Today, February 2016)



CANCER FROM EM EXPOSURE

USA NATIONAL TOXICOLOGY PROGRAM STUDY CONFIRMS BRAIN CANCER

NTP study: 8.5% cancer rate is 'conclusive' and 'final'

"The study found that one in twelve (8.5%) of the 540 male rats exposed to cellphone radiation developed cancer or pre-cancerous cells as compared to none of the 90 rats in the control condition. These are not preliminary findings. According to NTP, the effects of RFR on these two tumors, glioma and schwannoma, are final. The federal government released this partial report because the results "could have broad implications" for the public due to widespread cellphone use. The NTP posted on its website a link to the FDA's recommendations on how to reduce cellphone radiation exposure. This is "by far … the most carefully done cell phone" toxicology study of RFR carcinogenic effects."

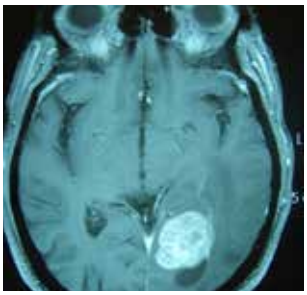
(Joel M. Moskowitz, School of Public Health, University of California, Berkeley "Spin versus Fact" www.saferemr.com)

NTP study: GBM brain cancer is increasing at 3% a year

"While the total incidence of all types of brain tumors in The Netherlands rose at the rate of only about 0.7% per year, the increase in glioblastoma multiforme (GBM) was about 3.1% per year —that is, the incidence more than doubled over the period 1989-2010. This is a statistically significant increase. At the same time, the rate of all the other types of brain tumors went down; these changes are also significant. The higher incidence of GBMs is being masked by the lower rates of the other types of brain cancer … "We have consistently found an increased risk for high-grade glioma, including the most malignant type, glioblastoma multiforme grade IV [GBM], and use of wireless phones," Hardell said. He added that he has also found that, in an analysis of 1,678, patients with GBMs in Sweden, those who used wireless phones had shorter survival times." ("News Media Nix NTP Phone Cancer Study; "Don't Believe the Hype" Are More People Getting Brain Tumors? GBMs, the Most Virulent Type, Are Rising" Microwave News, 31 May 2016)

NTP study: males more likely to get GBM

"The tables show a clear difference between male and female rats with respect to the incidence of spontaneous tumors among the NTP historical controls. Male rats were more than ten times more likely to develop malignant gliomas (brain tumors) than females: 11 of 550 males developed glioma, compared to only 1 of 540 females … Ron Melnick said: "It is not surprising that the exposed males had more tumors than the females given what we have seen in the historical controls. But we can go one step further, the fact that we saw any of these tumors in the exposed females but none in the concurrent controls adds support to the conclusion that cell phone radiation leads to cancer among rats." ("Brain Tumors More Likely in Male than Female Rats: Historical Controls Show the Difference" Microwave News, 1 June 2016)



Reactions to the NTP cancer findings: "largest study ever done", "a paradigm change"

The NTP stated one of the reasons that they were releasing these findings was because the NTP research results showed effects similar to human epidemiological research: "We're releasing the findings at this time because we believe they may contribute to the longstanding discussion over the potential for health effects from radio frequency radiation. We've provided this information to our regulatory agency partners."

The American Cancer Society states: "If you look historically at male and female rats, the rate in the males is about ten times than in females. The fact there was any cancer showing up in the females is actually quite dramatic, it may well be that the risk was higher in the females if you look closely at the data than it was in the males."

Dr Devra Davis says because this study is the largest ever done, and because it's been done by one of the most respected research groups in this field i.e. National Toxicology Program, it really is a profound change, it might even be called a paradigm change: "The levels in this study were set so that it didn't cause a measurable temperature change in the animals, and yet despite that lack of change in temperature there were effects demonstrated."

Dr Bob Morris said: "They [the wireless industry] can't admit any risk at all and so they try to defeat even the simplest calls for precautions in terms of cellphones, because to do so [advise precautions] would mean they acknowledged a risk and they simply can't do that. This is what we are up against. Perhaps what the industry would like to do is provide a consent form asking if people want to be part of this human experiment." (Tunicia Phillips "Pro Cellphone Safety Neoroscientist forced to retire amid NTP divisions" KayaFM, 2 June 2016)

NPT study: IARC may up its classification rating from 2B to 2A

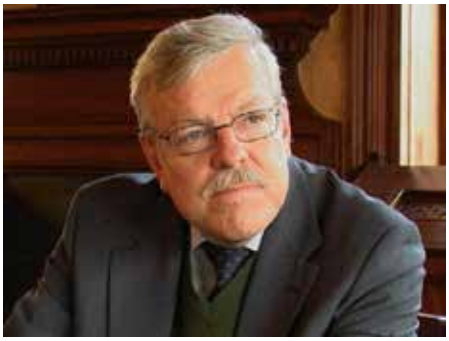
"With the NTP study results, [Kenneth] Foster expects more governments to put out cautionary guidelines and radiation labeling for cellphones. He says he wouldn't be surprised if California adds RF radiation to its Proposition 65 list of carcinogenic chemicals, and if the IARC ups its classification rating from 2B: possibly carcinogenic to humans to 2A: probably carcinogenic to humans. "And they wouldn't be out of line in doing that," he says. "This is going to change the rhetoric in the field. People can point to much more hard evidence that [cellphone RF exposure] really is a problem."" (Prachi Patel: "Cellphone Radiation Linked to Cancer in Major Rat Study" IEEE Spectrum, 27 May 2016)

Two non-thermal cellphone studies involving cancer

The NTP's study should have been done a long time ago, before the cell phones were commercially introduced on the market. Another animal study, published recently by the group of Alexander Lerchl from Germany, observed that cell phone radiation enhances carcinogenic effects of chemicals. Furthermore, both above mentioned animal studies had well designed and executed radiation exposure of animals and both well controlled for the temperature of the exposed animals. This means that the effects observed in both animal studies were of non-thermal nature, no matter whether we know or do not know yet the mechanism of it. (Dariusz Leszczynski: "Brief comments on the NTP study" BRHP, 27 May 2016)

What Are Some Possible Impacts of the Study?

The results of this large, long-term study could dramatically shift the national debate over cell phone safety. (a) The NTP's website says that the results may be used by the Food and Drug Administration and the FTC in determining how best to protect consumers from the potential harms of radiation that comes from cell phones. (b) The CDC might also consider reinstating the cautions it pulled from its web site. (c) Likewise, the cell phone industry may have to alter its stance. (Consumer Reports: "Government study finds link between cell phones and cancer in rats $25 million study from the National Institutes of Health looked at brain tumors in animals" Yahoo Finance, 27 May 2016)



Prof. Olle Johannson on the NTP study: "tremendous future cost"

Professor Olle Johannson at the Swedish based Karolinksa Institute says of criticism of the NTP's preliminary report: "The argument is the same again; it will take time, and then one day it will be too late to wake-up and say no. Even though the incidences were regarded as low, transferred to the human population scale such a result still would mean – down the road – a tremendous future cost for the world's health care systems … it is fair to call for precautionary measures as well as much better monitoring of health parameters and changes in our modern societies." (Tunicia Phillips "Pro Cellphone Safety Neoroscientist forced to retire amid NTP divisions" KayaFM, 2 June 2016)

ICNIRP's Croft: "does not impact health"

"Dr Rodney Croft, ICNIRP member and director of the Australian Centre for Electromagnetic Bioeffects Research, said: 'At present, and particularly given a range of uncertainties regarding its results, the report does not provide reason to move from the current scientific consensus that mobile phone-like exposure does not impact health.'" (Ben Spencer: "There is a link between mobile phones and cancer: Radio waves emitted by devices 'increase the risk of brain and heart tumours', report claims" Daily Mail, 27 May 2016)

PHE says 'definitive' NTP cancer study is 'far from definitive'

Written question by David Anderson MP of 03 June 2016 to the Department of Health on 'Cancer: Mobile Phones': "To ask the Secretary of State for Health, if he will discuss with his US counterpart the potential implications for his policies of work undertaken by the US National Toxicology Program on links between mobile telephone use and levels of cancer risk; and if he will make a statement." PHE's answer by Jane Ellison MP on 13 June 2016: "The Government looks to Public Health England (PHE) to review the scientific evidence regarding the effects of exposure to EM fields from mobile phones on public health, and to advise on the measures that should be taken to protect the public … the US NRP, which involved rats

exposed at levels substantially above those to which the public are exposed when using mobile phones. PHE has welcomed the first results of the study but consider the findings far from definitive with regard to any relationship between the use of mobile phones and cancer in humans."

[The NTP, the best resourced human toxicology institute in the world, works by first experimenting with exposure in animals. Where positive, it seeks, if ethically possible, to confirm any positive findings with lower exposure in humans. This $25M NTP study, even at this stage, in toxicology terms, should be regarded as definitive. It was deliberately non-thermal, i.e. <1 degree. The equal highest incidence of malignant glioma for GSM was at the lowest study exposure of 1.5 W/kg. This exposure is typical of some mobiles; the FCC limit is 1.6 W/kg. This is why the NTP unusually released the preliminary findings which have been blind peer-reviewed before full publication so as to help regulators and other governments adjust their warnings to their populations in the light of this definitive cancer link. – Ed.]

MOBILES AND BRAIN CANCER

"3rd February a severe headache … a migraine. 13th February a brain tumour."

Written evidence to the House of Commons Petitions Committee, "Funding for research into brain tumours", 14 March 2016: submitted by Celia & Melvin Ridley: "On the night of 3rd February 2015 our son Stu went to hospital with a severe headache behind his eyes. He came home the next morning; it was thought he had a migraine. On 13th February he was diagnosed with a brain tumour. Our son Stu Ridley died on 14th July 2015 aged 25 years. Countless times man has used things in the wrong way and many thousands have died before something has been found to be deadly: lead, mercury, asbestos and tobacco being examples. Stu would use his mobile phone as an alarm clock when doing the night shift during lambing time. That was for almost two months of the year. He was a teenager before he received his first mobile as the TV was reporting the possible dangers of mobile phones and radio waves back then. After work on a night he'd play computer games in his room using WiFi. At meal breaks he'd be on his phone for Facebook and texting or games and snapchat. We have a TV mast on our fell less than a mile from our home. On that mast are Orange telephone antennae and police radio antennae. Two years ago a lady from Bellingham died with a brain tumour; she was in her late forties. Another lady, again in her early forties, who lived just a couple of streets further from the mast, is fighting a brain tumour at the moment. These two cases are within 2 miles of the mast. A man in his forties is also fighting a brain tumour; he is within three and a half miles of the mast. These are the cases that I know of in this very sparsely populated rural area. Thirty new cases in one month for the rural catchment of the North of England and the Lake District are particularly scary."

Mobile phone brain tumour may be "the tip of an iceberg"

Stu Ridley's mother has told Parliament she fears her son's death from an incurable brain tumour may be "the tip of an iceberg". She raised her concerns about a possible link to killer tumours when she addressed the Petitions Committee during an event streamed live on Monday. Celia Ridley had been invited down to the House of Commons from the family farm in Northumberland to hear the committee make its first report into funding for brain tumour research. She told the committee: "I'm interested in the cause. I'm seriously concerned that there may be a link to mobile phones." (Barbara Hodgson: "Stu Ridley's mum tells Parliament of her fears of a brain tumour link to mobile phones" 15 March 2016).

Radio frequency can promote cancer

"Weak RF fields may indeed be able to promote cancer, according to two leading members of the EMF/RF research community. Frank Barnes and Ben Greenebaum are offering theoretical arguments to explain how low-level RF radiation can alter the growth rates of cancer cells. "We can see changes with very small fields." He granted that some may interpret what he is saying as "heresy." Barnes was careful to point out that not all experiments would show effects because "biological systems have many feedback and repair mechanisms." ("Weak Magnetic Fields Can Promote Cancer: It May Not Be Impossible, After All" Microwave News, 18 March 2016)

SKIN CANCER AND RASHES FROM MASTS AND WIFI

Skin cancer and rashes etc. caused by phone masts and WiFi

See 'ES Stories' for Diana Hilary Boughton's skin rashes caused by phone masts. This has been recorded in the medical literature for some 15 years. See e.g. Johansson O et al, J Cutan Pathol ., 2001; Kimata H, Int Arch Allergy Immunol 2002.

Phone masts cause skin cancer and rashes, especially WiFi

From a comment by Karl Muller on 26 March 2016: "I have taken a look at the pictures of this rash and I recognise it immediately. We saw and photographed literally dozens of cases of rashes like this in Johannesburg, in both black and white people, in the vicinity of masts. Please check out Tracey-Lee Dorny, of the EM Radiation Research Foundation of South Africa, who documented an entire suburb (affidavits, doctors' letters) that suddenly erupted in these rashes, with dizziness, nausea, etc. Dogs were scratching themselves madly, vets had no idea why. People who had no idea at all that a broadband mast had been erected, also came down with these hideous, completely disabling rashes. Dermatologists had no answers, despite fortunes being spent on biopsies and skin tests. Olle Johannson, of the experimental dermatology department at Karolinska University, has documented and explained the entire phenomenon - ironically, it is people who have an excess of "mast cells" (associated with inflammation) that suffer from "cell masts". This is at least 3% of the population. I am an old radio ham myself. I've known about the dangers of microwaves since I was a teenager, from ham radio magazines. These warnings are no longer given.

If you study the ICNIRP radiation guidelines, you will see something apparently paradoxical. The higher the frequency of radiation, the higher its energy, and the more likely it is to break chemical bonds and cause damage. Yet, as the frequency gets higher in the microwave spectrum, ICNIRP safe levels proportionately rise - i.e., you can radiate them at twice the level at 1800MHz as you can at 900MHz. I asked ICNIRP why - of course, I never got an answer. But I found the rationale on a ham radio website. Because lower-frequency microwaves (centimetre wavelengths) resonate with body-sized organs, like eyeballs, fingers, testicles, etc. However, at the higher microwaves, you get into millimetre wavelengths, and rather than resonating with body parts, it typically gets absorbed by the skin. Therefore you can radiate them at higher levels, specifically because "the radiation gets absorbed by the skin". And then when you get a rash, they tell you it's "psychological"...

I myself clearly feel a burning sensation on my skin, especially the face, near an active broadband mast. Many people get flushed near a mast. Then I get a terrible fatigue that can last for six to eight hours, unlike any kind of fatigue I've ever known, again, I recognise it immediately. I can feel it, and then go and look for the mast that's causing it."

Text-book skin cancer and rashes, from masts and WiFi

Tracey-Lee Dorny on 29 March 2016 wrote: "These rashes are text book as to what we have seen and keep seeing around masts in South Africa. In addition we constantly see them where WiFi has been introduced into the home or school. I personally experienced them dramatically over 7 years ago, following a mast erection next to my home, which led me into studying the subject and being part of a team that started the Electro-magnetic Radiation Research Foundation of South Africa. My son and pets had the same reaction. I conducted a survey in the neighbourhood and other people were having the same symptoms and rashes. The exposure left me and my son electrosensitive."

Significant associations with skin problems etc

"A rise in exposure to electromagnetic fields (EMF) in the general population in the last two decades (e.g. from wi-fi and mobile phone networks) coincides with a rise in prevalence of a broad array of health symptoms; often of allergic / asthmatic / oversensitivity character. Evidence is building up indicating that EMF exposure indeed is the cause of this increase, but possible harmful effects of EMF may present differently in different people and adaptation may occur … Significant associations were seen for a nearby mobile phone tower (more cognitive, head, eye, body and skin problems) and for constant wi-fi presence (less cognitive, eye, mouth, skin, lung and immune system problems)." (Siersma V et al, 2016, "Vicinity to wireless radiation sources and the prevalence of various health problems – a pilot survey", 21th World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians, Europe Conference 2016, Copenhagen, Denmark, June 2016).

Wireless devices cause terrible skin rashes

Some users complain that new Fitbit fitness trackers cause terrible skin rashes, and the Consumer Product Safety Commission has received more than 100 new complaints over the past year. Thousands of users

complained of severe rashes until the old Force model was recalled two years ago. Fitbit said the new trackers, with reduced nickel and no adhesives in contact with the skin, would solve the problem but there have been more complaints. There are also a few reports on social media of skin irritation from other trackers like Apple Watch and Jawbone. (Michael Finney: "7 on your side: complaints continue over rashes caused by fitbit trackers" ABC7 News, 25 March 2016)

BBC radio: excellent report on skin rash, except for PHE & ICNIRP denial

On 7 April 2016 radio Hereford and Worcester broadcast morning and afternoon discussions on the case of Diana Boughton, whose skin rash was caused by a phone mast 200 metres away. She explained herself clearly, and Prof Olle Johannson, the politest person the show hosts had ever interviewed, explained how radiation like that from phone masts can cause skin effects in some people, involving histamine degranulation as revealed by his research at the Karolinska Institute in Sweden. He also referred to studies in Japan from 2002 showing that eczema is made worse by radiation, and a new one from Sweden and Copenhagen showing ill health around phone masts. He added that Sweden would provide help for someone functionally impaired, such as Diana. Richard Kimberley gave details of how he now has to live away from radiation in a converted van, predicting that in 10 or 20 years the conversation will be very different since so many people will be affected, and Peter Gane talked about his work with ES-UK in helping people affected and his own unpleasant experiences.

The only discordant notes came from the quote from the NHS website, with its inaccurate claim of no evidence [for a condition discovered in 1932 and established by the 1960s], and a Public Health England spokesperson, ICNIRP's Dr Zenon Sienkiewicz. He claimed that their MTHR research (funded by mobile phone companies and the government, and therefore ineligible for consideration in some European legal systems) had failed to find a link between exposure and ill health, although the Essex and King's studies were "very high quality".

Public Health England

PHE wrong to support MTHR's Essex and King's failed studies

Although Public Health England spokesperson, ICNIRP's Dr Zenon Sienkiewicz, claimed the MTHR research such as the Essex and King's studies were "very high quality", in fact they were far from this for the following ten reasons, writes the Editor.

1 Both failed to replicate studies over the last 60 years showing that real physical electrosensitivity definitely exists.

2 Both failed to screen their subjects before the start, as to whether they had real EHS, or were self-diagnosed, perhaps inaccurately.

3 The King's study had high radiation in 'sham' mode and took place in an unshielded environment, invalidating the whole study.

4 The Essex study rejected some EHS most seriously affected, skewing the (wrongly) averaged findings downwards from the required 80%, which in part they otherwise almost achieved.

5 Both failed to accept the non-linear nature of quantum biology, thus accepting invalidated dose-response assumptions. It has been established since Frölhich's work in 1967 that coherence arising from frequency and signal attributes can have precedence over intensity in electro-biological inter-reactions.

6 Both allowed sham after positive signals, an invalid sequence in environmental tests.

7 Both wrongly defined EHS as only an ability to guess whether radiation is present, rather than identify it as a physical intolerance which stops when the toxic exposure stops, as required by the international Nordic ICD-10 definition of EI-Allergy. Both denied EHS intolerance can be consciously asymptomatic and assumed that humans are merely conscious measuring meters, as though humans can always say exactly when ionizing radiation is harming them, or if an hour in the sun will definitely give them sunburn, or whether a given foodstuff is present even before an intolerance reaction begins.

8 Both failed to employ sufficient objective physical markers, such as cerebral blood diffusion scans, ECG and protein expression, used by major international centres which diagnose hundreds of people with EHS.

9 Crucially, both Essex and King's deliberately failed to record each subject's assessment individually, as required by the WHO's definition of EHS as an individual or idiopathic condition. Instead both averaged the results so that the results for those who were actually EHS were lost among those subjects who were not EHS, since there was no prior screening using real physical symptoms.

10 Both were funded by MTHR, and thus by pro-wireless industry and government.

No medical scientist with experience in diagnosing and treating EHS could possibly call the fatally flawed studies by King's College and Essex as "very high quality". It seems that it was more a desire by PHE to find these flawed results 'convincing', however invalid the study parameters.

Curiously, the MTHR studies were conscious provocation tests, and nothing directly to do with the radio programme's primary subject matter of skin effects. MTHR never specifically tested this, probably because skin effects had already been established in the literature.
The programme failed to mention that PHE's Dr Sienkiewicz is also a member of ICNIRP. This is the private and unaccountable group whose members almost all hold to the minority and outdated hypothesis of no non-thermal effects. It would have been helpful for listeners to have been told that he represents a small activist clique rather than the majority orthodox viewpoint.
It would have been far better for PHE to refer to the set of studies in the 2015 Reviews of Environmental Health. These show that EHS is now scientifically established in the west, some 50 years after the USSR, Polish and German physicians firmly established the condition in the east.

PHE still refuses to say what causes EHS, if it is not radiation from mobile phones, masts and WiFi etc, which other studies confirm. It is certainly not a nocebo or psychological condition, since studies have shown that unaware adults, like children and animals, often lack prior cognitive conditioning.

Taxpayers expect more than failed provocation studies based on invalid assumptions, when their lives have been ruined by invalidated hypotheses from PHE and ICNIRP.

UNEMPLOYED AND DE-SCHOOLED BY WIFI AND SMART PHONES

Teacher's WiFi illness

Maria Plant, a British Columbia teacher afflicted with EHS, has spoken out after years of rebuffs from government and school officials. She is publicizing the validation of her illness by a Canadian Parliamentary committee. Excerpts from Plant's letter of 31 March 2016 to Len Webber, Vice Chair, Government of Canada's House of Commons Standing Committee on Health (HESA). "I am a very recently retired electromagnetic hypersensitivity (EHS) teacher from British Columbia. I have HESA to thank for validating my illness and giving me credibility in my battle against WiFi and RF, because in BC there are no doctors trained to do this. I have been trying in earnest for five years to appeal to the schoolboard, and the 63 school superintendents in BC school districts to remove toxic WiFi from our schools. I am one of those canaries whom Dr Riina Bray speaks of in the minutes of the April 28th meeting of HESA. I have extreme EHS. I was healthy and led a normal life until shortly after WiFi was installed at our school site in 2010. Formerly a Delta teacher for 25 years, I was forced onto Medical Leave this fall due to WiFI signals becoming intolerable, and my symptoms near WiFi was excruciatingly painful to endure. I chose Early Retirement after my 55th birthday in December 2015, and retired just last month. I have way too much energy, enthusiasm, experience, and love for teaching to be retired. Sigh.

The situation is out of control in our public schools right now, with the layering of multiple sources of radiation exposure from WiFi routers and boosters, laptops, iPads, and the hundreds (sometimes thousands) of strong iPhones actively in use daily in every public school. In light of recent developments in the east, with two Ontario unions requesting that WiFi be removed from their schools due to teachers who are developing EHS symptoms and the subsequent lift of the media blackout here in the west (the Vancouver Sun and The Province covered the Ontario story after years of ignoring WiFI issues and Resolutions against its use here within the BCTF), it seems a fitting time to send my article to our local media. We, the EHS, are being robbed of our rights and freedoms. I am now unable to participate in a formerly active, robust lifestyle, hike or jog in public parks, use transit, walk my dog on public sidewalks to run errands - all due to increased sensitivity to powerful EMF from powerlines, residential mobile phone use, home WiFi upgrades and boosters surging through neighbourhoods, and Smart Meter RF at street level. This is a basic Human Right to "clean air" that has been stolen from us. I have no RF in my own home, having never subscribed to home WiFi, mobile phone service, or Smart Meters. I am not suffering alone - my experience is not unlike that of thousands of other teachers and students in public schools throughout BC and Canada." (O'Dwyer, 7 April 2016; All American Banner, 20(6), 13 April 2016)

Teacher allergic to WiFi faces sack

Shelley McDonald, a maths teacher for eight years at North Kingston School, Rhode Island, USA, has been charged with insubordination for turning off a WiFi router among other matters. Over the previous 13 months she had become allergic to WiFi. At a meeting on 16 February 2016 the school board voted to progress towards her termination at the end of the year. There is a video of the meeting at https://www.youtube.com/watch?v=_sEGLvUJfY4.

Canadian Teacher unions want to ban WiFi

"Two local teachers unions are calling on the Limestone School Board to get rid of WiFi in area schools. The unions say there is growing evidence that the wireless technology may pose health risks. The Ontario Secondary School Teachers Federation wants a moratorium on WiFi in the Limestone School Board. The Teacher Union's president says there is a growing mountain of evidence that WiFi can pose health risks. Concerns that Andrea Loken is taking to school trustees: "There are thousands of published peer-reviewed papers that are indicating adverse health effects from WiFi and we are seeing an increased awareness around this issue worldwide." Loken says countries like France, Israel and Italy are all taking steps to ban WiFi in schools and day cares. The World Health Organization has listed WiFi in the same category as other potentially cancer causing substances. "That's in the same category as lead, exhaust fumes, DDT." The elementary teachers federation supports calls for a WiFi school ban, adding there are also teachers who suffer from electro-hyper sensitivity. They want to raise awareness over the need for a WIFI moratorium until further health studies are done, and lawmakers can catch up with new regulations. Loken says there are alternatives, like Ethernet, to deliver the internet and technology into classrooms. (Darryn Davis: "Teachers union wants Wifi banned from schools", CKWS TV Newswatch, 10 March 2016)

US school WiFi legal case: August 2016

"A lawsuit accusing the Fay School, of failing to accommodate a student's alleged WiFi sensitivity, is headed to trial in August, according to court documents. The family of "G," a 12-year-old who attended the Southboro junior boarding school, says the boy suffers from a condition called Electromagnetic Hypersensitivity Syndrome, which makes him feel ill when exposed to wireless Internet signals. They argue in their complaint, which they filed in August, that the Fay School ignored their pleas to find accommodations for G, who was experiencing dizziness, headaches and other symptoms in class because of the school's WiFi. After a scheduling conference was held Wednesday in U.S. District Court in Worcester, the case is set to go to trial on Aug. 8 before District Judge Timothy S. Hillman, according to court records. The plaintiffs are seeking $250,000. Their lawyer John J.E. Markham II said: "They think there's a way to work out accommodations, and that there's a lot to be learned about WiFi and its potential dangers." According to an amended complaint submitted by G in early December, the school would only allow the family to take measurements of WiFi activity during what they said would be an insufficient hour-and-a-half block in the afternoon. The family also said the school's eventual solution was to have G connect to the Internet via an Ethernet cable while sitting a few feet away from other students in class, all of whom continued to use the WiFi. When the boy's symptoms continued, he brought a dosimeter to measure the classroom's WiFi emissions. The readings from that device showed G's condition worsened when the WiFi signals were strongest, and subsided when they weakened, the complaint alleges. G eventually stopped going to class on Dec. 1, and initially tried to keep up with his studies at home. But his family said the Fay School made that arrangement unworkable, and the boy stopped attending the school altogether in early December. (Scott O'Connell: "Wi-Fi lawsuit against Southboro's Fay School is headed to trial" Telegram, 18 January 2016)

Fay alleged retaliation against pupil sensitive to WiFi

"As I've previously posted, Fay School is the defendant in a Federal lawsuit. Backed by a physician's diagnoses, parents of a 12 year old student (named G in the lawsuit) have claimed that the school's strong wifi signals cause their son physical harm. At root of the issue is the boy's diagnosis as suffering from Electromagnetic Hypersensitivity Syndrome (EHS). The lawsuit, for $250,000, amended through a January filing, alleges that the school has unfairly discriminated and retaliated against the student and family. The school and parents were not able to come to agreement on accommodating G's hypersensitivity in classrooms. That led to G working from home, while still a Fay student. Since then, the family claims G was unfairly discriminated against to the point that they had to enroll him in another school for the interim. The administration barred G from campus for any reason, even for activities that do not expose him to WiFi. That includes sports, which he loves, and which allowed social time he missed with peers. His mother claims the school didn't given them any justification for the ban. As for the underlying reasons for the suit, the complaint claims that under the American Disabilities Act, Fay should be working towards "reasonable accommodation to his EHS, if doing so can be accomplished without disrupting Fay's program or academic standards." It's something they allege the school hasn't done: G's Mother and Father have offered to work with Fay, even at their own expense, to examine the classroom WiFi system, and to attempt installation of a reasonable alternative to their industrial capacity WiFi for use when G is in attendance. Fay has refused to do anything meaningful and has ignored measurements, other data, and medical and other reports supporting the need to make an accommodation.

Some highlights from a Q&A with G's mother: if we prevail at the trial on our injunction request that will mean the school will be ordered to have fixed the problem so that our child can return to Fay. If this happens our damages will be less because our child will return to finish the program we have paid dearly for over the last seven years. Their stated goal: that the school will fully address the issues that have come to light before more children become sensitized and severely impacted. Also worth noting: G was experiencing and describing symptoms before having any idea wifi could be a cause. Data collected and analyzed showed "startling connection" that his symptoms coincided with wifi exposure peaks. (Beth: "Fay accused of retaliating against family suing school; Q&A with mother" My Southborough, 11 March 2016)

INTERNATIONAL NEWS

Spanish town: people's rights against 'smart' meters

On 30 June 2016 Santa Perpètua de Mogoda, near Barcelona, Spain, approved the motion presented by PSCT (Plataforma Stop Comptadors Telegestionables) to stop the installation of smart meters in the town. Two of the points approved were: 1) to stop installing smart meters in a city already very polluted with RF, and 2) to replace the ones already changed with the old analogue ones. This is a big step in a country highly permissive to wireless companies and with high RF limits in comparison with other parts of Europe and the world. Well done to PSCT, the brave mayor and city councillors! (Report from Carlos Galiano on behalf of his wife Montserrat López Mestres, 2 July 2016.)

French town stops installing 'Linky' smart meters

The town of Carmaux, southern France, has suspended the installation of the 'Linky' smart meters. This was announced by Alain Espié, mayor and president of the Local Distribution Company Ené'o, on 29 February 2016: "We may have to postpone until 2022". ("A Carmaux, l'installation du « compteur communicant » Linky est suspendue sine-die, des habitants et des élus avaient dit leur inquiétude" Le Tarn Libre, 1 March 2016)

USA: EHS smart meter symptoms legally a 'disability'

"On 1 September 2015 a federal district court in Florida, USA, refused to dismiss an Americans with Disabilities Act based on allegations that an individual experienced insomnia, loud and violent ear ringing and difficulty concentrating as a result of the attachment of a digital meter to his home. The court said that because these symptoms substantially limited major life activities and derived from "some sort of physical or mental impairment," it could reasonably infer that the plaintiff has a disability." (Alexis Kramer: "Hypersensitivity to WiFi … could it be a disability?" Bloomberg BNA Legal, 10 September 2015)

USA: cancer and an elevator's high EM fields

"Graduate students from the University of California, San Diego, Literature Department released a petition last week calling for the immediate relocation due to the uncommonly high number of cancer diagnoses among the facility's faculty and graduate students. Between 1991 and 2008, 16 occupants of the Literature Building were diagnosed with a form of cancer, nine of which were breast cancer cases. In response, UCSD conducted an in-depth review of the facility in 2008 and addressed potential hazard areas, particularly those involving EM fields and mold. Even though 2011 studies concluded that the Literature Building's air quality and chemical levels were safe, recent cancer diagnoses have reignited fear. (Kevin Santos: "Literature Building Occupants Demand Relocation to Avoid Health Hazards" University of California, San Diego, The Guardian, 3 June 2016)

Cyprus: cancers around phone mast: 1 uW/m2 limit needed

"Scores of residents and shop owners in Havouza, Limassol, staged a protest demanding the removal of a mobile phone antenna standing the last ten years on the roof of an apartment building, leading to at least 10 cancer deaths in the area. Residents commissioned a report on the risks of exposure levels of high frequency EM radiation, which is based on the permissible limit set by the Austrian Medical Association, and which is much lower than those of ICNIRP. According to the report, the CNA said, 100 meters from the antenna the recorded maximum values of EM radiation was 20,000 microwatts per sq meter, while the normal limits set by the Austrian Medical Association is 1μW/m2. The report advises the immediate removal of the antenna." (Cyprus Mail, 14 May 2016)

India to investigate phone mast damage

"The Supreme Court agreed to assess the impact of cell phone towers on the health of people in the vicinity by asking PIL petitioners to produce scientific evidence in support of their contention that radiation from such towers was harmful. While petitioners' advocate Prashant Bhushan pleaded for continuance of the ban on mobile towers in residential and other crowded areas, such as hospitals, schools and markets, cellular service providers contended that their towers posed no health problem. A Bench headed by Chief Justice T.S. Thakur noted that retired judge P.N. Gupta, who died of cancer, had written a book that his

health problem was due to remaining on cell phone calls for long hours on a regular basis. The Bench had noted that the government had come out with radiation norms for cell phone towers only recently and these were more stringent than the regulations in 90 countries. Bhushan contended that the government had set the radiation norm at a unit of 0.92, while in China, Italy, France and Poland the permissible limit was one-tenth of this at 0.1. (R Sedhuraman: "SC to assess health hazards of cell phone towers" The Tribune India, 18 March 2016)

India: Human Rights Organization against phone masts

Notices have been issued to the Union Ministries of Communications and Information Technology and Health through their Secretaries by the National Human Rights Organisation (NHRC) regarding complaints of hazardous radiations emitted by mobile towers. The Commission has called for a report in the wake of allegations in a complaint that mobile phone towers, in the close vicinity of residential areas, are emitting radiations, hazardous to the health of human beings. The concerned authorities have to reply within two weeks. The complainant has stated that the existing order is imperfect because it does not cover "houses" but only "schools and hospitals", which should not be within 500 meters of a mobile phone tower. (Narendra Ch "Radiation from mobile towers: NHRC issues notices" MeriNews, 4 June 2016)

French government warn on EM dangers for children: "lack of sleep, fatigue, stress, anxiety, irritability, difficulty concentrating, headaches"

The French National Agency for Food, Environmental and Labor Safety (ANSES), in a report on RF exposure and the health of children of 8 July 2016, concluded that "there is "a possible effect of radiofrequency on the cognitive functions of a child", such as memory, attention, psychomotor skills or language. They come to the same conclusion about "possible effects" on the "well-being" of children, a state defined by lack of sleep or disorders such as fatigue, stress, anxiety, irritability, difficulty concentrating, headaches.

Janine Le Calvez, President of the Association for the Regulation of Mobile Phone Masts (Priartem) said: "The recommendations need to be implemented, and a first step would be to remove wireless devices from primary schools." ("Pierre (trans.) "Warning about the dangers of radiofrequency radiation for children" Le Monde, July 8 2016)

USA: Berkeley mobile radiation warning now law

Cell phone retailers in Berkeley, USA, are now required to post or hand out fliers warning customers of possible radiation exposure from the mobile devices. The required warning, which became law on 21 March 2016, is part of the so-called "right to know" ordinance voted unanimously by the city council in May 2015. The ordinance is the first law in the nation requiring cell phone retailers to warn customers about possible RF exposure. (Jean Elle: "Berkeley's 'Right to Know' Cell Phone Radiation Warning Ordinance Now in Effect" NBC Bay, 22 March 2016)

Argentina: bill to limit radiation with Registry and Council for enforcement

A bill entitled "The minimum prevention and control of EM pollution" was presented in Argentina's Chamber of Deputies by Deputy Gabriela Troiano. It has the support of many NGOs, trade unions and neighbourhood organizations. It aims to "ensure the protection of public health" considering "both thermal effects and biological". This parliamentary initiative seeks to respond to widespread public demand in the country and the world, which has caused hundreds of protests, lawsuits and petitions to the authorities against uncontrolled deployment of cellular antennas, power lines and other EM pollution. It has a solid scientific basis on the effects of EM pollution on health and behaviour, and establishes measures comparable with legal initiatives in other countries. The bill requires that irradiating devices should be installed at over 100 meters from inhabited areas, with a limit of 1000 microWatts/m2 for digital radiation. It would be prohibited to install radiation emissions under 100m from green spaces, health, educational, sporting and cultural institutions with public access. In education and health facilities only wired connections to data networks and internet access may be used. In hospitals phones may not be used in areas with higher health risks. All manufacturers of devices with EM emissions should state the radiation levels they generate, with a label warning harm to human health. To install

an antenna you must perform an Environmental Impact Assessment (EIA), communicate by letter to the owners and tenants of all properties within a radius of 100m, and publicise a public hearing in the locality. The enforcement authority must explain how it has taken into account the views of citizens gathered at the Public Hearing. A Registry of Emission of Sources of Non-Ionising Electromagnetic Radiation is required, kept updated on a website. (Claudio Fabián Guevara: "Argentina seeks a national law against electromagnetic pollution" 28 March 2016)

Australia's Prof Simon Chapman: accepting studies showing mobile phones dangers "irrational" and "either nonsense or faith-based beliefs"

Simon Chapman was joint author on a study claiming no risk from use of mobile phones (Chapman S et al, Cancer Epidemiol. 2016). Although he is a public health warrior against the effects of tobacco smoking, he has also published studies claiming that infrasound from wind turbines is probably a 'nocebo' effect, and allegedly "likened people who consider wind turbines health dangers to those who believe in aliens or have superstitions about their lottery numbers." This 2016 study appears to be his first on the health effects of mobile phones, although in 2015 he declared: "Some people earnestly believe that … mobile phones and towers, and Wi-Fi are deadly. I do not need to talk personally to any of these people or visit their homes in order to corroborate the information that I can obtain from a variety of sources which tells me clearly that these beliefs are irrational, and in fact either nonsense or faith-based beliefs." (Malcolm Farr: "Professor Simon Chapman delivers withering smack-down to wind farm opponents", News. com.au, 4 August 2015) From StopTheseThings: "Australia is blessed with a former tobacco advertising guru who is paid a packet by wind power outfits to pedal a story that the adverse health impacts caused by incessant turbine generated low-frequency noise and infrasound (such as sleep deprivation) are the product of "scare-mongering". This grab bag of nonsense is pitched up under the tagline "nocebo" … Not only did the Australian Senate find that the guru and the truth are involved in a somewhat 'troubled' relationship, STT Champion Dr Sarah Laurie called him out for falsely and maliciously claiming that she had been 'struck-off' by the Medical Board of Australia … Set upon by the attack dogs that help run media and political interference for the wind industry, Sarah has been subjected to more than her fair share of utterly unwarranted, vilification and abuse. And the lion's share of that has been generated, or orchestrated, by the guru." ("Wind Industry's Propaganda King – Simon Chapman Forced to Apologise to Dr Sarah Laurie for False & Malicious Taunts" StopTheseThings, 23 August 2015)

Australian ABC TV should reverse retract of WiFi programme and suspending journalist

The excellent Catalyst Wi-Fried programme broadcast in February 2016 was retracted by ABC TV on 5 July 2016 and the outstanding journalist, Dr Maryanne Demasi, was suspended, following complaints by pressure groups like AMTA (Australian Mobile Telecommunications Association) and Prof. Croft, an ICNIRP psychologist. "It appears that the ABC TV was possibly "pressured" to act and "scapegoats" were to be found and "retracted and suspended" … the action of the ABC TV retracting the "Wi-Fried?" program looks like a classical example of science censorship, done under pressure and tainted with Conflict of Interest … I hope that, in the interest of the open scientific debate, the Director of Television at the ABC TV, Richard Finlayson, will reconsider his decision to retract "Wi-Fried?"." (Prof. Dariusz Leszczynski: "Science Censorship in Australia: The retraction of the ABC TV Catalyst "Wi-Fried?"" BRHP, 5 July 2016) "iTWire editor-in-chief Stan Beer raised the possibility that the ABC may have come under pressure from the AMTA: "I have experience of this; I came under tremendous pressure from AMTA when I wrote a series of articles for the Australian Financial Review 16 years ago, about the possible links between mobile phones and and brain tumours," he said. … the Australian Communications and Media Authority is the regulator both of the mobile phone industry in Australia and also the media – which includes the ABC. Talk about conflicts of interest!" (Sam Varghese: "ABC Wi-Fi stuff-up: shoot the bosses, not the messenger" iTWire, 7 July 2016)

Australian hospital: "I could no longer take the radiation"

The following is from an affadavit by a 76-year-old woman who was forcibly sedated in a major Australian hospital after declaring she was EHS and expressing a wish to leave. "13. My Medic Alert bracelet also has "EHS" printed on it to indicate this diagnosed condition. 14. I then stated to the doctor that the EMR being emitted from the fluorescent lights above my head was causing me excruciating pain, and that I would have to vacate the building. 15. After departing the Triage area, I walked some 15 meters away from where Nurse #1 was seated towards the main entrance, when I was suddenly attacked from behind by two male nurses whom I refer to as Nurse #2 and Nurse #3. 16. Nurse #2 grabbed my right arm rather viciously in his attempt to restrain my exit that eventually caused severe bruising to occur, which has remained apparent 10 days later, so far. 17. Nurse #3 grabbed my left elbow and wrist and twisted my arm so I thought it was going to come out of the shoulder socket. I glared at him and he stopped twisting. I screamed out "NO!!" - being fearful that the pressure he was placing upon my elbow would break it. He did not respond to my cries for him to ease his grip on my arm. There were 9 witnesses of this. This twisting has caused severe pain to exist in an area covering my left shoulder to my chest ever since together with a bruised arm. 18. Nurse #2 and Nurse #3 escorted me back to the doctor's location where I was placed in a chair under the fluorescent lights. I again tried to leave the building after stating that I could no longer take the radiation. After rising from the chair I was then restrained into a gurney by hospital staff securing both of my arms and legs to it. Upwards of 9 nursing staff witnessed these events. 19. The doctor then informed me I was being placed under the Mental Health Act and was not permitted to leave." (EMR Aware Newsletter, May-June 2016)

USA WiFi conference bans health questions

The 'Wi-Fi Now 2016' conference in April at Tysons Corner, Va., after giving O'Dwyer's press credentials, has withdrawn them after being told O'Dwyer's would raise health issues related to WiFi, mobile phones and other radiation sources. Claus Hetting, chair of the conference, told O'Dwyer's that discussion of health issues related to Wi-Fi is barred from the conference. Such a boycott should not be allowed in America. (Jack O'Dwyer: "Wi-Fi Now Confab Bars Press; FCC Commissioner Told" 14 April 2016).

Sweden's Prof Olle Johansson: "treated like dirt"

"One of the most prominent Professors on cellphone and wireless safety has been put on early leave. Professor Olle Johannson at the Swedish based Karolinksa Institute says the NTP's preliminary report coincides with a request for him to retire from his role in research concerning health effects of EM fields and the functional impairment of electro-hypersensitivity. When asked about the current criticism of the results, Johansson said: "the argument is the same again; it will take time, and then one day it will be too late to wake-up and say no. Persons, like myself, who has warned (on RF safety) for decades have been treated like dirt. The Karolinska Institute namely wants me to retire in advance due to (a) my lack of funding (b) lack of need of my services, i.e. the need for research concerning health effects of EM fields and the functional impairment EHS does not exist any longer. With the above results (NTP) at hand, I feel the need is much, much bigger than ever!" (Tunicia Phillips "Pro Cellphone Safety Neoroscientist forced to retire amid NTP divisions" KayaFM, 2 June 2016)

USA: apologies from telecom manufacturers overdue

"A brave young 21-year-old woman from eastern Pennsylvania, Tiffany Frantz has come forward with the story of her own rare cancerous breast tumors that formed right under the antennae of the cellphone she kept in her bra … Recent studies find that those who begin using cell phones as teens have four to eight times more risk of brain cancer as young adults. The Cleveland Clinic reports that men who keep phones in their pockets may have lower sperm motility and viability. Yale University studies show that mice exposed prenatally to cellphone radiation develop damaged brains and behavioral problems. Yet, these studies showing that operating phones can damage the body, as well as case reports on Tiffany and others like her are

strangely omitted from reviews on wireless radiation, such as that recently carried out by Canada's Safety Code Six, or from the increasingly challenged ICNIRP. Overdue are apologies from major telecom manufacturers and Internet providers to people like Tiffany. They continue to market cell phones and other microwave-radiating products especially to infants, toddlers, and young teens and fail to provide clear notice that such radiation increases the risks of brain cancers, reproductive harm, and a host of other health problems." (Devra Davis: "Show me the bodies: A monumental public policy failure" OUPblog, 18 April 2016)

Israel: third largest city disconnects WiFi in schools

Haifa's mayor, Yona Yahav, in coordination with the head of the education department, Ilana Truck, ordered the immediate disconnection of WiFi in the educational system until there is a thorough examination of the subject. Yahav required advancing the installation of the safer wired system. Yahav said: "Regarding anything that relates to our children, if there is doubt, there is no doubt. We must take excessive precaution. As long as the argument on real danger was not refuted, I ordered the disconnection of all the wireless devices in kindergartens and in schools. We will act to activate a safe wired system. Children is an especially sensitive population to environmental effects. Dr Mona Nofi-Naama, head of non-ionizing radiation issues in the Cities Association Haifa Bay for environmental protection, said: "According to the precautionary principle, it is necessary to reduce the exposure to non-ionizing radiation as much as possible, including WiFi, by reducing the use of wireless networks and to prefer in every opportunity wired connection rather than wireless. The current standards relate to thermal effects only, while here the issue is health effects that do not relate to heating. ("The mayor of Haifa (in Israel) ordered to disconnect WiFi in schools and kindergartens – until examining the safety of WiFi thoroughly" Local News, 18 April 2016)

Canadian Police urged to investigate WiFi threat

Captain Jerry Flynn (ret.), who spent 22 years in electronic warfare and signals intelligence for the Canadian Armed Forces, called on the Public Health Agency of Canada to direct the Royal Canadian Mounter Police "to conduct a criminal investigation into the industry's stranglehold on Canada's radio frequency electro-magnetic radiation and extremely low frequency scientific community beginning with Health Canada's radiation protection bureau." (Jack O'Dwyer: "Royal Canadian Police Summoned on Wi-Fi Threat" 11 May 2016)

Finland's STUK omitted EHS: 'scientific misconduct'?

"The newly re-designed (late 2015) website of the Finland's STUK (Radiation and Nuclear Safety Authority), by purposefully omitting important and relevant information, engages in 'scientific misconduct' and 'scientific misinformation'. Information concerning the biological and health effects of EMF has been re-written and absolutely all information concerning 'electromagnetic hypersensitivity' was removed. STUK is a governmental agency obliged to provide reliable information for Finns about any and all aspects of radiation, whether ionizing or non-ionizing. Complete omission of the EHS from the STUK website equals scientific misconduct." (Prof. Dariusz Leszczynski: "Scientific misconduct and misinformation on the website of Säteilyturvakeskus (STUK) in Finland" BRHP, 15 March 2016)

Germany: menswear against EM exposure

"Students believe silver wire deflects radiation associated with carrying a mobile phone in the trouser pocket. Students have invented "Crown Jewels Underwear" to protect men from mobile phone radiation that could reduce their sperm count. A recent Israeli study showed EM radiation from phones can

damage male virility. To combat the rays, graduates from Munich Business school in Germany designed boxers with material incorporating silver wire, which blocks the radiation pulses." (Allan Hall: "Students invent radiation deflecting underwear to stop sperm being fried by mobile phones" Mirror, 6 March 2016)

USA: bosses told lies to protect their business

A new book (Kate Moore: "The Radium Girls" Simon & Schuster) records how, during the first world war in the USA, women used luminous radium paint to make the numbers on watches, clocks and aeronautical dials glow brightly in the dark. They were instructed to suck their paintbrushes, to make a fine point for the precise handiwork. A dial-painter said: "The first thing we asked was, 'Does this stuff hurt you?' But [my boss] said no. " That wasn't true. Radium was known to be hazardous - other employees, handling larger amounts, wore lead aprons. Manufacturers funded research that supported their claims - and ignored independent studies that proved the opposite.

In 1925, a pioneering doctor, Harrison Martland, proved the connection between the women's work and their illnesses after discovering that radium had deposited in the women's bones. In 1928, Grace Fryer and others finally filed a lawsuit for $250,000 each (= $3.4m today) and won their case in 1938. (Kate Moore "The forgotten factory girls killed by radioactive poisoning" Daily Telegraph, 14 June 2016)

SCIENCE

Female fertility reduced by EM exposure during pregnancy

"Exposure to EM fields during embryonic development can cause morphological changes in oocytes and affect the differentiation of oocytes and folliculogenesis, resulting in decreased ovarian reserve leading to infertility or reduced fertility." (Ahmadi SS et al, Electron Physician, 2016)

Men warned: non-thermal effects from mobile phones

Men who keep their mobile phones in trouser pockets or on bedside tables at night may be damaging their chances of becoming a father. Gedis Grudzinskas, a fertility consultant at Harley Street and St George's Hospital, London, said: "Men need to think about their wellbeing and try to stop being addicted to their phones." (Richard Ford: "Carrying phone in your pocket can 'cook' sperm" The Times, 22 February 2016)

Mobile phone damage to male fertility

"Our findings indicate that stress and lifestyle factor may affect sperm DNA damage." (Radwan M et al, Int J Impot Res, 2016).

Boys affected by EM exposure

"A subsample of 123 boys belonging to the Environment and Childhood cohort from Granada (Spain), recruited at birth from 2000 through 2002, were evaluated at the age of 9-11 years … children living in higher RF exposure areas had lower scores for verbal expression/ comprehension and higher scores for internalizing and total problems, and obsessive-compulsive and post-traumatic stress disorders, in comparison to those living in areas with lower exposure." (Calvente I et al, Bioelectromagnetics, 2016)

Significant genotoxic damage from mobile phones

"Mobile phone radiation even in the permissible range when used for longer duration causes significant genotoxicity." (Banerjee S et al, J Clin Diagn Res., 2016).

Poor sleep from mobile phone use

"Excessive use of mobile phones can affect the quality of sleep as one of the important issues in the health literature and general health of people … The results revealed that half of the students had a poor level of sleep quality and most of them were considered unhealthy." (Eyvazlou M et al, Chronobiol Int. 2016)

Power-lines can cause biological effects

"The overall conclusion is that the application of magnetic fields at frequencies ranging from a few Hertz to microwaves at the absorption frequencies observed in electron and nuclear resonance spectroscopy for radicals can lead to changes in free radical concentrations and have the potential to lead to biologically significant changes." (Barnes FS et al, Bioelectromagnetics, 2015)

ELF is also a tumour promoter: change safety limits!

A new study confirms that power-line fields (ELF), just like radio frequency from mobile phone masts, phones or WiFi, enhances cancer. This means that both ELF and RF should now be re-classified from 2B possible to 2A probable human carcinogens. "These results call for a re-evaluation of the safety of non-ionizing radiation." (Soffritti M et al, Int J Radiat Biol, 2016).

Antibiotic resistance from radiation?

"Millimeter waves (MMW) or electromagnetic fields of extremely high frequencies at low intensity … might be leading to antibiotic resistance in bacteria." (Soghomonyan D et al, Appl Microbiol Biotechnol. 2016)

Animals, like humans, have magnetic sensitivity

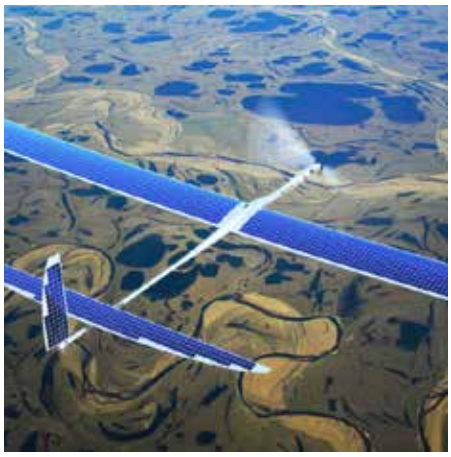
Ken Lohmann's seminal 1991 experiment on turtle hatchlings confirmed that turtles could sense the magnetic field, switching their swimming direction in response to it. In 2009, neuroscientists David Dickman and Le-Qing Wu imaged pigeons' brains while varying the angle of a magnetic field. They observed 53 pairs of neurons changing their firing as the angle changed." ("Animal superpowers: How we're homing in on their magnetic satnav" New Scientist, 16 March 2016) [For human non-linear magnetic sensitivity in 16 out or 17 subjects, see: Carrubba S et al, Neuroscience, 2007 – Ed.] "The results indicate that the threshold for biological effects of ELF MFs is 10 μT [10,000 nT] or less." (Kesari KK et al, J R Soc Interface, 2016)

Chronic illness from EM pollution

The prevalence of chronic non-infectious diseases is related to the electrophysical state of the environment, especially through the influence of HAARP signals (Rakhmanin YA et al, Gig Sanit. Russian, 2015).

WHO 2016 report on environmental risks includes EM fields

On 16 March 2016 the WHO published the second edition of its report: "Preventing disease through healthy environments: A global assessment of the burden of disease from environmental risks". The WHO press release stated: "An estimated 12.6 million people died as a result of living or working in an unhealthy environment in 2012 – nearly 1 in 4 of total global deaths. Environmental risk factors contribute to more than 100 diseases and injuries. The report lists "Noise, Electromagnetic fields" as the third of eight environmental factors included in the study. (Prüss-Ustün A et al, WHO, 2016)



Loon balloons: 1-2 μW/m2 = 0.02 V/m on the ground

"According to the numbers that Yuval and Alasdair crunched: expected thermal effect values at ground level from balloons and drones in the neighbourhood of 1-2 microWatts/meter squared (μW/m2) or 0.02 V/m and -51 to -47 dBm from point-to-point transmissions at 70-90 GHz, which, Dr. Marshall says, every balloon will transmit, and expected thermal effect values at ground level of 0.0006 to 0.003 microWatts/meter squared (μW/m2), or 0.0005 to 0.001 V/m or -83 to -77 dBm/m2 for frequencies transmitted in the 2400 and 900 MHz range,

respectively, which is what Google used when they tested their Titan drones in 2014. The No Concern range of the Building Biology's guidelines begins at 0.1 microWatts/meter squared (µW/m2). The values for the point-to-point transmissions are in the slight concern level." Your cell phone shows five bars at 0.01 microWatts/meter squared (µW/m2) or 0.002 V/m or -50 dBm/m2. The cell phone can still connect to the tower at 1 bar (0.000025 microWatts/meter squared (µW/m2) or 0.00001 V/m, almost 100 times lower than five bars). (Oram Miller: "Loon: Important information from yesterday's conference call that people should listen to from Prof. Trevor Marshall" 11 January 2016)

Do humans use sensory hairs to detect electric fields like bees?

"Bumblebees use tiny vibrating hairs to sense electric fields transmitted by flowers, a study

has shown. Gregory Sutton, the lead researcher, said: "A lot of insects have similar body hairs which leads to the possibility that many members of the insect world may be equally sensitive to small electric fields." … In 2013, researchers at Bristol led by Professor Daniel Robert demonstrated that [flowering plants] use electricity. Bees build up a positive electric charge as they fly, while flowers are negatively charged. The difference produces a spark, an electrostatic field, that the bees can sense." ("Flowers can make a bee's hairs tingle" The Times, 31 May 2016)

"The sensory mechanism is proposed to rely on electromechanical coupling"

"Bumblebees (Bombus terrestris) use information from surrounding electric fields to make foraging decisions. Electroreception in air, a nonconductive medium, is a recently discovered sensory capacity of insects." (Sutton GP et al., Proc Natl Acad Sci U S A. 2016).

ELECTROSENSITIVITY STORIES

Severe rash caused by mobile phone mast

"A woman believes a severe rash which covered her upper body was caused by radiation from a mobile phone mast. Diana Hilary Boughton has decided to speak out about her concerns over mobile phone masts after David Cameron vowed to relax planning policy to make it easier for operators to put up masts. The Welsh Newton resident said she suffers from electrosensitivity - a condition suffered by people who in varying degrees are made ill by connection to electricity. Some medical professionals believe the condition is psychological. But Ms Broughton said she is used to people being sceptical about her condition, which she said was made worse when she came within close proximity of a mast in Llangrove. She said: "It must be one of the few illnesses were it is considered acceptable to tell the sufferer that they are 'imagining it' or 'making it up' – simply because the effects are not visible to the onlooker." She said she has suffered from electrosensitivity for over 15 years,

with symptoms such as head pains, tinnitus and pain in her jaw. But when she started a new relationship with a man in Llangrove she noticed her symptoms would get worse when she stayed at his house, even though all electrical devices had been unplugged. Her skin continued

to get itchier whenever she stayed at his house, and it then developed into a severe rash with burn-like lesions. Ms Boughton then noticed a mobile phone mast 200 metres away. Her GP prescribed anti-histamines but it became worse and, when the lesions spread to the inside of her mouth and throat, she attended A&E at Hereford County Hospital and was given an emergency appointment with a dermatologist. Following various examinations and tests, including skin biopsies, the usual causes were ruled out, such as Stevens-Johnson syndrome and Lupus erythematosus. She was told the rash could have been caused by a medication she was taking called Humira. But she said although she believes this weakened her immune system it does not explain why the symptoms were site specific. Ms Boughton added: "I briefly discussed the possibility of radiation burns from the mast with the dermatology specialists in Hereford Hospital and they said that they honestly didn't know if they could be radiation burns because they've never seen them before." (Rebecca Cain: "Welsh Newton woman voices concerns about phone masts after she developed severe skin rash" Hereford Times, 21 March 2016)

Burning face from TV

Dan Reddington, 75, a grandfather-of-four from Broadway in Worcestershire, developed electrosensitivity 6 months ago. He says watching TV, using a computer, or turning on the central heating, brings his face out in a red rash. He has to resort to home remedies, such as wearing a welder's mask or a face mask lined with foil. He has to avoid electrical shops to keep his symptoms at bay, which flare up any time he gets too close to electrical items. Doctors have apparently been left baffled by the rare condition. Mr Reddington has resorted to finding his own cures in order to watch TV, including wearing a T-shirt with eye-holes cut out, donning a welder's mask or a face-mask lined with foil: "'My face just starts burning up really badly, within 10 minutes of watching TV or being at a computer. It goes bright red like a sunburn - it makes my whole body feel hot. For a lot of my career I spent six to eight hours a day on the computer, as part of my business was mail orders. All that has built up over the years and this electrosensitivity is coming out now as this rash. I have good days and bad days. I just have to take precautions, like wearing a mask, sitting further back from the TV or taking a break to splash some cold water on my face. I also get my wife, Beryl, to help me out on the computer, although it can cause some disagreements between us. It's a bit of a pain for her. I've had to change my lifestyle completely to try and cope with it. But there's no cure, so I'm just stuck with it now really and need

to make the best of it." The pensioner used to run Reddington's Rare Records in Digbeth, Birmingham, but closed down his shop in 2006. The part-time DJ now dishes out online advice for record fans but can only use a computer or the internet for five minutes before he starts to burn. He has to rely on his wife Beryl who helps him with his radio shows and website. Mr Reddington added: "I have to stand over the computer and tell her what to do but even then my face burns up so I have to move back into the hallway. It's only when I use the internet on my phone that my face starts playing up. I have to back right off from the television and now it is as far away as it can be from my chair. Even if I go to my daughter's house I have to go outside or swill my face because she has wi-fi and that doesn't help. I've worked hard all my life and it gets to this point where I am suffering." ("'I get sunburnt every time I watch Downton Abbey' Rare condition making man's life hell" Express, 25 April 2016; Anna Hodgekiss: "Grandfather claims he suffers bizarre allergy to Electricity which gives him 'sunburn' every time he watches TV" Daily Mail, 25 April 2016; "Record store boss gets sunburn watching TV" ITV News, 25 April 2016; BBC Radio Hereford & Worcester 25 April 2016: 4 minutes)

"Becoming sensitive has turned my life upside down"

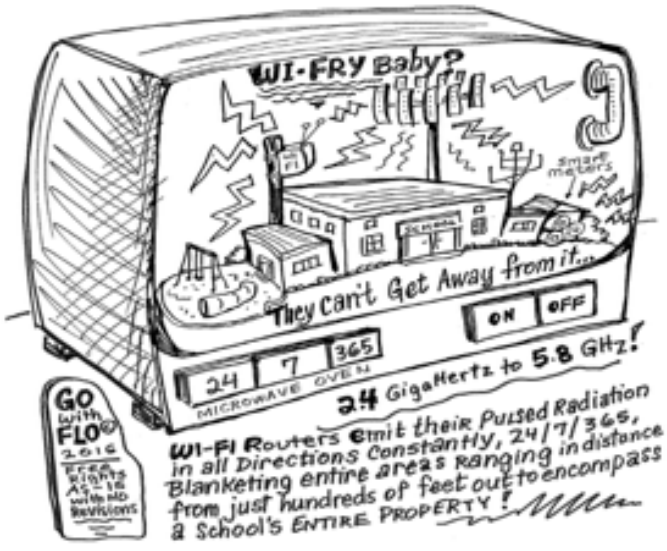
A Kidderminster man who fixes computers and phones for a living says he has been forced to close his repair business of 20 years as technology has made him ill. Richard Kimberley, 36, is shutting csmicros on July 22 after claiming radiation signals from wireless technology has given him a rare condition known as electro-hypersensitivity (EHS). He suffers from black outs, headaches and tiredness as a result of working with phones, computers and Wi-Fi signals on a regular basis since launching his business in 1996. He said: "Due to an over-exposure to the radiation from wireless technology, my health has declined to the point where I cannot continue with the business that I have spent my life building. It is a complete

life changer and an absolute blow that was totally unexpected. I'd wake up five or six times in a night, my joints were aching, I'd have headaches during the day and my memory was awful – I felt atrocious and I had no idea why. I've had to rely on staff for the past 18 months since becoming EHS. I have persevered, battling with electro-hypersensitivity for as long as I can."

Mr Kimberley's symptoms began in 2013 when he moved into a dual shop and house premise on Stourport Road, yet found the problem improved by removing wireless technology at home. Since October, he has lived in a van fitted with aluminium lining to block out radiation signals. He added: "Becoming sensitive has turned my life upside down. Wireless technology is everywhere and the only way I can avoid it is to camp in the van every night in places I find that are safe. I have satellite broadband and a landline in the van, my computer is wired and people can email me or phone my landline if they want me. I still have technology, but now I use it safely. It's an extremely solitary life." (Tom Davis: "Wi-Fi allergy known as EHS has forced me to close my computer repair shop – Kidderminster boss" Evesham Journal, 1 July 2016)

"Insomnia, skin rash, brain fog"

Floris Freshman is an EHS sufferer, from New York but now living in Scottsdale, Arizona. Both her parents survived the European Holocaust. "Never would I believe that the Holocaust had followed my parents to America and would someday target myself, my home and my pets. From January 10th through June 10th, 2014, I had a smart-meter installed on my home, against my will, knowledge and instructions, and I was lied to that it was an analogue. I began to suffer from every side effect of 'microwave sickness', although I didn't realize what it was until June of 2014. Insomnia, skin rash, brain fog, inability to read a book (concentration problems), insomnia, severe muscle cramps, vertigo, nausea, irritability, pre-cancer (cured!), I lost clients, I had trouble driving, auditory hallucinations (microwaved voices and music), my right eye always felt tired, frequent urination, I couldn't get out of bed, heart palpitations, cardiac arrest and more. Stacking tires, aluminium mesh screening, shielding hats and masks from EMF's, shutting down all breakers but one, wrapping my evaporation cooler on the roof with rubber Koi pond liner, and other gizmos. My health improved, but after being sensitised for so long, I developed a sensitivity to microwaves in the air. There are 54 celltowers and antennae within a 3-mile radius of my house and every school, community center, college and restaurant boast having free WiFi. I cannot attend many networking or cultural events knowing my threshold for EHS is low. Recently, in January 2016, the new Focus meters with 2-way radios were being deployed, and the radiation is deafening. They sport 1–3 watts of power, upped from the ¼ watt of the original smart-meter. So I moved into my garage, I sleep on a wooden bed with a foam mattress, and have a little flashlight for night-time needs. I couldn't take the frequencies of my neighbors' smart-meters tazing through my bedroom across my property." (Floris R. Freshman' update, 15 March 2016; see her cartoons on irradiation with a 2B cancer agent).



ES-UK Leaflet

It's an excellent introduction to what ES is, with notes on its symptoms and causes, updated in September 2013.

Give it to your relatives and friends, or anyone interested.

Please send contributions for the ES-UK Newsletter to:
Michael Bevington, BM Box ES-UK, London, WC1N 3XX
or email: michael@es-uk.info

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Telephone: 0845 643 9748

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