

## Europe recognises EHS health problems

Two votes in January 2015 showed that EHS is now accepted as a major health problem in Europe. On 21st January the EESC voted to help people with EHS. Although Richard Adams' controversial counter-opinion was adopted by a small margin, the debate showed how widely EHS is now recognised. On 29th January the French parliament passed Laurence Abeille's bill. Not only does this ban WiFi in nurseries because of health dangers, but it is also the first to include EHS, requiring the French government to produce a report on EHS within a year. The Nordic Council of Minister recognised Electrosensitivity in 2000, the EU Parliament recognised the need for EHS disability equality in 2009, and the Council of Europe did so in 2011. See inside for more details.



## Ombudsman: Europe needs balanced groups, not secrecy

At present groups like the European SCENIHR and the World Health Organisation's EMF Project are single-viewpoint cliques representing a minority opinion against public health. Emily O'Reilly, the European Union's Ombudsman, on 27th January wrote to Jean-Claude Juncker, the EU commission president, criticising the secrecy still surrounding scientific groups used by the European Commission to draft legislation, which have been shown to be infiltrated by industry scientists, as has the WHO. The Commission has to reply by 30th April 2015.

## European EHS conference: essential for WHO EMF Project

A conference with 16 international speakers, organised as the Fifth Congress of the Paris Appeal, at the Royal Academy of Medicine, Brussels, 17-18th May, aims to inform scientists and politicians of advances in understanding EHS and MCS. This will be crucial material for the WHO's EMF Project in dealing with the EHS sections of its EHC report.

## Europe's EESC: Real EHS or invalidated Nocebo effect: both require action on disability

The two separate conditions, 'Real physical EHS', and 'The WHO's EMF Project Nocebo Fear of EHS', often deliberately confused by pro-wireless industry groups like the WHO's EMF Project and parts of ICNIRP, formed the basis of the two draft opinions at the EESC, the original TEN-559 opinion, and Adams' controversial counter-opinion. The first attracted 110 (42%) votes, the second 136 (51%), with 19 abstentions. Both conditions lead to functional impairment, or disability, as under the United Nations' Rights for Persons with Disability, and national laws such as the UK's Equality Act of 2010. The EESC must now follow up its vote by dealing with the disability and equality issues. The obvious and most cost-effective way is to reduce environmental EM exposure, since this will help people suffering from the first condition, 'Real Physical EHS', and anyone suffering from the second 'Nocebo' fear.

## Petition to move RF radiation to class 1 carcinogen

See the Avaaz petition for the regulators to catch up with the science. [https://secure.avaaz.org/en/petition/IARC\\_WHO\\_Move\\_Radio\\_Frequency\\_Radiation\\_from\\_Class\\_2b\\_to\\_Class\\_1/?nHHJhfb](https://secure.avaaz.org/en/petition/IARC_WHO_Move_Radio_Frequency_Radiation_from_Class_2b_to_Class_1/?nHHJhfb)



## Taiwan bans toddlers from wireless radiation; UK wants more radiation

Taiwan now accepts the established evidence of harm from everyday wireless exposure and has banned parents from letting children under two use radiation devices. In contrast, the UK government Department of Transport misguidedly announced on 11th February 2015 that it wants more WiFi radiation in public places and will use £50M of public money to irradiate more train passengers, despite the known health harm.

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## Write to politicians and the media: UK is pollution hotspot?

The UK is said to be one of the worst countries for uncontrolled electromagnetic pollution. Please keep writing to MPs, government and the media, reminding them of their responsibilities to their fellow citizens and the environment. Please ask candidates before the general election about their attitude to EM pollution. The science is now almost entirely on our side, showing harm from radiation. The industry and government apparently rely on an invalid nocebo effect from failed provocation tests, while ignoring studies on symptoms from phone masts, electronic warfare, therapeutic uses and cellular studies, which all prove sensitivity at low levels. Even European laws now require employers to report sensitivity symptoms, not nocebo effects.

## Bradford-on-Avon meeting, 20th March

Dr Andrew Tresidder, a trustee of ES-UK, spoke on 'Health and Electrosensitivity: problems and solutions' on 20th March, at Bradford-on-Avon, Wilts.

## Running ES meetings

Peter Gane reports.

Towards the end of 2014 I had the pleasure of helping with the resources table at major ES events in Stroud, Budleigh Salterton and Brighton, all with capacity attendance. The speakers included Dr Andrew Tresidder, Lynne and Barrie Trower.

The enthusiasm and thirst for knowledge from those who attended was abundantly clear, and I would like to most sincerely thank the organisers of these amazingly successful events for their hard work and often personal sacrifice in order to raise awareness of ES and associated health issues to benefit others. May I kindly request that if an event is to take place in your locality, please do your absolute best not only to attend but also to help with the promotion, as such events are to benefit us all.

I also organised an event last May along with Dr Andrew Tresidder and also give talks to various groups and organisations, to raise awareness and hopefully ES-UK funds. In particular I would like to mention revelations from a talk I gave to a fibromyalgia support group, which I have already found of benefit when raising ES with others. The talk in question attracted 25 people, some of whom had heard of ES but knew nothing about it. It transpired that 3 of the group had discovered, purely by chance, that away from the causes of ES their symptoms improved dramatically, one even saying that she now turns off her electricity at the mains every night and for the first time in years gets a decent night's sleep!

The point is that relating ES to a more socially, politically and medically accepted condition can immediately add credibility to what you are attempting to explain, especially to sceptics. I do hope the momentum of these events from last year continues in 2015. Please do contact me if I can help in any way. Peter Gane (01935 423002, peter.gane@btopenworld.com).

## Volunteers thanks

Thank you again to our volunteers who answer the telephone helpline and support people who discover they've been sensitised to electromagnetic radiation. Thank you also to all those who arrange local meetings.

## Newsletters

Do contribute to your Newsletter. If you have strong views on not receiving your printed copy in a trans-parent plastic wrapper, please let the editor know.

## Europe: offer of help

Following the vote on 21st January by the EESC on EHS, the chair of trustees of ES-UK wrote to Henri Malosse, the EESC's president, offering the EESC help in developing policies to resolve the increasing economic and social problems faced by people with EHS.

## ES Social Event

Saturday 16 May 2015, plus optional camping, 10.30 am - 7pm, to be held on a farm in East Sussex, close to Tunbridge Wells, 15 miles from the M25 J5. There is fishing and sailing close by on Bewl Water and various walks through woodland. Please bring a bicycle if you enjoy cycling. We are not organising a formal conference agenda and you will be free to come and go as you please. There will be opportunities to chat to others about your EHS challenges. If you wish to bring your tent and camp overnight, sites are available for £15 per person per night and camping will be open from 3pm on Friday 15th until 4pm on Sunday, 17th May. The local villages of Lamberhurst and Hawkhurst have B&Bs, but you will need to check that the accommodation meets your own requirements. There are many local pubs serving meals. Tickets for the day cost £25 and we suggest that you pay by PayPal on the website ([www.es-uk.info](http://www.es-uk.info)) or send your cheque, payable to ES-UK, before 20th April to BM BOX ES-UK, London WC1N 3XX. [media@es-uk.info](mailto:media@es-uk.info). ES-UK CAVEAT: there are two local mobile phone masts along the main A roads within a mile each way from the site but the topography of the landscape and the local woodlands offer good cover.

# EQUALITY RIGHTS FOR PEOPLE WITH ES

## Surviving airplane flights

Anne writes:

“I have been finding that the back row on a large plane has been a good place to sit and I was even able to watch films on my screen. There was no one in the seat behind me because we were in the back row. On small internal flights, where to sit depends where the wings go. I am not happy in a plane when people have paid to use WiFi, but on the planes I have caught that has tended to be for the first hour. A nightmare was Air Canada Rouge, as I did not know till I was about to board the plane that the entertainment system was on internal WiFi ... I was not a happy bunny. The plane was very full, but on the outward journey, I talked to a mature air attendant. (The back row was reserved for staff, I think as a perk for non-working staff. They were all using their equipment.) The guy said if I could find somewhere to sit that would be more comfortable in my area of the plane, I could move, but the plane was too full and WiFi entertainment was being used too extensively for this to be helpful. However, while it was completely ignored, he did arrange for an announcement to be made, over the plane’s tannoy that someone who was electric sensitive was on the plane. I just about heard it, but it was a good sign, though not making a real difference as yet. The small planes we took for internal flights were pretty good (no WiFi service); the wings were seaplane type, and were above the body of the plane. I dreaded the long haul back, and asked if I would be able to take aluminum foil on the plane. I bought a roll and took some on, and used it, and it seemed to help calm my body on the way back. Boarding areas are difficult. I sit away from everyone else at a neighbouring boarding area until everyone has gone through. Long queues going through baggage check-in and security are a problem. Where possible from the UK you can buy cheaply the privilege to go through the fast lane. The Disability helper at Manchester airport told me he could escort me through the fast track if needed. In Canada, I found talking and waving the Electro-sensitive UK leaflet at staff, helped me to be allowed to go through the fast track. Good luck everyone.” See more at: <http://www.electricsense.com/958/flying-and-electromagnetic-radiation/comment-page-1/#comment-79226>



## Air travel accommodations for people with EHS

“Anyone looking to fly on US commercial carriers within the USA should ask for (1) a plane without WiFi, (2) entry at the airport with a check-in procedure that takes the person to a non WiFi area (supposedly British Airways has done this), (3) possible partitioning of aircraft for phone use in one section (a la smoking and non-smoking sections). If you are denied accommodation, fill out the US Department of Transportation Civil Rights Complaint form: [www.fta.dot.gov/documents/Consolidated\\_Civil\\_Rights\\_Complaint\\_Form.pdf](http://www.fta.dot.gov/documents/Consolidated_Civil_Rights_Complaint_Form.pdf) and mail to: Federal Transit Administration (FTA), Office of Civil Rights, Attention: Complaint Team, East Building, 5th Floor – TCR, 1200 New Jersey Ave., SE Washington, DC 20590. Until people start to demand this accommodation en masse, airlines will not take it seriously” (Deborah Kopald, posted 5th February).

## Recording EHS symptoms on accident forms

EHS sufferers should complete an accident form for any organisation, workplace, or institution where they suffer adverse EHS symptoms. It is suggested that the illness is recorded as “Radiation Sickness”, as this is often the most accurate terminology and one commonly accepted medically. Most large public organisations have Health & Safety departments concerned with such incidents and appreciate being informed. Some employers insist that all such instances are recorded in writing on each occasion, with the location, date and time. This could include symptoms caused by other people’s use of mobile phones and iPads, since such injuries, however temporary or long-term, could be part of a growing pattern or form part of injury liability. There is a growing movement to ensure that all such incidents are recorded under HSE reporting in the UK. European legislation now requires that employers should record instances of non-thermal electrosensitivity symptoms among their employees. All schools, with a duty of care to their pupils, appear required to record headaches and memory deficits caused by the use of iPads, mobile or cordless phones, or WiFi routers and laptops. Other organisations such as theatres, shops, trains and buses allowing unregulated radiation devices to be used on their premises, such as WiFi in smart phones and tablets, may be responsible for any injury caused and therefore need to know of such instances.

# AVOIDANCE, REFUGES

## Radiation at the RSC theatre

A supporter of ES-UK received the following letter from Laura Benson, the Access Programmes Manager for the Royal Shakespeare Company at Stratford-upon-Avon on 16th December 2014:

“Thank you for your email requesting help with your visit as regards your electrosensitivity. I’ve been doing some research to try and give you as much information as possible about the wifi, radio and phone signals in our building. There are three wifi access points in the RST auditorium, two placed below the floor in the stalls, one either side, and one on the lighting rig high above the audience’s heads. We use two wifi networks, 2.4ghz and 5ghz. These are in use during the

performance to run our technical sound / lighting / automation cues so cannot be disabled I’m afraid. We also use radios to run our performances. As regards phones, we do always ask audience members to ‘turn off’ mobile phones rather than switch them to silent, and in addition the steel structure inside our RST effectively acts as a Faraday cage, so most phone signals are deflected. On the occasion of your visit FOH staff will reinforce this message, in particular in the area where you are sitting. We would ask that you let us have these conversations rather than you, so do make contact with the Duty Manager on the night and they can reassure you that this is taking place. In particular we ask that you do not leaflet members of the audience at any time as we have a policy against the distribution of any non-RSC literature within our buildings. You are more than welcome to

stand at the back of the stalls, we have a designated standing area. However to avoid distraction to the performers and audience we would ask that movement is kept to a minimum once the performance has begun. Whether seated or standing you are also welcome to wear a protective garment as long as this does not impede the view of those seated behind or around you. We would certainly like to accommodate you and would appreciate your feedback after your visit to let us know how it went.”

## “The Town without Wi-Fi”

This article is a fascinating account of life at Green Bank, West Virginia, the radio quiet zone in the USA. It explores the relationships between people with ES and locals. (Michael Gaynor, Washingtonian, January 2015; [www.washingtonian.com/articles/people/the-town-without-wi-fi/](http://www.washingtonian.com/articles/people/the-town-without-wi-fi/))

## ES NEWS

### ES research from 1950s: 50% of world population?

“In the 1950s special clinics were set up in Moscow, Leningrad and other cities in the Soviet Union and Eastern Europe to study an occupational disease termed as the Radio Wave Sickness. The patients included those who were in constant contact with electrical equipment and exposed to harmful EM fields. Many reported symptoms such as headaches, fatigue, weakness, sleep disturbance, heart palpitations, irritability, dizziness, sexual dysfunction and occasional sensitivity to sunlight which were documented in a report produced by the study. As a consequence, the first programme called the US/USSR scientific exchange was launched to further study the phenomenon. Since then, numerous studies have been carried out on the subject of radio wave sickness. Based on a report by Dr Ollie Johansson in the Electromagnetic Biology Medicine journal, EM hyper-sensitivity is on the rise and by 2017, 50% of the total world population will be sensitive to electric current. The World Health Organization has already classified EM fields produced by mobile phones as possibly

carcinogenic to humans. One of the first scientists to conduct studies on dirty electricity, Sam Milham, who also authored the book Dirty electricity: Electrification and the Diseases of Civilization, writes, ‘All the diseases of the 20th century, which we may consider to be the so-called ‘diseases of civilisation’, including cancer, cardiovascular disease, diabetes and suicide, are caused by EM radiation.’” (Zohaib Amjad, Express Tribune, 14th December)

### Stephen Clarke update

Stephen Clarke was arrested in June 2014 and held for 3 months in the Mater Infirmorum in Belfast without trial after his protest against WiFi and iPads at his children’s school, on the diagnosis of the psychiatrist Dr Ann McDonnell. He was re-arrested for not having kept his car insured and held in Maghaberry prison, near Belfast, where his case before Judge Rosemary Watters was delayed. She originally denied Clarke the right to speak Motu Proprio in the custody battle over his children because it was not a criminal case. (John Weigel, 29th November)

## Peter Lloyd: “Save Man Allergic to Electricity”

See [www.gofundme.com/electricallergy](http://www.gofundme.com/electricallergy) for a detailed explanation of Peter’s need for funding to find suitable accommodation. He has been medically diagnosed with an unusual combination of mitochondrial disease, which leads to neuromuscular dysfunction, multiple chemical sensitivity and severe electrical sensitivity; all three conditions inter-react, and medical specialists are concerned that further EM exposure may lead to the development of a motor neuron disease. So far Cardiff Council, which apparently accepts that he has EHS and that it has a duty to find suitable accommodation, has offered semi-detached housing within 112m of two phone masts which it says is suitable, but Peter’s lawyers declined these premises as unsuitable on medical advice because this exposes him to high levels of microwave radiation which triggers his electrical sensitivity and thereby worsens his mitochondrial dysfunction which then leads to further muscular deterioration. The council declares that their offer is suitable and that his refusal classifies him as ‘voluntary homeless’ and that the council is now absolved of all responsibilities. Peter is therefore seeking to raise funds for a wooden chalet in a remote area. An enforced hospitalisation in an environment with high levels of EM exposure could lead to a downward spiral of all three of his conditions with serious consequences. His MP and the press have highlighted his case, but so far without success. He is due to be evicted from his current housing on 1st April



## Children irradiated at school: “vomiting and headaches”

“Exceedingly high radiation levels were found in Ashdod city schools, and the parents demanded quick solutions from the municipality. In the municipality they argued that the letter warning on the radiation in the same schools did not arrive at all to them and that they did not know about

it. The mayor Dr. Yehiel Lasri sent a sharp letter to the Ministry of Environment.” The parents in Ariel school, where exceeding levels were found, started collecting money from the parents to fund examination on their behalf. “How can it be,” says one of the worried parents, “that since July they knew in the municipality and in education administration about the radiation and until it was published in the media they did not do anything? We send the children to school, which is supposed to be a safe place, and we learn that they are being exposed to danger”. Another mother said: “My son was hospitalized with vomiting and headaches. He went through many check-ups including neurological and they did not find the source of the problem. Now I connect things. My son is not the only one in his classroom who suffers from these symptoms. Also other kids in the classroom complain about the same symptoms. They neglected our children’s health and it’s a crime. We have a feeling that in the municipality they try to cover for the person who was supposed to handle the problem months ago and did not do his job.” According to information revealed, more than 3 months ago, on 16.7.14, a letter was sent from the Ministry of Environment to the head of education administration in Ashdod, Arie Mimon, with grave results of radiation levels as a result of proximity to electricity cabinets in 7 schools in Ashdod; Dr Rivka Shirazki, official administrator of radiation safety in the Ministry of Environment, sent to Ashdod municipality the conclusions from the examinations she did in the area near the power network in the schools.” (Rivka Yaniv: “Following the exposure of radiation levels in Ashdod: parents are afraid to send their children to school”, 20th November 2014).

## Prof Elihu Richter: “not psychiatric, but caused by radiation”

“Even if it’s 5% of the population, it is a large number of EHS in the world”, says Professor Elihu Richter, retired director of the unit of Occupational and Environmental Medicine, Faculty of Medicine of the Hebrew University of Jerusalem. Richter calls it intolerance to electromagnetic radiation, and claims that it is not a psychiatric or psychosomatic illness, but a medical condition caused by exposure to radiation. “This statement is based on my personal experience when I checked patients suffering from EHS, and on the basis of clinical and scientific information available. It is not clear what causes certain people to be sensitive and less resistant to radiation but like any type of exposure there are always subgroups with more sensitivity, and children are undoubtedly more likely.” (Smadar Salton: Israel Today, 26th December 2014)

## **Prof. Stelian Gelberg: “children with hypersensitivity to radiation”**

Prof. Stelian Gelberg, head of radiation and noise at the Ministry of Environmental Protection, acknowledged that there are children, in Israel and abroad, who have a hypersensitivity to radiation. He said this during a hearing held in the Education Committee in March 2014 on coping with threat of electromagnetic radiation in the educational system. He also said that radio radiation and power fields have been declared by the World Health Organization as possible carcinogens, explaining that when 30 laptops or tablets are in the same classroom and transmitting at the same time, the exposure of class may reach rather high levels. (Smadar Salton: Israel Today, 26th December 2014)

## **Dr Zamir P Shalita: 10% sensitive to radiation: “headaches, insomnia, weak memory”**

Dr Zamir P Shalita, a retired microbiologist doctor from the Institute of Biology, came across the subject when on sabbatical in the USA. He is active against non-ionizing radiation and participated in parliamentary committees and gives expert evidence in court. “There is evidence of diseases, some of which resulted in death among people who worked or lived near areas of radiation such as power-lines. Others develop sensitivities to radiation which are similar to allergic reactions. In my opinion, one in ten people are sensitive today to cellular radiation and suffer from headaches, insomnia, weakness of memory and more.” (Smadar Salton: Israel Today, 26th December 2014)

## **Illness and no birds near phone masts**

“A friend of mine collapsed in agony last year, from the prolonged effect of living next to a mast.” “I know people who have to leave Bradford-on-Avon to spend time in time in places less polluted by ‘electrosmog’ from phone masts – the last thing we need is more of them.” “Westbury has two powerful phone masts in the town centre. The huge flock of starlings that used to roost there has completely disappeared.” (Martin Valatin, letter to the Wiltshire Times, 26th December 2014)



## **Photosensitivity caused by computer: “We are just like you”**

Anna Lyndsey (not her real name), aged 43 and living in London, was severely sensitised to light in 2005 when she was working as a fast-track civil



servant in the Department for Work & Pensions. It started when she “first experienced a burning feeling on her face ... caused by her computer screen at work.”

Fluorescent lights also caused her agony. She wrote her autobiographical book, “Girl in the Dark”, “to humanise people with chronic illness and say to the rest of the world, ‘We are just like you. We are not a bunch of psychologically maladjusted nutcases.’ The more open-minded doctors and scientists can be, the better. It’s the closed-minded ones who say, ‘I haven’t come across this, therefore it is not real.’” (Louise Carpenter: “The Woman Who Lives In The Dark” Times Magazine, 14th February 2014)

## **NACST: “headaches and cardiac issues across the country”**

“Decades of accumulated research show wireless radiation damages neurological, immune, and reproductive systems in addition to increasing cancer risk. Prof. Olle Johansson, Karolinska Institute, Stockholm Sweden, has stated that wireless radiation exposure studies have indicated ‘irreversible sterility within five generations’. As this damage is cumulative, the longer the radiation exposure, the greater the health impact over time. ‘We are getting reports of headaches and cardiac issues from across the country. The time to act is now’, stated a spokesperson for the National Association for Children and Safe Technology. NACST is an organization dedicated to raising awareness of the health impacts of wireless radiation on children. They are calling for schools to use wired Internet only. Their website details both the accumulated research showing wireless radiation’s acute as well as long term health impacts.” (“Los Angeles Unified School District Accommodates Teacher Who Fell Ill After Wireless Installation” NACST, 31st January)

# READERS' COMMENTS

## **Tiredness**

"While driving I felt a sudden onset of extreme tiredness, so I asked the passenger behind me whether she had switched on her phone, and she said she'd just done so to check for texts. She then kindly switched it off again."

## **Obituary notice: colon cancer and BlackBerry-addicted**

"I saw an obituary in the Times on 27th December 2014 for Kate Gross. She died from colon cancer aged 36 and was described as 'your average BlackBerry-addicted, workaholic mother.'"

## **Ozone benefits**

"I see that ozone treatment is in the news as being excellent for stopping ebola, but was apparently blocked by the drug companies. Is it true that it could also help people with immune conditions, including ES? See Elvis & Ekta, J Nat Sci Niol Med., 2011."

## **Phil Inkley**

These are a few excerpts on Phil Inkley's difficult situation Please contact the Helpline if you can help.

"Urgent legal advice/help needed. The council have refused to help me find elsewhere to live, have refused to take my health into account despite me suffering potentially life threatening and completely debilitating symptoms with prolonged EMF exposure and have now served eviction notice on me yet again due to lack of planning permission for residential use of land (even though they cannot identify who owns the land...it appears to be 'no man's land'). Deadline to remove my caravan is the 11th Feb or it will be destroyed and I will be responsible for the

cost. It seems that not having a caravan on the verge of a remote byway (out of sight and that hardly anyone ever passes) is more important than my life. My caravan is no longer roadworthy and is literally falling apart at the seams in situ, my vehicles are off the road due to lack of money for repairs and I'm currently hiring a van with no tow bar so the only option at the moment is for me to sleep in the van (with gardening tools and dirt) parking on the sides of roads without heating or washing facilities and facing being harassed by Police and zapped by their TETRA radios.



The 'Senior Compliance and Enforcement Officer' who has instigated this eviction action seems to think that he's doing me a favour, despite me thoroughly informing him during a two hour conversation when he visited in the Autumn, as he said with the eviction notice that 'this is an opportunity for your quality of life to improve'.

Since the council evicted me from land I was renting in Autumn of 2012 (the reason I'm living on the side of a byway) I've been appealing to them for help in finding somewhere I could live where I can function without threat of eviction. The legal aid system in the UK appears to have been systematically destroyed, so without money I know not of a way I can consult with a lawyer to help me defend the multitude of human and health rights that are being denied me, let alone attempt to get compensation for being injured by EMFs in the first place. Of particular concern still is the apparent injury to the left

of my brain (adjacent to where mobile phone antenna used to rest) which responds directly to EMF exposure and if exposure is too prolonged becomes alarmingly pronounced, with throbbing pain with any bending and even 'mild' EMR exposure, sometimes with accompanying bleeding from the left nostril. It is this apparent brain injury that makes having a low EMF home to escape to of especially critical importance.

I'm reluctant to ask for charity as so many friends have been of amazingly kind help in the past and many have frankly still not received sufficient personal thanks from me; I'm sorry. Thanks so much again to everyone who has helped in the past. Even just a click of the like button on Facebook is appreciated (I consider likes of such posts to be a vote of moral support, not that you necessary like what is happening so please don't hesitate to click if you'd like an easy way to send much appreciated and morale-boosting support, thanks peeps). I think it's got to the stage where I should be setting up a 'go fund me' page or similar to ask the public for help in getting a safe home and treatment; - something I've been intending to do for some time but solvency and ability to communicate has been a constant challenge and I just haven't found the spare time, head-state and means to do so. Should anyone have the ability, inclination and kindness to donate to my cause, I can accept paypal payments via phil.inkley@fastmail.fm. Massive thanks to anyone who has done so in the past and the same hugely grateful thanks to anyone who may do so in the future."

# SCIENCE: PHOSPHORUS, PROTEINS, GLUTAMATE, DEMENTIA

## Phosphorylation: key to effects?

“Interviewer: You expect that changes in phosphorylation will be key to understanding the effects of cell phone radiation? Reply: We saw an increase in phosphorylation of Hsp27 of between two-fold and six-fold after exposure to mobile phone radiation. So in the expression of proteins there might only be very small changes, but the changes in the activity of proteins might be the more important statistic. So what we would like to do is to examine not so much the expression of proteins but changes like phosphorylation, the changes in activity.” (Prof Dariusz Leszczynski, July 2011)

## Proteins STAT3 and hsp27: phosphorylation in ES and dementia?

“RF exposure differentially induced pro-inflammatory responses in microglia and astrocytes, which involved differential activation of STAT3 in microglia and astrocytes. Our data provide novel insights into the potential mechanisms of the reported central nervous system (CNS) impacts associated with mobile phone use and present STAT3 as a promising target to protect humans against increasing RF exposure.” (Lu Y et al, PLoS One, 2014). “Mobile phone exposure caused a transient increase in phosphorylation of hsp27 ... may (i) facilitate the development of brain cancer ... and (ii) cause an increase in blood-brain barrier permeability.” (Leszczynski D et al, Differentiation, 2002). “Phosphorylation modulates K<sup>+</sup>, Na<sup>+</sup> and Ca<sup>2+</sup> fluxes through membranes, i.e. the general excitability properties of the cell.” (Haiech J et al, Philos Trans R Soc Lond B Biol Sci., 1983).

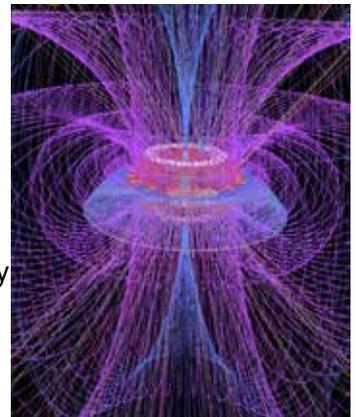
## STEP, phosphates, proteins, glutamate, memory and dementia

Yale School of Medicine on 5th August 2014 published their discovery after five years' research of TC-2153 which inhibits the negative effects of the protein STtrialat-Enriched tyrosine Phosphatase (STEP), a key to regulating learning and memory, cognitive functions impaired in Alzheimer's. “When STEP is elevated in the brain, it depletes receptors from synaptic sites, and inactivates other proteins that are necessary for proper cognitive function. This disruption can result in Alzheimer's disease or a number of neuropsychiatric and neurodegenerative disorders, all marked by cognitive deficits. Decreasing STEP levels reversed the effects of Alzheimer's disease in mice,” according to Prof. Lambroso (Xu J et al, PLoS Biol., 2014). Lambroso said that glutamate receptors on the surface of neurons are key to learning and memory. He and his team determined that the excess level of STEP was removing these glutamate receptors and preventing short-term memories from turning into long-term memories (Yale News, 18th October). “Long-term irradiation from both EMF sources altered significantly the expression of 143 proteins in total (as low as 0.003 fold downregulation up to 114 fold overexpression)

... The observed protein expression changes may be related to brain plasticity alterations, indicative of oxidative stress in the nervous system or involved in apoptosis and might potentially explain human health hazards reported so far, such as headaches, sleep disturbance, fatigue, memory deficits, and brain tumor long-term induction under similar exposure conditions.” (Fragopoulou AF et al, Electromagn Biol Med., 2012). Subliminal EMFs increased glucose metabolism in the brain (Duan Y at al, Food Funct., 2014; Fritel C 2nd et al, Neuroscience, 2014) whereas microwaves decreased glutamate ratios (Wang H et al, Int J Radiat Biol, 2014). “Glutamate signaling sub-networks were also found to be significantly overrepresented in Alzheimer's disease ... genetic variation within glutamate signaling contributes to the remaining genetic risk of AD” (Perez-Palma E et al, PLoS One, 2014).

## EM radiation causes impaired cognition and memory

“After exposure, electromagnetic pulse (EMP) exposure caused clear cognitive and memory impairment compared with sham exposure group. Determination of oxidation indexes showed decreased superoxide dismutase (SOD) activity and glutathione (GSH) content in exposure groups compared with sham group. Immunohistochemical (IHC) staining showed increased beta amyloid protein (A $\beta$ ) in EMP exposure groups compared with sham group ... The present results showed that EMP exposure can cause long-term impairment in impaired cognition and memory of rats, resulting in AD-like symptoms. This may be induced by enhancing oxidative stress and is related to autophagy dysfunction.” (Jiang DP et al, Arch Med Res., 2013).



## Possible mechanism of memory loss

“Our results showed that the microwave exposed rats showed consistent deficiencies in spatial learning and memory. The level of amino acid neurotransmitters also decreased after microwave radiation. The ratio of glutamate (Glu) and gammaaminobutyric acid (GABA) significantly decreased at 6 minutes. Besides, the hippocampus showed varying degrees of degeneration of neurons, increased postsynaptic density and blurred synaptic clefts in the exposure group. ... This study indicated that the content of amino acids neurotransmitters, the expression of NMDAR subunits and the variation of hippocampal structure might contribute to the long term cognitive impairment after microwave exposure.” (Wang H et al, Int J Radiat Biol., 2014).

### Wireless 'smart' meter causes jump in blood glucose levels

"The A1C [blood glucose] level jumped from 6.8 to 9.5 in a diabetic child after smart meter was installed, 3 feet from where he slept. The mother called the power company and asked to change to analogue; they refused. So she bought an analogue meter, installed it in January. In February he had 7.7 A1C level. Now the power company threatens to cut her power off. How can she refrigerate her child's insulin? she is asking." (Evidence to the Michigan House Oversight Committee, 2nd December 2014)

### Wireless gene expression

Wireless signals can now remotely control gene expression by opening the TRPV1 channel (a protein identified in 1997) to allow calcium ions to enter the cell (Stanley SA et al, Nature Medicine, 2014).

### Mobile phones alter miRNA

"We still do not have any information on the interaction between RF radiation and miRNA, which play paramount role in growth, differentiation, proliferation and cell death by suppressing one or more target genes. The purpose of this study was to bridge this gap by investigating effects of long-term 900 MHz mobile phone exposure on some of the miRNA in brain tissue.

... Conclusion: 900 MHz RF radiation can alter some of the miRNA, which, in turn, may lead to adverse effects" (Dasdag S et al, Int J Radiat Biol., 2015).



### Cell type differences in sensitivity to EMFs

"The simultaneous exposure of the two cell types results showed that the NHEK and HaCaT cells exhibited distinct responses to ELF-EMFs. Thus, we confirmed that the biological effects of ELF-EMFs in epidermal keratinocytes are cell type specific. Our findings may partially explain the inconsistent results of previous studies when comparing results across various experimental models." (Huang CY et al, PLoS One, 2014)

### Fruit flies have differing sensitivity too: use for WHO safety limits

"Our results suggest a possible radiofrequency sensitivity difference in insects which may be due to the distance from the antenna or to unexplored intimate factors. Each subject ... may react differently in electromagnetic stress (diverse radiofrequency sensitivity i.e. due to genetic factors). ... Because Drosophila model genome is at least 54% homologous to the human, our findings may be of clinical value in terms of limit setting for public health safety." (Geronikolou S et al, PLoS One, 2014).

### Symptoms caused by power-lines

"The aim of this study was to investigate the association between exposure to ELF MF, or power frequency fields, and non-specific physical symptoms ... The crude odds ratio for women was 8.50, suggesting that for women environmental exposure to ELF MF is associated with an increased score on NSPS." (Bolte JF et al, Environ Pollut., 2014).

### Brain waves: remembering where you parked

When the hippocampus forms a new spatial memory, it receives sensory information about your current location from the entorhinal cortex. To recall a past location, it retrieves the stored spatial memory from a subregion called CA3. The entorhinal cortex and CA3 transmit these different types of information using different frequencies of gamma waves; the former uses fast gamma waves at about 80 Hz (like as a bass E note on a piano), but CA3 uses slow gamma waves at about 40 Hz. Laura Colgin and her colleagues at Texas University hypothesized that fast gamma waves promote encoding of recent experiences, while slow gamma waves support memory retrieval: "These findings suggest that fast gamma waves promote current memory encoding, such as the memory of where we just parked. However, when we need to remember where we are going, like when finding our parked car later in the day, the hippocampus tunes into slow gamma waves." (Medicalxpress, 17th April 2014).

### Epigenetic changes from powerlines

In adult mice 1 milliTesla at 50-Hz "resulted in a 30-fold increase in the number of cells that got reprogrammed. And surprisingly, they found that cells grown in a chamber that blocks Earth's geomagnetic field were unable to transform into stem cells." (Chemical & Engineering News, 2nd October 2014; Baek S et al, ACS Nano, 2014).

### Radio disrupts migratory orientation

"Weak radiofrequency (RF) magnetic field (190 nT at 1.4 MHz) disrupted this orientation ability" of the garden warbler. This "confirmed outstanding sensitivity of the birds' magnetic compass to RF fields in the lower megahertz range..." (Kavokin K et al, J R Soc Interface, 2014).



# FILMS, VIDEOS, WEBSITES AND BOOKS

## **“Better call Saul”: hero’s brother is EHS**

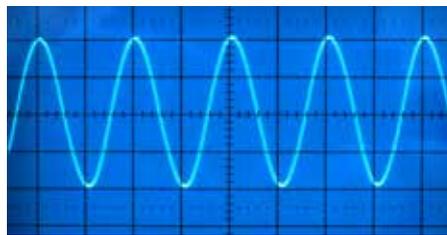
This is an American drama series released on 8th February as a prequel from the Breaking Bad series. It features Saul’s brother Chuck McGill as an EHS lawyer, “apparently a founding partner of the firm, and certainly a guy on medical leave, McGill has told the firm that he plans to return after he recovers from an ailment related to a debilitating sensitivity to EM fields. The precise nature of this ailment becomes clearer when James leaves the firm, furious and empty-handed, and visits Chuck, played by Michael McKean.

To enter Chuck’s home, you leave your watch and cellphone in his mail box and then tap some electrical switch to “ground yourself,” in the electrical sense. Chuck’s house has no lights or refrigerator and he works by lantern on a manual typewriter. He is a shut in, somehow afflicted by electrical currents — psychosomatic or not — but eager to overcome this torment and return to work” (ArtsBeat, 8th February).

Some comments from Reddit on 10th February: “Someone please explain to me when Saul goes to his former colleague’s house and has to remove his watch and phone? Why is the guy so weird?” “The guy is Saul/Jimmy’s brother, Chuck. The implication is that he’s mentally ill, believing himself to have Electromagnetic hyper-sensitivity and seemingly forbids all electrical devices from his house so that they don’t affect him (from his perspective anyway). Jimmy knows Chuck will never recover, so he’s trying to get the firm to cash him out.”

## **‘SMS’ film: hero’s brother is EHS**

This 2014 film with English subtitles is a smart comedy about the effects of overuse of mobile phones. It features the brother of the ‘hero’ who is EHS and kidnaps the CEO of a mobile phone company and tortures him by attaching mobile phones to his head and ringing them remotely. [www.allocine.fr/film/fichefilm\\_gen\\_cfilm=221240.html](http://www.allocine.fr/film/fichefilm_gen_cfilm=221240.html)



## **“Technophobe”**

For those who appreciate basic humour of technophobia or even ES (French, with English subtitles, Cyprien, 2015, 11 minutes, [www.youtube.com/watch?v=wNRUzu4fTgw](http://www.youtube.com/watch?v=wNRUzu4fTgw)).

## **Video of 3 ES people**

A video from the USA shows three people sensitised to electromagnetic radiation: David Wientjes, a real estate executive sensitised by mobile phone masts in 1998 who suffers tinnitus, pressure in the head, poor sleep and nosebleeds; Sandy Aiders, sensitised in 2008 by a wireless ‘smart’ meter and unable to work as a paralegal and forced out of her home suffering insomnia, rashes, tinnitus, heart palpitation, diarrhoea and electrical shocks; and Sarah Riley, sensitised in 2003 by mobile phone masts suffering ‘fireworks all over her body’ and nosebleeds, and forced to live on a beach. (Joshua Hart: “Wounded by Wireless”, StopSmartMeters, 2010, 14m, [www.youtube.com/watch?v=1zzRP\\_J7P-c](http://www.youtube.com/watch?v=1zzRP_J7P-c)).

## **Water is sensitive to mobile phones too!**

Water, like humans, is sensitive to electromagnetic radiation. See the 2008 film “Water’s Memories: The Mystery of Water: Scientific Proof” (48 minutes: [www.youtube.com/watch?v=59iuelCL0MQ](http://www.youtube.com/watch?v=59iuelCL0MQ)) for dark field microscopic photography of dried water drops showing each individual drop is changed when exposed to electromagnetic fields and thus become a data medium. Thus a lettuce leaf exposed to a mobile phone signal for 2 minutes produces differences in water drops compared with those from an unexposed leaf, showing the water drops retain information passed on by a leaf (25 minutes in). Similarly humans can change water drops. Each person handling the same water produces different styles of drops from other people, but similar to others of their own (6m). Similarly bacteria in water can be used to show that they are changed when irradiated by electromagnetic radiation, and these are related to metabolism which are also evident in chemical changes (14 m). Similarly, one hour after flowers such as Sweet William have been immersed in water, the centre of every water droplet when dried looks like the flower (22 m).

Similarly a dental x-ray can change a person’s saliva as shown by droplet dark field photography (36m). Likewise asthmatic children (asthma now affects 10% of Austria’s children and is increasing among adults too) are helped by exposure to waterfall droplets. This may be not because of increased negative ions but changes within the water droplets’ information. Many industries, from chemical and swimming pools to bakers, use the water revitalisation process

developed by the 'water man of the Tyrol', Johann Grandner (1930-2012). This changes water without contact but by making it flow in a field through natural water. Leading experts appear, such as Prof. Eshel Ben Jacob, an experimental and theoretical physicist at Tel Aviv University, and Prof Bernd Kroplin of Stuttgart University, although all admit that there is still much to be understood about how water retains information.

### Take Back Your Power

Dissecting Docs posted a review of "Take Back Your Power" on 20th December 2014: "I think it's probably the most important doc I saw in 2014..."

### New EHS audio talks on YouTube: ¾ million people in UK are ES?

Recordings of talks by Lynne, an ES sufferer, with Dr Andrew Tresidder, and contributions from Paul and Peter, in 5 sections, about 10-14 minutes each. Lynne comments on research into harm from EM radiation: "It reminds me of the 1980s and 90s when the picture of Climate Change was building up." Dr Tresidder explains how safety lags behind technology. He comments on the number of his patients suffering from EM exposure and, if all 30,000 GPs are also seeing dozens of similar cases, how big a health problem it has become, therefore, for the UK. ([www.youtube.com/watch?v=Lm72wQf1NaM&index=1&list=PLEAowARbUhT2kYSYdbIqgYQ4XhMtKNVve](http://www.youtube.com/watch?v=Lm72wQf1NaM&index=1&list=PLEAowARbUhT2kYSYdbIqgYQ4XhMtKNVve))

### Powerpoint on EHS and social expectations

Dr Isaac Jamieson: "Why the EU should deal with electromagnetic hypersensitivity, and what should be the approach", January 2015 ([www.eesc.europa.eu/resources/docs/dr-jamieson---revised-presentation.pdf](http://www.eesc.europa.eu/resources/docs/dr-jamieson---revised-presentation.pdf))

### Barrie Trower

Talk at Brighton (November 2014, 84 minutes: [www.youtube.com/watch?v=XZMEqOzZhhQ](http://www.youtube.com/watch?v=XZMEqOzZhhQ))

### Jimmy Gonzalez (1972-2014)

Attorney Jimmy Gonzalez on 17th October 2012 gave eloquent testimony to the Pembroke Pines Commission for a resolution to raise awareness of the health risks of mobile phones. He explained how he was fighting a brain tumour caused by his mobile use from 2001-2011. Pembroke Pines voted resolution no. 3362 unanimously a month later informing citizens about the dangers of mobile phone radiation. Jimmy died in November 2014. ("Cell Phones Cause Cancer", 8 minutes, [www.youtube.com/watch?v=DIIOVJd0IA8](http://www.youtube.com/watch?v=DIIOVJd0IA8))

### "Our Children and Wireless Technology"

(1 min.) by MeansForChange.org: [www.youtube.com/watch?v=yCmmmKT70-0](http://www.youtube.com/watch?v=yCmmmKT70-0)



### Prof. Pall's lecture: WiFi harms

Prof Martin Pall's lecture "How WiFi and other EMFs Cause Biological Harm" on EM hazards at Oslo, Norway, on 18th October 2014: [www.youtube.com/watch?v=Pjt0iJThPU0](http://www.youtube.com/watch?v=Pjt0iJThPU0).

### Dr Sarah Myhill's ES page

There is a useful page on Electrosensitivity on the website of Dr Sarah Myhill, an expert on related fields like Chronic Fatigue Syndrome and Mitochondrial Dysfunction: [www.doctormyhill.co.uk/wiki/Electrical\\_sensitivity](http://www.doctormyhill.co.uk/wiki/Electrical_sensitivity). It includes some useful brief notes: "Thanks to Professor Martin Pall we have a biochemical expla-

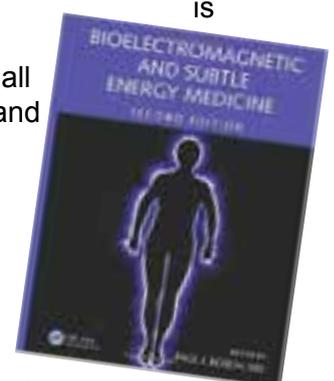
nation for ES. EMF disrupts voltage-gated calcium channels across cell membranes. So in a susceptible individual ES will allow calcium to leak into cells - calcium is toxic inside cells - the normal concentration gradient of calcium outside to inside is a 14,000 fold difference! Since all cells have voltage gated calcium channels ES can present with any symptom. However 2 conditions have been particularly linked with ES namely autism and cardiac dysrhythmias."

### "Bioelectromagnetic and Subtle Energy Medicine"

This new edition of a standard book on Bioelectromagnetics presents current research in 50 chapters by 95 authors from around the world. Three are from the UK, including Dr Andrew Tresidder and Michael Bevington, trustees of ES-UK, who contributed chapter 47: "Electrosensitivity: Sources, Symptoms and Solutions" (pages 567-585).

Seven chapters are reproduced from the First Edition of 2004. The book is presented as a review of "clinical applications of evidence-based bioelectromagnetic and subtle energy therapies". Its sections highlight subtle energies and new understanding of water, stimulation of brain, nerve and bone, how electromagnetic fields can be used in cancer diagnosis and treatment, ultrasound, environmental influence, mechanisms of action, and EM safety and hazards.

This book is essential reading for all regulators and reviewers, such as SCENIHR whose RF Opinion of 2015 was to be published just after



this book, and the WHO's EMF Project. It is contemporary and authoritative in its conclusions, such as: "Based on current literature, supported by the Hill criteria, glioma and acoustic neuroma should be considered to be caused by RF-EMF emissions from wireless phones and regarded as carcinogenic to humans. Current guidelines for exposure need to be urgently revised" (p.555).

(ed. Paul J. Rosch, 2015, 2nd edition, CRC Press, Taylor & Francis Group, ISBN 9781482233193, 628 pages, priced at about £150).

### "Digital Dementia"

"Digitale Demenz" [Digital Dementia], a new book by neuroscientist Dr Manfred Spitzer, has caused outrage in Germany and beyond. He argues that multitasking, as in calling while playing computer games, reduces concentration and should not be encouraged. Use of computing devices can reduce brain function and neuroplasticity, thus having "a negative effect on learning". Spitzer recommends that "digital media be banned from the classroom". ("Does The Internet Make You Dumb? Top German Neuroscientist Says Yes – And Forever" World Crunch, 9th December).

### "Light that heals: Energy Medicine Today & Beyond"

This book, by Donna Fisher and released in December 2014, in its first section discusses EMF that can harm.



# BAN MOBILE PHONES AND MASTS

## Ban phone masts within 300m

Yet another study, this time from Iran, confirms Electrosensitivity symptoms near phone masts and suggests banning nearby phone masts: "Cellular phone base stations antenna should not be sited closer than 300 m to populations to minimize exposure of neighbours". This is because phone masts cause symptoms such as nausea, headache, dizziness, irritability, discomfort, nervousness, depression, sleep disturbance, memory loss and lowering of libido, in a survey of 250 randomly selected inhabitants. (Shahbazi-Gahrouei D et al, Electromagn Biol Med., 2014)

## Mobile phones damage children's brains

The Cancer Association of South Africa (Cansa) has issued a stern warning about giving children mobile phones and other wireless technology because of the enormous risks. Prof. Michael Herbst, head of health at Cansa, said: "Their skulls and brains are still developing and the radiation from cellphones practically 'cooks' their brains." (Tanya Farber: "Cellphones fry young brains", Times Live, 11th December)

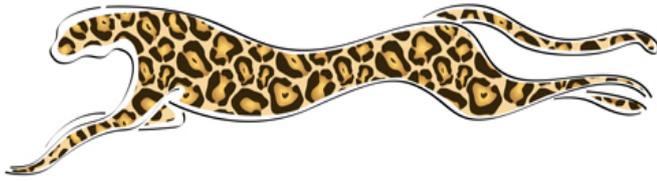


## Warning over 'Smart' phones

"A new feature being added to the LTE protocol that smartphones use to communicate with cellular towers will make it possible to bypass those towers altogether. Phones will be able to "talk" directly to other mobile devices and to beacons located in shops and other businesses. Known as LTE Direct, the wireless technology has a range of up to 500 meters, far more than either Wi-Fi or Bluetooth. It is included in updates to the LTE standard slated for approval this year, and devices capable of LTE Direct could appear as soon as late 2015." (MIT Technology Review, 29th September 2014)

## Wearable technology: "just hope you don't get a brain tumour"

The fashion designer Diane von Furstenberg raised the question of health dangers at a fashion conference on wearable gadgets in New York. She explained how Google Glass had become a smaller and smaller thing "that you put on your head, and you just hope you don't get a brain tumour." A member of the audience later pointed out it was proven that a mobile causes changes in the brain's glucose levels. (Jenni Avins, "We need to talk about the health risks of wearable technology", Quartz, 22nd December) [Google have since withdrawn Glass, perhaps because of repeated health problems.]



### 20 minutes on a mobile like tiger-riding: "food for the tiger"

"According to a study, indiscriminate use of cell phone by indulging in non-stop talk for 20 minutes every day will cause hearing loss over a period of time. Other health hazards over long-term use of cell phone are feverishness, sleeplessness, sleep disruption, migraine, palpitations of the heart, dizziness, irreversible infertility, DNA damage, immune system degradation and arising of cardiovascular problems due to exposure to EM radiation.

These are the findings of a study undertaken by Prof. Girish Kumar, professor in electrical engineering, IIT, Mumbai ... The main concern is that of those indulging in cell-phone talking spree for long hours. It amounted to indulging in tiger-riding and that it is a matter of time when the rider will end up as a food for the tiger, unless remedial measures are taken up with all seriousness and in right earnest, warns Girish Kumar. There are 25,000 brain tumour cases in Andhra Pradesh and Telangana states and most of them are attributed to excessive use of cell phones, as per a recent medical survey." ("Cell phone may cause hearing loss: Study" 7th February, The Hans, India)



### Mobile phones cause headaches, migraine and itches

Mobile phone use among 2,000 children aged 11-15 years in Taiwan, was associated increased headaches and migraine (1.42) and skin itches (1.84) (Chiu CT et al, J Formos Med Assoc., 2014).

### US warnings over mobiles

On 18th November Berkeley California Council voted 7-2 for a city ordinance whereby Berkeley became the first city in the USA to require cell phone retailers to provide an informational fact sheet to purchasers urging them to read the user manual to learn the cell phone's minimum separation distance from the body. The Greenbelt Maryland City Council in Wyoming, USA, voted unanimously on 24th November to alert citizens about the fine print warnings and possible health risks of cell phones and wireless devices and to send the FCC Chairman a letter encouraging national action to revise the outdated 18-year-old limits. (Release Wire, 26th November)

### Radiation warnings on mobiles bill

On 11th December 2014 Terence Young introduced a private member's bill in Canada: "Warning Labels for Radio Apparatus Act".

### How to protect against mobiles: tobacco spin again

"Taking account of the tobacco experience, it is not wise waiting for an official announcement to start protecting ourselves and others from the harmful effects of cell phone emissions. Prevention is actually quite simple and includes the following: 1. Not to provide cell phones to children (due to brain development phase); 2. Strictly enforce the use of headsets for teenagers and adults alike when making a call; 3. Utilise the messaging function in preference to the call function, making only valuable calls of short duration; 4. Keep away the cell phone from the head and as much as possible from other parts of the body; 5. Switch off the phone whenever appropriate" (Dr Gerard Lalande, managing director of CEO-Health, The Nation, Thailand, 1st July 2014).



# BAN RADAR AND RADIO MIKES

## Radio mikes warning to preachers

A campaign has started in Ohio to prevent clergy having heart attacks and strokes in the pulpit because of high radiation levels from microphones and their transmitter ([www.michihealth.org/](http://www.michihealth.org/)).

## High radiation from handheld 3.1 GHz radar

Over 50 agencies in the USA have been using handheld L3 Communications Range-R radar devices with Doppler 'Stepped Frequency Continuous Wave' radar to scan buildings remotely for people and movement inside for 50 feet. The radar can penetrate brick and concrete up to 1' thick, but not solid metal. Although these devices have been used since 2012 they may require a search warrant, especially if fitted to drones (USA Today, 20th January 2015). The Range-R FCC ID: YKD-25TWD3000 has calculated 0.007 mW/cm<sup>2</sup> at 20cm based on a limit of 1 mW/cm<sup>2</sup> from 14.24 dBm on 3.18 GHz. When combined with a 802.11b/g/n WLAN module (i.e. WiFi) of 0.013 mW/cm<sup>2</sup> at 20cm based on a limit of 1 mW/cm<sup>2</sup> from 16.06 dBm on 2.45 GHz, the combined simultaneous total is 0.02 mW/cm<sup>2</sup> at 20 cm, the distance the 8-inch unit must be kept from the body. [0.02 mW/cm<sup>2</sup> = 200,000 uW/m<sup>2</sup>; biological safety limits for children are 3 uW/m<sup>2</sup>.]

# BAN SMART METERS

## 'Smart' meters cause electrosensitivity symptoms

"In 2006, the government in the state of Victoria, Australia, mandated the rollout of smart meters in Victoria, which effectively removed a whole population's ability to avoid exposure to human-made high-frequency nonionizing radiation. This issue appears to constitute an unprecedented public health challenge for Victoria. By August 2013, 142 people had reported adverse health effects from wireless smart meters ... The study included 92 residents of Victoria, Australia. ... The most frequently reported symptoms from exposure to smart meters were (1) insomnia, (2) headaches, (3) tinnitus, (4) fatigue, (5) cognitive disturbances, (6) dysesthesias (abnormal sensation), and (7) dizziness. The effects of these symptoms on people's lives were significant. Conclusions: Review of some key studies, both recent and old (1971), reveals that the participants' symptoms were the same as those reported by people exposed to RF

fields emitted by devices other than smart meters. Interestingly, the vast majority of Victorian cases did not state that they had been sufferers of EM hypersensitivity syndrome (EHS) prior to exposure to the wireless meters, which points to the possibility that smart meters may have unique characteristics that lower people's threshold for symptom development." (Lamech F, Altern Ther Health Med., 2014)

## Wireless 'smart' meter symptoms

Ginette Gagné-Julien and Michel Gagné waited 3 months for Hydro-Québec to remove a wireless meter mistakenly installed on their property on 17th December. Ginette said she experienced health problems shortly after installation: "Tight feeling in the throat, headaches, insomnia, and ringing in the ears." Hydro-Québec said that RF emissions from its wireless equipment have "no health effects". Since removal of the router, Ginette Gagné-Julien says her symptoms disappeared, except for the ringing in the ears. (trans. Andre Fauteux, ICI Radio Canada, 23rd December 2014)

## Dangers of wireless 'smart' meters

(From a letter to the editor, 4th December 2014, by Jenny Miller, a former resident of Paradise in California): "I had an elderly golden retriever who was in remarkably good health. Within weeks after the installation of a smart meter (at the time I had no idea what a smart meter was, or any health problems associated with them) my dog started exhibiting such extreme pain and symptoms of disability that I had to have her put down. I know of someone in a nearby town, ... who despite her very advanced years was managing to hang on and enjoy some quality of life. Within a week after the smart meter was installed she was dead. Some years later I had moved to Santa Rosa. I lived in a cottage complex, and I had opted out of having a smart meter, even though the meter for my cottage was not located directly on my cottage, but with a collection of other meters a few cottages away. By then I understood that the health-destroying effects of the meter's pulsations were carried though the wiring into my living space. One of my neighbours, a seemingly healthy man in his forties who was doing work in construction, died suddenly in his sleep. He had five smart meters located on the side of his small cottage."

## Evidence on dangers of 'smart' meters

See the Parliamentary written record of the Energy & Climate Change Committee from 2013 which includes submissions from people concerned about the damaging health effects of smart meters: [www.publications.parliament.uk/pa/cm201314/cmselect/cmenergy/161/161vw01.htm](http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenergy/161/161vw01.htm)

# BAN WIFI

## **“No more wifi and mobile phone signals in public places”**

This was the main headline reporting on a meeting of more than 100 people in Brighton, where “campaigners who fear exposure to wifi and mobile phone signals can put children’s health at risk want to reduce its use in public places”. Microwave energy expert Barrie Trower, who worked for the Royal Navy and the British Secret Service, led the talk. Dr Karl Cox, a senior lecturer in computing, engineering and mathematics at the University of Brighton, believes exposure can cause brain tumours. He said: “I’ve spoken to some schools already and they were shocked at the risks. I would be happy to talk to more. People cannot lead a healthy lifestyle when they are constantly exposed to these signals. There is a wealth of research on this topic already.” The 46-year-old father-of-two, who suffers from electro-sensitivity, powers his technology through cable connections. (The Argus, 27th November)

## **WiFi radiation harm in UK: newspaper reports**

The Daily Mail on 24th November 2014 had a long article on three people made sensitive to electromagnetic exposure, especially WiFi. The article, “Could Wifi be harming YOUR health? That’s what a growing number of people believe is triggering their headaches, nausea and crippling pain”, was highlighted in turn elsewhere. (Amanda Bernocco: “Electro-Sensitivity Complaints Increasing In Britain And WiFi Could Be Responsible”, HNGN: Headlines & Global News; Mobile Phone Industry Today: Mobile Phone News; UK 24 hour; 24th November)

## **Taiwan bans WiFi in for under 2s**

On 23rd January 2015 the Taiwanese Parliament banned children under two from using electronic devices, such as iPads, TVs and smart phones, with fines up to £1,000. Parents must also ensure that children under 18 use electronic products for a ‘reasonable’, but undefined, length of time. (“Does YOUR toddler play on an iPad? Taiwan makes it ILLEGAL for parents to let children under two use electronic gadgets ... and under-18s must limit use to ‘reasonable’ lengths”, Daily Mail, 28th January)



## **Ban WiFi experiment: “poor memory and concentration”**

People are facing a host of illnesses ranging from brain tumours and leukaemia to poor memory and concentration as they become increasingly engulfed by “electrosmog” as WiFi networks expand globally, scientists in Scandinavia have warned. “The wireless society is the largest human full-scale experiment ever, and it urgently needs to be addressed as such,” said Associate Professor Olle Johansson from the Department of Neuroscience at the Karolinska Institute in Stockholm. He warned: “We are literally enveloped by an ‘electrosmog’ which contributes to increased sickness rates, and politicians need a totally different approach to the problem.” Calling for WiFi to be discontinued worldwide, he warned: “It is going to affect future generations, and the time to act is now” (“WiFi ‘electrosmog’ a risk to health, say scientists”, World Bulletin, 12 November 2014)

## **Wi-Fi and mobile phones: the biggest health crisis in history?**

“Laws and warnings are all very well but it’s pretty much certain that all restrictions on products that use microwave technology will err on the safe side; that is, the side that’s safe for industry, not the side of what’s safe for society.” Gibbs then added this ominous closing question, “Will we look back (sadly) in fifty or a hundred years and marvel at how Wi-Fi and cellphones were responsible for the biggest health crisis in human history?” (Mark Gibbs: “Is Wi-Fi killing us ... slowly?” Networkworld, 21st August 2014)

## **Dr Boris Beller: “cause of symptoms is WiFi”**

In an affidavit filed in the High Court Dr Boris Beller, a paediatrician, wrote: “I personally checked 31 children from the school in Kiryat Ganim and diagnosed that the cause of their symptoms is exposure to radiation from the antennas and WiFi.” He made his diagnosis, although in the absence of guidance and information from the state, based on observation and extensive testing, including the eyes, EEG and by a neurologist; the elimination of other factors; and, based on scientific knowledge proven in hundreds of studies that such symptoms may be caused by radiation. (Smadar Salton: Israel Today, 26th December 2014)

## **Warning notices for WiFi radiation**

“The Suffolk County Legislature passed legislation Tuesday to require all county buildings to post notices that wireless routers are in use.” (Newsday, Long Island, USA, 2nd December 2014)

## Warning on school WiFi health risks

The plan to introduce wireless devices to schools in Hamburg has been challenged. An open letter by 20 doctors from “Doctors Working Group Digital Media in Stuttgart” noted that medical and scientific concerns for the use of digital media in schools were not being met. Prof. Manfred Spitzer, an Almer psychiatrist and brain researcher, commented: “The correlation of the increase of work stress, headaches, ADHD and mental illness with the growing use of digital media is worrying.” (shz.de, 29th November 2014)

## Israeli Health Ministry: replace WiFi radiation with wired Internet

The Israeli Health Ministry recommends a “firm preference for using wired Internet in educational institutions, the removal of children from radiation potential such as electrical cabinets and transformers and reducing exposure to radiation sources if possible.” The Israeli Environmental Protection Agency said: “There are people who are hypersensitive to environmental factors many like noise and air pollution, and there is hypersensitivity also to radiation exposure. Therefore it strongly recommends that wherever possible supply wired communication is to be preferred over wireless communication.” The Israeli Ministry of Education said: “The ministry set up a professional committee, which meets every few months to examine new research ... limiting the number of hours of wireless use in low grade levels, regulating the network setup, the distances between routers etc.” (Smadar Salton: Israel Today, 26th December 2014)



## School removes WiFi - “the asbestos of the 21st century”?

Excerpts from: Ronald E. Koetzsch, PhD: “Saying Good-Bye to Wi-Fi - A Waldorf School Takes a Precautionary Step” (Renewal (Spring/Summer 2014) 23(01): 24-26; EMF Refugee, 11th January 2015). The full article is worth reading, along with the advice from Michael D’Aleo.

“In the summer of 2010, a prospective parent walked into the office of Caroline Askew, admissions director at the City of Lakes Waldorf School in Minneapolis, USA. The parent was an attorney with two young daughters. Caroline is accustomed to answering all kinds of questions from parents, but this mother had questions and

concerns that Caroline had never heard before. The parent first inquired whether or not the school utilised a WiFi system. On learning that WiFi was in use, she asked Caroline, “Would the school be open to the possibility of removing the system?”

City of Lakes first installed a WiFi router in 2004. The majority of faculty and staff did not question the safety of the WiFi system. One class teacher was an exception and frequently caused havoc and frustrated his colleagues by intentionally disabling the system. This teacher was very sensitive to electrical influences (electrosmog) and tried to raise awareness about the problem. He left his class in the middle of fourth grade due to health issues.

In February 2011, Caroline and other City of Lakes staff attended the regional Great Lakes conference at the Chicago Waldorf School. The keynote presenter was Michael D’Aleo, a highly respected Waldorf high school science teacher. Caroline asked Michael if he thought the concerns about WiFi were credible. He answered in the affirmative and added that he is one of the small percentage of the population (about 3%) who are electrosensitive (ES), i.e. extremely sensitive to EM and RF influences.

Following the regional conference, a presentation of the issue was made at a City of Lakes weekly staff meeting. Most staff members were open to further investigation, although there was significant reluctance to eliminate the convenience of WiFi. At this point, the mother who had initially raised the concern and was now a parent in the school offered to pay for an inspection of the school building. The company gave the school a 16-page report, describing the problems present and recommending measures for remediation. The first and most important recommendation was to remove the WiFi routers from the school and have staff and faculty connect to the Internet by Ethernet cables instead. The recommendations were not particularly costly, and the school was able to implement many of them.

City of Lakes Waldorf School has not chosen to publicise its decision to remove WiFi. Staff and faculty have adapted to the non-wireless environment. Parents and visitors to the school are not surprised when they discover they cannot get a WiFi connection to the Internet with their laptop or smartphone. There are, after all, “Cell Phone Free Zone” signs in the school lobby. A visitor with a laptop can, if necessary, access the

Internet via a hardwired connection.

Rudolf Steiner, founder of Waldorf Education, considered electricity a realm of “subnature”. Early in the 1900s, Steiner predicted that by the end of the century there would be so much electrical influence in the environment that it would be detrimental to human health.

Dr. Michaela Glöckler, who is head of the Medical Section at the Goetheanum, Dornach in Switzerland, has for some years been warning about the dangers of WiFi. Dr. Glöckler stated that we can and should use electronic technology. However, we should use it only when it is necessary. She strongly advised against the use of WiFi in schools when wired connections can serve the same purpose. She emphasized that children, due to their small size and rapid development and growth, are particularly at risk. Dr. Glöckler also advised people with serious health problems to avoid WiFi environments, since exposure may compromise the immune system. The Goetheanum contains many offices, lecture rooms, a cafeteria, and other spaces where one would expect to find WiFi. However, WiFi is available only in a limited area on the ground floor of the building and only for visiting conference participants. In talks and private conversations, Dr. Glöckler has often speculated that WiFi may be the asbestos of the 21st century – something universally accepted as perfectly safe and then, in time, after much harm has been done, discovered to be a serious hazard.

City of Lakes Waldorf School took a courageous and perhaps prescient step in eliminating WiFi and going back to hardwired access to the Internet. The school chose to act out of concern for the health and well-being of the students entrusted to its care. The school is in good company, though. The Israeli Department of Education, the French National Assembly, the European Environmental Agency, the Council of Europe, and the German government are but a few of the many governments, government agencies, and scientific authorities which are now warning about and/or banning WiFi in schools.”

### Traffic WiFi gives headaches

“When I had to drive around the outskirts of Norwich, I felt absolutely terrible, almost collapsing over the wheel. It seemed worse when stopping at traffic lights. Then I noticed that every traffic light had a pair of small grey boxes on [Apparently WiFi communication links, or radar traffic controls, introduced by Imtech’s 2014 traffic management contract – Ed.]. The day after the Norwich trip I had dizziness, colossal headache and pain at the back of my neck, and all the usual symptoms, which I thought was the mysterious ‘vertigo’ which

everyone (except me) had been suffering from over the last month. I was fine the following day. I had to go to the other side of the city again last night involving one unexpected group of lights, where the symptoms started again. Headache and swiminess again today. It seems we’re now being denied our rights to travel.” (Newsletter reader, January 2015)

### “Headaches nausea and dizziness” from tablets and school WiFi

A mother with two daughters, 12 and 15, from Jerusalem reports: “My oldest daughter started complaining of headaches and eyes, and said that most of the class complain of similar symptoms, found only on school grounds.” According to her, following pressure from parents, some girls were allowed to work with books instead of tablets, subject to medical approval. “When my daughter stopped using the tablet symptoms decreased, but it bothers me knowing that the girls are still exposed to the high radiation intensities.” A similar incident was reported last year in an elementary school at Rishon Lezion, where dozens of students complained of headaches, nausea and dizziness when a WiFi network was installed. A year earlier a number of cell towers had also been placed on the roof of a building next to the school. The parents argued that since the installation of the wireless network 70 students began to suffer from headaches, rashes, abdominal pain and other symptoms, particularly among children in classrooms facing towards the access devices on the roof in the shopping centre. (Smadar Salton: Israel Today, 26th December 2014)

### Executive with ES bans WiFi

“Belgium has passed a law forbidding the sale and the advertising of cell phones to children of a certain age. This is due to the president of Belgium Telecom becoming electrosensitive and banning WiFi from his office and the entire floor on his building! Why does it take an executive to become ill for something like this to happen?” (Liz Barris, 29th November 2014)

### Forbes warns of WiFi dangers to children

In the Forbes Magazine Robert J. Szczerba, CEO of X Tech Ventures, wrote an article called “Study Suggest Wi-Fi Exposure More Dangerous To Kids Than Previously Thought” based on the study “Why children absorb more microwave radiation than adults” by Lloyd Morgan, Santosh Kesari, and Devra Davis. It argues that “we may need to limit that exposure, when possible” and notes that US safety limits have not been updated for more than 19 years. (Forbes, 13th January; the article was watered-down by Forbes on 14th January on their website version: see Paul Doyon, Environmental Health Trust, and Take Back Your Power)

## WiFi: "nausea, headaches, dizziness, heart palpitations and insomnia"

The City Council chambers of Salmon Arm were filled with 120 people at a meeting on 29th January about WiFi dangers. A few years ago Eva Tavares of Sorrento arrived at the University of British Columbia but she became ill with all kinds of severe symptoms she hadn't experienced before, nausea, headaches, dizziness, heart palpitations and insomnia. When she came home, her symptoms disappeared within a few days. On return to UBC they came back. She discovered a WiFi router on the opposite side of her bedroom wall. After months of illness, she was medically diagnosed in 2011 with EHS. Now she must constantly check her surroundings for Wi-Fi routers and cell towers. She said that many others may be affected but don't know the cause. (Martha Wickett, "Citizens warn of WiFi risk" Salmon Arm Observer, 4th February 2015)

## Switch off WiFi and phone:

### "My sleeping issues were over"

From the Center for Safer Wireless, Virginia, USA: "I was having a lot of sleeping issues, as well as the whole family was having health issues - ear infections in my children, sinusitis, and bronchitis, which often resulted in the need for antibiotics to cure us. A friend told me about the Center for Safer Wireless. They did a radiation assessment of my home, and told me how to use all our wireless devices more safely - how to turn off my wireless router at night, eliminate the cordless phone, install dirty electricity filters, and other steps. After a month, my sleeping issues were over, my son never had another ear infection, and my daughter's chronic sinusitis disappeared. Our health overall improved, and my family hasn't needed any antibiotics for over three years."

## GOVERNMENT AND RADIATION INDUSTRY PROPAGANDA

### Invalidated arguments against Real EHS

The weight of evidence showing Real EHS symptoms from EM exposure is becoming overwhelming, but a few radiation industry and government activists are making ever more desperate attempts against the majority scientific evidence (writes the editor). There have been four attempts to deny EHS: heating only, psychological, a nocebo effect - all of which have been invalidated - and now an admission that Real EHS symptoms exist but are not a serious health problem.

(1). In the 1950s and 1960s some pro-radiation western scientists tried to claim heating-only effects, but this argument was undermined from the start by the use of electronic warfare, therapeutic devices, increasing molecular science, and nearly half of the world's population opting for non-thermal limits, starting with the USSR in 1958.

(2). The next scapegoat, from the late 1980s, was general psychological fear. That too was disproved by evidence of physiological changes and genetic

differences in EHS people, along with animal and plant studies, together with the established effects from radar, phone masts, electronic warfare and therapeutic devices. International regulators recognised Real EHS in 2000, the WHO's ICNIRP called for non-thermal limits for such people in 2002, the EU Parliament recognised real EHS in 2009, as did the Council of Europe in 2011, and since 2013 EU law has required employers to report electromagnetic sensitivity symptoms.

(3). The third attempt was the 'nocebo effect', a particular facet of the previous claim. It was named by Kennedy in 1961 and used since 2004 by the WHO's EMF Project and parts of ICNIRP and SCENIHR. It is impossible, however, to derive evidence for the nocebo effect from the conscious subjective provocation tests designed primarily to identify EHS but on which supposed evidence for the effect depends, and from observational studies, as was recognised in 2008, so this attempted explanation is now invalidated too. In addition there now exists the established



evidence for Real EHS, as noted above, and the majority scientific viewpoint now accepts Real EHS, even if a few single-viewpoint cliques like the EMF Project still refuse to do so. Furthermore, the nocebo effect cannot apply to EHS in young children, animals and people unaware that EM exposure causes specific symptoms, so most reputable scientists have now abandoned the nocebo effect as an attempted explanation for EHS. (4). Since a WHO report in 2006 accepting Real EHS symptoms, the few industry and government apologists still trying to argue against Real EHS have been forced to accept the existence of these symptoms caused by EM exposure, but have tried to mitigate its significance by claiming that some of these EHS symptoms can be transient and are not always life-threatening. They then try to argue that they are not a 'health' issue, refusing to accept,

for instance, the growing clinical evidence for EHS symptoms as signs of a pre-Alzheimer's state.

Curiously, the radiation industry and government apologists sometimes roll out an already invalidated and obsolete excuse. Thus Peyman of HPA/PHE in 2011 was still using the obsolete heating paradigm from NRPB 2004 ("the restrictions are intended to prevent adverse effects due to excessive whole and partial



body heating"), after the WHO's ICNIRP in 2002 had already admitted heating limits were inadequate and in 2006 accepted electrosensitivity symptoms without heating. A similar use of an obsolete excuse occurred twice in February 2015 with the nocebo effect, following the appearance of an EHS character in "Better Call Saul". David Robson on the BBC, followed by Rubin & Wessely in the Guardian, used the invalidated and outdated nocebo effect hypothesis. The UK government has often chosen psychological or nocebo excuses to try to avoid problem illnesses, as with ME/CFS and the Camelford water poisoning by aluminium. The UK government eventually had to abandon the psychological excuse over Camelford and apologised, after criticism by politicians, coroners and the police, but allegedly the King's College London psychiatrists, such as Wessely, who related the Camelford illnesses to 'anxiety-related symptoms' and those 'amplified by media attention', have yet to do so.

Clearly, parts of the radiation industry want to maximise profits and thus try to deny the science which proves real EHS. Their views at present dominate the SCENIHR, EMF Project and ICNIRP committees, whose reports are limited to a few years,

avoiding an overview, and have outcomes divided by frequencies, whereas most modern devices radiate at both ELF and RF. Some governments also refuse to accept the science, perhaps under pressure from the radiation industry, through the Canute syndrome. They try to resist physical forces to preserve their position, rather than to help their citizens, or simply through fear of accepting the unknown implications of the science.

### 65% say mobiles cause cancer: presenter wrong

Eileen O'Connor, the Director of the Radiation Research Trust, wrote to the Independent Reviewer of the Advertising Standards Authority Adjudications on 19th October: "I also wish to lodge a complaint regarding a reckless comment made by one of the presenters representing Cancer Research UK on Channel 4's Stand up to Cancer show on Friday 17th October 2014. The show conducted a survey asking the audience if they thought mobile phones cause cancer and 65% of the audience said yes. The presenter representing cancer research then announced that mobile phones do not cause cancer ... This comment cannot be substantiated and is not acceptable and needs to be addressed and as a matter of urgency."



### Scrutton and the National Grid: class 1 carcinogen or 'safe'?

The Daily Telegraph ("Mobile phones unlikely to harm human health, scientists find" 10th December 2014) reported Prof. Scrutton as claiming: "This study definitely takes us nearer to the point where we can say that power-lines, mobile phones and other similar devices are likely to be safe for humans." A commentator noted that "the leading scientists are now saying there is enough evidence to

classify radio frequency as a class 1 certain cancer agent. 80% of studies show adverse health effects from phone masts etc" and "the research paper under discussion was not directly on mobile phones but on the precise mechanism. ... It appears that some funding for this study came from the EMF Biological Research Trust, which is financed by the National Grid, and that Prof. Scrutton is an EPSRC fellow and that the EPSRC chair [Paul Golby] is a director of the National Grid."



### Dangers of SMC industry science: "decision-based evidence"

"It's become quite clear that instead of evidence-based decision making, we now have decision-based evidence making... Scientific evidence appears to be largely concocted to support an already established corporate agenda, and any scientific investigation that refutes or questions it is either suppressed or squelched by virtually any means. The public is further deceived by clever and highly paid PR firms, disguised as scientific organizations but set up specifically for the purpose of controlling how the media reports new science and portrays industry. Two examples are Science Media Centre (SMC) and the American Council on Science and Health (ACSH), both of which are heavily funded by industry ... SMC ... its primary purpose being to control the press using a team of not-so-independent scientists who spin science news in industry's favor ... the SMC has one agenda, and that is to deceive you with corporate propaganda. For example, they provide handy tips to their 'independent' experts in a document called 'Communicating Risks in a Soundbite: A Guide for Scientists'. It explains how to respond to media questions by downplaying problems. For

example, if a reporter asks, 'Is it risky?' the scientist should get the journalist to instead ask about the benefits by replying, 'the benefits outweigh the risks.' Another suggested answer: 'It is a very small risk. So small that I believe it is safe.' Not exactly players with an objective view of science." (Dr Mercola, 30th December 2014, 18th September 2013)

### Telecoms lobbying expenses

"The four largest U.S. wireless companies spent a combined \$9.6M on lobbying efforts" in the first quarter of 2014, while the trade association CTIA spent \$3M. In 2013 the wireless industry spent a total of \$46.8 M." (RCR Wireless News, 11th August 2014)

### Rubin and Wessely support industry and government, against 70% of Europeans: whose nocebo?

Rubin and Wessely's psychiatric department is notorious for trying to help industry and government by blaming any environmental risk, such as ME/CFS/SEID, the Camelford water poisoning or EM radiation as used in electronic warfare, on media scare stories. They tried to spin Chuck McGill's EHS in "Better Call Saul": "It's an unusual condition, but Chuck is not alone. In the UK, around 4% of people report that they experience unpleasant symptoms due to

exposure to EM fields given out by mobile phones, Wi-Fi routers, TVs and so on.



In severe cases, it can ruin people's lives, making them unable to work in computer-filled offices, enter shops with fluorescent lights or visit friends or family whose homes are filled with electronics. In the most extreme – and rare – cases, affected people withdraw from modern society almost entirely, living in isolated caravans or remote communities in 'EMF-free zones.'" Rubin and Wessely have an uphill task, however, both against the established science

and what most people think, since they admit: "A 2010 survey of 26,602 Europeans found that 70% believed emissions from mobile phone masts affect health." These Europeans are correct, despite Rubin and Wessely, since 80% of studies confirm that masts cause EHS symptoms.

Rubin and Wessely then assert: "But what does the evidence say? ... The symptoms are real, but they are not caused by EM fields. Instead, they seem to be triggered by something far more mysterious: the nocebo effect." Critics note that (a) they omit all the positive provocation tests which disprove their nocebo hypothesis, (b) they still reject the non-linear effects which were proved many decades ago and completely invalidate their averaged conscious provocation tests, and (c) they ignore the impossibility of distinguishing nocebo effects from real effects in provocation tests except by outcome, unless you can screen who is EHS and who suffers from nocebo, the very point of the tests. This is not science, but cherry-picking beliefs; and these beliefs happen to suit industry and government financial interests. They even ignore the fact that the military and governments use EM sensitivity in electronic warfare and control, and doctors in the NHS use this EM sensitivity for therapeutic purposes.

Instead Rubin and Wessely blame scare-mongering by the media: "In the case of EHS, it turns out that believing that you are being exposed to EM fields, and that this is harmful, is what triggers the symptoms, not the exposure itself. Where do these expectations and beliefs come from? The media must take part of the blame." They fail to include the evidence from numerous studies and clinical examinations, where the media has nothing to do with causing the symptoms, only the EM exposure, since the person concerned had never heard that EM exposure is dangerous and so has no fear of it.

They also fail to explain how young children and animals suffer EHS symptoms, unless they assume that toddlers, dogs and cats understand newspapers and TV. Critics say that this nocebo hypothesis as the only explanation is fallacious and absurd, and that psychiatrists arguing against the established medical evidence appear to be themselves suffering from a nocebo effect similar to the one they claim to be able to identify in others. (James Rubin and Simon Wessely: "Better Call Saul: is EHS a real health risk?" The Guardian, 15th February)

### BBC Worldwide on the Nocebo effect: propaganda for industry?

Some comments by the editor on: David Robson, "The contagious thought that could kill you" (BBC Worldwide, 11 February 2015). This article carefully avoids stating that all symptoms attributed to environmental exposures, such as food allergies, vaccines, the contraceptive pill, mobile phones and wind turbines, are always and only caused by the Nocebo effect, a psychological fear where the subject expects harm. The article states, however: "How easily those dangerous beliefs can spread through gossip and hearsay ... it may be the reason ... if you have ever felt 'fluey' after a vaccination, believed your cell phone was giving you a headache, or suffered an inexplicable food allergy, you may have also fallen victim to a nocebo jinx ... this nocebo effect is very common."

Almost no reference is made to the real physical effects which do not involve a psychological fear, although the article admits that, with food allergies, some 2% of the population in England can be shown to have real physical reactions, out of the 20% of the population who claim to be unable to stomach certain foods. This suggests that such an



article as this matches the desire of government and industry to play down established physical dangers. Studies financed by the government and industry, like the MTHR tests at Essex and King's College London Institute of Psychiatry, almost always fail to find any evidence of real effects. In contrast independent researchers elsewhere, not sponsored by industry or government, do find such effects.

The BBC has allegedly been persuaded to promote a psychological hypothesis before. Thus



the captions added to debates in the House of Commons contradicted those speakers warning of radiation dangers, and the Bang Goes the Theory programme had a slot arguing for the safety of WiFi added at the time of the London conference when Annie Sascoe of the WHO's IARC was stating that there was now sufficient evidence for RF radiation to be raised to a class 2A probable cancer agent. The BBC trustees even rejected a complaint about the programme's prediction that RF radiation would be found to be safe, despite the WHO's IARC already declaring it a possible carcinogen which can thus never be declared completely safe. Critics point out that the BBC uses wireless radiation and so is unlikely to accept its dangers, and that at the time some of its trustees were also involved with mobile phone companies.

Some key aspect with which this article fails to deal are as follows.

- Numerous studies supporting the real physical nature of symptoms related to, for instance, the contraceptive pill, vaccinations, EM fields from TVs, mobile phones or ultrasonic frequencies from wind turbines.

- The spin and bias in

interpretation used by the relevant drug and wireless industries and also governments.

- Alleged commercial influence, as highlighted in 2014 by the World Health Organisation's Director General's Report. In 2000 the tobacco industry's infiltration of the WHO was revealed.

- Military use of non-thermal EM exposure to cause the symptoms which the article appears to limit mainly to the nocebo effect.

- Government covert use of non-thermal EM exposure on civilian populations to cause sensitivity symptoms, without any possible nocebo effect.

- Increasingly common therapeutic uses of non-thermal EM exposure in hospitals throughout the world.

- Distortion of some conscious psychological provocation tests used for these conditions by the nocebo effect.

- Symptoms mainly attributed here to nocebo effects are also apparent in young children and animals, which are unable cognitively to form nocebo concepts.

In failing to present this hypothesis in a balanced way, the article appears to be following the propaganda used by the WHO's EMF Project from 2004 in support of the wireless industry and some governments. Thousands of peer-reviewed articles show objective physical effects and symptoms from non-thermal EM exposure, as opposed to from the nocebo effect (see, for instance, the Bioinitiative reports of

2007 and 2012 and the WHO's IARC classifications of non-thermal EM exposure at ELF and RF as a possible carcinogen). Instead this article adopts a minority psychological hypothesis.



### BBC on WiFi harm: convincing evidence, dogmatic denial

BBC Radio Berkshire's Andrew Peach show on 3rd December 2014 interviewed Mary, who explained clearly how WiFi, mobile and cordless phones and CFLs severely affected her, causing an intolerable pain in her tongue. Andrew Peach recalled that he had visited an EHS lady in Shiplake 18 months ago. Roger then explained how he became sensitive in 1997 and in 2006 had to give up office work and public transport, suffering headaches like a red hot knife in the head. He also explained how everybody reacts differently according to their level of sensitivity. Finally Malcolm Sperrin, a physicist who said WiFi radiation was much less intense than that emitted by domestic microwave ovens (Daily Telegraph, 21st May 2007), was brought in with a pro-wireless hypothesis, although he admitted that it was difficult to identify the effects of electrosmog and that it was difficult to find why some people are so affected.

As the interview went on he became more dogmatic about his theory that he and some others do not understand how electro-sensitivity works and that it is difficult to work out what is going on. In the end he went so far as to claim that there was no evidence to suggest a link between WiFi and symptoms. [Yet Mary and Roger had just given totally convincing and consistent evidence that there was a causal link between WiFi and symptoms. Sperrin could have accepted this evidence, or asked hundreds of other people with ES, or consulted medical experts in this field, or read peer-reviewed articles showing effects. Even the ICNIRP accepts electro-sensitivity symptoms as caused by EM exposure. Why is the BBC forced to put on spokespeople for the wireless industry who are apparently not up to speed with the medical evidence or prepared to accept evidence? – Ed.]



### US electronic warfare: outdated denial of non-thermal harm

The US navy is planning for September 2015 an “electronic warfare testing project” in the Olympic National Forest, with trucks targeted by aircraft from Whidbey Island, Washington

State, flying 90 miles off the coast. The 15 trucks would be moved if hunters or campers refused to leave danger areas. Notices were first issued in newspapers away from the affected area.

The emitters, 14 feet high on the trucks, radiate at 4 to 8 GHz. Mike Welding, Naval Air Station Whidbey Island spokesman, said “If someone is in the exclusion area for more than 15 minutes, that’s a ballpark estimate for when

there would be some concern for potential to injure, to receive burns.” (Peninsular Daily News, 28th September) The only paper cited to justify the controversial claim of no non-thermal effects was Focke F et al, 2009. [This related to ELF and not RF, the primary frequency used by the US navy transmitters. In fact the study showed increased DNA fragmentation after intermittent 50 Hz exposure, not none. – Ed.]

## EUROPE AND EHS

### France: (a) WiFi ban in nurseries (b) EHS report by January 2016

On 29th January 2015 the French Parliament passed a law proposed in January 2013 by Laurence Abeille (Europe Ecologie-Les Verts) on EM fields and EM hypersensitivity. It is the first of its kind in the world. Its provisions include the following.

1. Anyone intending to build a radio installation regulated by the ANFR (France’s equivalent of the FCC) must submit if requested calculated EMFs.
2. A national dialogue committee on levels of public exposure to EMFs is created within the ANFR. This committee will give information to all stakeholders.
3. Within one year from today, the ANFR will produce a municipal-level map of all cell towers in France.
4. Any advertisement for cell phones must mention, clearly and legibly, the recommended use of an accessory device that reduces exposure of the head to RF radiation. Violators: fine of €75,000.
5. Advertisements promoting the use of cell phones without such accessories are prohibited. Violators: fine of €75,000.
6. Anyone selling a cell phone must provide, upon request, an accessory designed for children under 14 years of age that reduces exposure of the head to RF radiation.
7. Wireless internet is prohibited in places dedicated to the welcome, rest, and activities of children under 3 years of age.
8. Wireless internet access in elementary schools must be disabled when not in use for teaching.
9. One year from today, the government shall submit to the Parliament a report on EHS.

(Le Monde, “Une loi pour encadrer l’exposition aux ondes” [A law to regulate wave exposure], 29th January)



### Powerpoint on EHS and social expectations

Dr Isaac Jamieson: “Why the EU should deal with electromagnetic hypersensitivity, and what should be the approach”, January 2015 ([www.eesc.europa.eu/resources/docs/dr-jamieson---revised-presentation.pdf](http://www.eesc.europa.eu/resources/docs/dr-jamieson---revised-presentation.pdf))

### Europe’s EESC and EHS

There are two separate conditions, often deliberately confused by pro-wireless industry groups like parts of ICNIRP and the WHO’s EMF Project.

(1) ‘Real physical EHS’, with symptoms caused by low-level EM exposure, as established since the 1930s and long accepted by national and international groups, such as the USSR in 1958, the Nordic Council of Ministers in 2000, the EU Parliament in 2009 and parts of the ICNIRP in 2008 and subsequently. The treatment, as for other environmental toxins, is removal of the toxin. Its mechanisms are becoming established, e.g. cell membrane depolarisation, VGCCs and calcium flux, hypo-vascularization, melatonin reduction, breach of the BBB, mast cell increase, cardiovascular effects, rouleaux formation, etc. This was the subject of the original TEN-559 opinion.

(2) ‘The WHO’s EMF Project Nocebo Fear of EHS’, with symptoms caused by the ‘nocebo’ effect, by seeing scare stories in the media, except for young children, animals, some military personnel and unwitting civilian populations where the cause is still unknown, proposed in 2004 by the WHO’s EMF Project under Michael Repacholi. The treatment, as for other media-induced fears, is Cognitive Behavioural Therapy, to retrain associations in the mind. This was the subject of Richard Adams’ controversial counter-opinion.

There is a vast amount of scientific evidence for the first condition, with some 20,000 relevant studies already published. The claims for the second condition, however, are tendentious, since they nearly all depend on failed conscious provocation studies

with invalidated methodology, such as a hypothesis still rejecting the non-linear 'windows' of effects which were discovered some four decades ago.

In the EESC on 21st January 110 (42%) voted in favour of its TEN-559 opinion relating to (1) Real EHS, and 136 (52%) in favour of (2) The WHO's EMF Project Nocebo Fear of EHS based on Adams' controversial counter-opinion, with 19 abstentions. Both conditions lead to functional impairment or disability. This EHS disability has been dealt with by the United Nations' Convention on the Rights of Persons with Disabilities of 2006, and national laws such as the UK's Equality Act of 2010, and now needs to be addressed by the EESC.

The adopted opinion states:

(1.1) "The EESC acknowledges and is concerned about the prevalence of EHS."

(1.6) "The Committee notes that EHS sufferers experience real symptoms. Efforts should be made to improve their health conditions with a focus on reducing disability." (The reference to COST Action BM0704 does not lead to an action plan on reducing EM exposure to help people with EHS.) The EESC now needs to follow up its vote of January 2015 which recognises EHS disability and equality issues, now apparently affecting 4% of the population. The obvious and most cost-effective way to deal with EHS disability is reduce environmental EM exposure, since this will help people with real EHS and also anyone with a fear of EM exposure, whereas CBT would be very expensive for the millions involved and not help those with real EHS.

#### **"No academic or scientific support or credibility" - libel at EESC?**

In an extraordinary attack on probably the world's most distinguished independent research professor into the link between cancer and mobile and cordless phones, a member of the EU's EESC, Richard Adams, allegedly stated that "the two main supporting organisations/studies which you quote – Bioinitiative Working Group and Hardell – have no academic or scientific support or credibility" (email to Eileen O'Connor, Director RRT, 16th January 2015). In fact Prof. Hardell's work has been the key influence on the World Health Organisation in its 2B classification, indicating the opposite of what Mr Adams alleges. His attack seems closer to the outrageous claims of some pro-wireless activists than an objective assessment. Equally, the Bioinitiative Reports are regarded as much more authoritative in their independent assessment and representation of the majority scientific viewpoint than the minority clique of outdated sceptic denials which dominates SCENIHR, AGNIR, and parts of ICNIRP and the WHO. (See Powerwatch news, 20th January 2015). With reference to Adams' attack: "This opposition is obviously meant to protect the interests of the telecom and related industries and of the governments which have benefitted greatly from

selling the transmission rights" (Dr Leendert Vriens, "Electromagnetic fields from wireless communications and health: 'Scientific proof' versus 'observation' and 'experiences'", 19th January 2015).

#### **Letter of Notice: Richard Adams "personally accountable"**

The Radiation Research Trust, under its director Eileen O'Connor, on 18th February 2015 issued a "Letter of Notice Served on Mr Richard Adams EESC Member FCO of UK Government ... holding EESC member Richard Adams personally accountable for betraying public trust by ignoring evidence on the hazards of RF/EMF." The RRT called for "Mr Adams's appointment or re-appointment as a member of the European Economic and Social Committee (EESC) to be terminated due to his serious breach of duty and faith as a member of the EESC."

#### **Letter to Richard Adams: "morally negligent; criminal negligence?"**

An open letter by Susan Foster, advisor to the Radiation Research Trust, to Mr Richard Adams points out the long-term memory loss among fire-fighters exposed to microwave radiation from transmitters. She finishes by asking: "To mislead your fellow members of the EESC with your lobbying prior to the Plenary Session was morally negligent. To turn away from the truth when tens of millions of people are suffering, and argue within the Plenary Session that there is no proof of harm from RF radiation, was morally negligent. It appears, Mr. Adams, that you are defending some very specific economic interests for the utility companies as opposed to the human rights of tens of millions of people who are now ill as a result of exposure to RF radiation. With that in mind, I have just one more question for you: When does moral negligence rise to the level of criminal negligence?" (letter, 4th February 2015)



#### **Overview of Adams' controversial EESC counter-opinion**

The following is a summary of Michael Bevington's paper called "The EESC's adoption of Richard Adams' controversial counter-opinion, 21st January 2015", of 25th January 2015, which is available on the ES-UK website.

The EESC's adoption of Richard Adams' controversial counter-opinion on 21st January 2015 by 136 (51%) to 110 (42%) votes with 19 abstentions, conflicts with (a) the established science about EHS and (b) the economic and social equality rights of people with EHS.

(a) It presents an activist pro-wireless minority viewpoint. It ignores over 200 years of medical evidence establishing sensitivity to non-thermal electromagnetic exposures. It effectively ignores statements from parts of the World Health Organisation

and its agencies which recognise EHS symptoms as disabling, and as caused by electromagnetic exposure and not a psychological fear. The overwhelming weight of evidence supports adverse effects from human sensitivity to non-thermal radiation and fields; simply asserting the opposite does not make the minority sceptic viewpoint any stronger, especially since it appears to be based on a confusion between two different conditions, real EHS, established in the 1960s, and placebo psychological fear, promulgated by pro-wireless industry sympathisers in 2004. A discussion for 75 minutes, without EHS medical experts speaking, followed by the EESC's split vote, cannot undo over 20,000 studies and existing international recognition of EHS, both medical and legal. Adams' counter-opinion is a rejection of majority medical science and is based on a controversial SCENIHR draft opinion which is irrelevant to real EHS; it was produced by a virtually single-viewpoint clique with views similar to wireless industry activists who follow the denial tactics of the tobacco and asbestos industries.

(b) It ignores statements from parts of the World Health Organisation and its agencies which recognise EHS symptoms and require governments to adopt non-thermal limits to protect vulnerable people. It ignores children with EHS who are unable to access schools because of WiFi, and EHS people who are unable to access work and public places or live in their own homes because of electro-pollution. It replaces a draft opinion by the EESC's TEN-559 which would have helped extend awareness of equality rights in economic and social matters for EHS people in the European Union, rights already granted by some countries like the member state Sweden, for people functionally disabled by EHS.

Adams' controversial counter-opinion is a worthless pseudo-medical document which conflicts with the established majority scientific viewpoint and denies people in the EU with EHS the equality rights already granted to others. It is inappropriate for an economic and social committee.

### **Adams' Europe rejects equal rights for EHS people**

In Andrew Geller's polite but searching interview with Richard Adams on 21st January, Adams appeared to have no answer for Geller's impressive roll-call of scientific research from the 1960s onwards, including lengthy US defence documents verifying ES symptoms. Adams claimed that some public health authorities do not accept this evidence and that it is difficult to design provocation tests, but did not mention the positive studies and those public health bodies which have long accepted the symptoms, such as the USSR, the Nordic Council of Ministers, parts of the ICNIRP and the WHO, and even the European Commission, under which the EESC comes, which now requires employers to report ES symptoms caused by non-thermal exposure.

At first Adams maintained the invalidated psychological hypothesis, claiming that higher rates of illness in the irradiated US Moscow embassy could have been caused by other factors, so far unknown. Later Adams accepted that EHS could be caused by EM exposure and "other environmental factors causing these symptoms", eventually admitting "combinations of environmental factors" which would have to be "reproduced in a controlled environment". He finally asserted that he had not said it was "a psychological condition", only that it was exacerbated by a psychological condition, although he could not explain why his "talking therapy" (CBT), designed for a psychological fear, did not work for real physical EHS. The confusion in the counter-opinion, which relied on the SCENIHR draft and other minority documents pretending that real physical EHS is the same as the different condition of psychological fear, was shown when Geller quoted its statement that "efforts should be made to improve their [EHS people's] health conditions"; Adams then claimed that their health conditions were not linked to EM exposure, the established common factor between EHS people, so he had no ideas on how to improve their health conditions.

When challenged by US documents admitting that the West's adoption of thermal limits would restrict industry and government profits, Adams refuted the idea that groups like SCENIHR would "deliberately ignore" established evidence, claiming it was "beyond the bounds of credibility". He did not mention that the draft SCENIHR opinion, on which his EESC counter-opinion relied, had been delayed a year following the international outrage which the SCENIHR caused by deliberately ignoring evidence confirming that non-thermal EM exposure can cause cancer.



Adams said that his EESC counter-opinion was medical and not concerned with the economic and social problems of EHS people which he accepted were genuine and needed immediate attention. The EESC seems to have lost sight of its prime aim to help all people in Europe, including those functionally disabled by real EHS who are now second-class citizens without equal rights. Does Europe really intend to impose inequality on people with EHS and simply help the minority pro-wireless industry activists? (Andrew Geller: "Europe Backs Away from Protecting the Electrohypersensitive", 31st January 2015, 55 minutes; [www.andrewgeller.me/blog/2015/01/31/europe-backs-away-from-protecting-the-electrohypersensitive/](http://www.andrewgeller.me/blog/2015/01/31/europe-backs-away-from-protecting-the-electrohypersensitive/))

### **Kompetenzinitiative on EESC:**

#### **"protects the industry instead of the public"**

"The institutional work of this Committee is quite a paradox, which shows again the current dilemma of politicians who are caught between an unscrupulous

pro-industry stance and a preventive health care or environmental conscience ... the Draft Opinion develops the following two objectives, among others. In the face of the complexity of EHS, protective measures to reduce RF radiation exposure levels are suggested and placed on the agenda. At the same time, with regard to the non-thermal biological effects of RF radiation, the implementation of the ALARA (As Low As Reasonably Achievable) principle and the support of further research are given top priority ... in a unanimously adopted resolution from 6 May 2011, the Committee on Environment, Agriculture and Local and Regional Affairs of PACE demanded a fundamental change in wireless communication policies, which was supported by the Standing Committee of the Council of Europe on 27 May 2011 ... in spring 2011, the IARC of the WHO classified RF EM radiation as possibly carcinogenic. The EJA followed with a statement in fall 2011, calling for better consumer information and protection ... The Counter Opinion is not only an expression of stagnation, but also a step back from the international debate regarding wireless communication technologies as reflected in selected aspects of the document ... On 18 August 2014, the Competence Initiative e.V. had already filed such a Complaint about SCENIHR regarding the Preliminary Opinion on Potential Health Effects of Exposure to EM Fields (EMF) with the European Ombudsman Mrs. Emily O'Reilly, whose result is still pending ... the Counter Opinion shows signs of consolidating the paradox state of affairs regarding wireless communication policies that protects the industry instead of the public ... it is also in conflict with the human right of health, which has been explicitly included in Article 25 of the Universal Declaration of Human Rights at the General Assembly of the United Nations on 10 December 1948 ... Europe owes its existence to the history of inalienable citizen and human rights." (The Board of the Competence Initiative for the Protection of Humanity, the Environment and Democracy e.V., 10th February 2015)

**EU Ombudsman: stop secrecy in choice of scientific panels**

Emily O'Reilly, the European Union's Ombudsman, on 27th January wrote to the EU commission president, Jean-Claude Juncker, criticising the secrecy that still surrounds the powerful scientific groups used to help the European Commission draft EU legislation, proposing her own-initiative inquiry, case OI/6/2014/NF. She demanded greater transparency from secretive EC expert groups and criticised the EU for not opening them up to greater public scrutiny. The Commission must reply to her proposals by 30th April 2015. Her proposals include the following.

Part A: Achieving a balanced composition: (1) "The balanced representation of all relevant interests should be a mandatory requirement", not "as far as possible" as at present. (2) The



Commission should "set out an individual definition of 'balance' for each individual expert group", taking into account the particular objective/tasks of the group; the expertise required; which stakeholders would most likely be affected by the matter; how those groups of stakeholders are organised; and what the ratio of the represented economic and non-economic interests should be." (3) The Commission should "develop general criteria for the delimitation of economic and non-economic interests."

Part B: Calls for applications, since the level of representation of civil society in expert groups is not always satisfactory: (1) The Commission should publish a call for applications for every expert group. (2) Interested stakeholders must be able to access calls for applications easily.

Part C: Link to the Transparency Register.

Part D: Conflict of interest policy for individual experts appointed in their personal capacity, to "ensure that no individual with any actual, potential or apparent conflict of interest will be appointed to an expert group in his/her personal capacity".

Part E: Improvement of data availability on the register.

She stated: "There is room for improvement if we want to be sure that the public can trust and scrutinise the work of these important groups." Companies spend millions of euros lobbying Brussels' institutions and having direct access to an expert group is seen as one of the best ways of shaping legislation. Companies can, controversially, have one of their representatives appointed to the expert groups. In 2014 a report (Corporate Europe Observatory: "Chemical Conflicts", 25th September 2014) revealed big companies had scientists issuing opinions in expert groups on toxic chemicals they themselves manufactured. (The Association of European Conservatives and Reformists (AECR): "Secrecy surrounding EU expert groups must end", 31st January 2015)

**European lobby's refusal to accept WHO's IARC**

Europe's pro-wireless clique of Wissenschaft manipulates the WHO's IARC's 2B classification for RF exposure by stating: "The classification 'possibly carcinogenic to humans' refers only to personal exposure from wireless phones." This limitation was not in the WHO's cancer classification, where the director of IARC specifically included all RF, such as from WiFi, masts and cordless phones (Evaluation in Perspektive (EIP): "Communicating IARC's 2B Classification of RF EMF", The Science Forum EMF, p.5)

**SCENIHR RF opinion: international outrage**

The SCENIHR opinion, "The Potential health effects of exposure to electromagnetic fields (EMF)", published in draft form in March 2014, caused international outrage because its one-sided minority viewpoint deliberately excluded the studies showing that RF should be classified as a Class 1 Certain cancer agent. According to the minutes, it was eventually adopted

on 27th January 2015 after “The Chair gave the floor to the Chair of the working group who presented the main conclusions of the opinion and the main changes made as result of the input received during the public consultation.” [This Opinion had not been published in time for this Newsletter.]

### **Paris Match on Prof. Belpomme and EHS: “science denial” and future “health catastrophe”**

For the first time in France, a law has been passed on controlling EM exposure. This is the beginning of the recognition of the health dangers of RF. A “positive association” between mobile phone use and the development of brain tumours was shown in a study published by Inserm Unit 897 from Bordeaux in May 2014. More than 896 hours of calls, in a life, could involve the development of brain tumours, or more than 15 hours per month. According to the Regulatory Authority for Electronic Communications and Posts (ARCEP), 67 million French Sim card holders average 3 hours 4 minutes per month. According to Inserm, tumour risk appears after 24 years’ of use, or in a dozen years for people with a laptop since 2000. But the risk is much higher for young people, according to a study of 2012 by the Association Health Environment France (Association Sante Environnement France, ASEF) with nearly half the students from 12 schools calling for more than half an hour a day, and 20% more than 2 hours.



Prof. Dominique Belpomme, the oncologist, speaks of a “scientific denial” and facing a future “health catastrophe”, “a thousand times more serious than the asbestos scandal, as it concerns billions of people who abuse laptops”, since using a mobile more than 20 minutes per day would cause long-term Alzheimer’s.” The French agency refused to finance his studies. “I was forced to find money in the United States, Canada and Sweden to conduct my research.” The World Health Organization (WHO) said in 2011 that the use of mobiles was “possibly” carcinogenic but in 2013 the French National Agency for Health Safety of Food, Environment and Labour (ANSES) concluded in its “RF and Health” report that the use of mobile presented no “known risks”. Jean-Pierre Marc-Vergnes, a neuropsychiatrist at ANSES, admits that “the leadership of the agency sometimes adapts its conclusions based on what is expressed by the government”.

“The risk today is not cancer but the destruction of brain cells that causes Alzheimer’s disease. The youngest are the most vulnerable because they are the biggest users of mobile and their brain is not mature before the age of 15 years. I see this happen today, including young people with symptoms of mental confusion, a pre-Alzheimer’s type that can lead to dementia: immediate memory deficit, concentration,

spatial and temporal disorientation.” As in Britain, he would discourage the use of mobile phones for those aged less than 15 years, and for mothers. Women are more sensitive to EM fields because they represent 2/3rds of those affected,” he says.

Professor Belpomme has developed tests to show that exposure to EM waves causes, in the worst instances, brain oxygenation problems, or an “intolerance” to EM fields. According to his research, genetic factors determine this hypersensitivity. Some people need to protect their homes with special materials or take refuge away from the cities to recover their abilities. Jonathan, 32, is ES. He is the first person in France to have benefited from Departmental help to provide anti-radiation protection.

EHS people are difficult to identify but represent 1-10% of the population, with talk of 25% by the end of the century. They have varied pains but generally suffer from migraines, digestive problems, joint pain, chronic fatigue or tingling of skin. Jean-Pierre Marc-Vergnes, aged 80 and working on this issue since 2010, will this year start research on EHS observing 60 people for skin sensitivity and pain reactivity, aiming to link the pathologies of electrical and chemical sensitivity. Dr. Marc-Vergnes says “I have met enough EHS to say that they are quite normal, not deluded.” The associations wish to lower the thermal threshold to 0.6 V/m (a level recommended in 2011 by the Council of Europe) instead of 41-61 V/m set by a 2002 decree. Countries such as Austria, Belgium, Luxembourg, Poland and Greece have lowered their thresholds to 0.3 or 0.6 V/m. China, Russia and India have also done so, forcing operators to replace base stations with less powerful ones.

Prof. Dominique Belpomme performs practical biological tests on his patients to reveal their hypersensitivity. The cerebral echo pulsed Doppler shows hypo-vascularisation of the brain, causing a lack of oxygen, especially in the limbic system of EHS people. He also found abnormalities in the blood with an increased histamine level, related to immunity and allergies, abnormal presence of S100B protein, which helps bind calcium and acts on cell proliferation and, in a third of cases, decreased melatonin, the sleep hormone, in the urine. If the EHS diagnosis is established, as was the case for 90% of the 1,200 people examined since 2008, Professor Belpomme administers a treatment of antihistamines, antioxidants, natural anti-inflammatory and intensive vitamin therapy to enable revascularization of the brain. This will ‘make life bearable’, but he warns against using a mobile phone for over twenty minutes a day, limited to sequences of six minutes, to prevent a progression to Alzheimer’s disease. In the most serious cases he advises people to move away from all EM fields if possible. (Daphne Mongibeaux, “Deja l’onde de choc” [Already the shockwave] Paris Match, 12th February).

# WHO, ICNIRP AND SAFETY LIMITS

## Warnings by 58% of countries to limit radiation exposure below ICNIRP heating limits

A recent WHO survey of 86 of the 194 WHO countries, covering 75% of the world's population, that showed that 58% advised limiting RF exposure below WHO's ICNIRP heating limits, usually warning the whole general population. The most common were: hands-free kits (69.0 %), reduce call time (44.4 %), use text messaging (35.6 %), avoid calling with low signals (24.4 %), or use phones with low SAR (22.2 %). (Dhungel A et al, Radiat Prot Dosimetry, 2014). [Why not adopt biological limits instead of obsolete heating limits, to ensure the public's safety, as public health requires? – Ed.]

## Current ICNIRP safety standards "a fiction, of no value"

"The safety standards, because they are based on a fiction, are of no value, and consequently the assurances of safety that are based on them are equally without value. All of these things are extensively documented in a very large and growing scientific literature and many groups of scientists have argued against these safety standards." "The current safety standards are based on the assumption that the only thing these fields can do is heat things, like heating foods in a microwave oven. But we know that this is false. These fields act by activating channels designated VGCCs in the cells of our bodies. And that in turn produces many serious health impacts, including oxidative stress, breaks in the DNA of our cells, cancer, male and female infertility, many neuropsychiatric effects including depression and serious effects on the electrical control of the heart including tachycardia (rapid heart beat), arrhythmia and sudden cardiac death." (Prof. Emeritus Martin Pall, World Link, 27th December 2014).

## Nigeria aims to cut cancer masts

"The Nigerian Communications Commission says it is now compelled to cut down EMFs being emitted by base stations and believed to cause leukaemia, infertility and alteration in cerebral blood flow, among other

health hazards. The NCC therefore said it was in the process of acquiring multi-functional software developed by the International Telecommunications Union to calculate the cumulative radio frequency exposure levels near transmitting base transceiver stations. According to local media reports, the NCC stated this at the second West African conference on EMF exposure and health held in Lagos ... the acquisition of the multi-functional software was a way to check the rising cases of cancer usually linked to EMF emissions." (APA, "Nigeria's communications commissions set to cut down cancer causing elements", Star Africa, 22nd December 2014)

## Israel abandons ICNIRP's obsolete heating limits

Israel Ministry of the Environment has adopted a more stringent standard which is 10% of the 1998 ICNIRP RF standard, ie 40-100 microwatts per square centimetre (not 400-1,000), and 4 mG magnetic field (not 2,000 mG). These are still based on the assumption that non-ionizing radiation damages only if it creates a temperature change in cells. 12 countries have reduced the RF radiation standard to single-digit numbers, and Austria adopted the most stringent standard at 0.1 microwatts per square centimeter – the level recommended by the Council of Europe in 2011. (Smadar Salton: Israel Today, 26th December 2014)

## Challenge for WHO: "appoint scientists with non-ICNIRP opinions"

Prof Dariusz Leszczynski on the challenge the WHO EMF Project now faces after the entirely one-sided draft EHC was partially published: "It will be up to the Task Group for EHC on RF-EMF to prepare scientifically unbiased conclusions using the scientifically biased review of science provided by the EHC draft. The challenge for Dr Emilie van Deventer, Head of the WHO EMF Project is significant. She has to approve members of the Task Group. The selection process will certainly involve ICNIRP Main Commission, including its Chairman Emeritus [Repacholi]. I hope that Dr van Deventer, in spite of the pressure from the ICNIRP, will consider appointing of scientists with diverse viewpoints. I hope that she will, similarly as IARC has done in 2011, appoint scientists with non-

ICNIRP opinions to the Task Group. IARC dared to have such scientists as Armstrong, Belyaev, Blackman, Cardis, Hardell, Leszczynski, Portier. I sincerely hope that Dr Emilie van Deventer will stand up to the occasion and, in spite of lobbying to the contrary, she will appoint Task Group with diverse opinions, where science will be discussed and not only rubber-stamp ICNIRP no-effect-whatsoever opinion." (BRHP, 22nd December 2014)

## Private group ICNIRP and WHO's EMF Project: debate limited

Prof. Dariusz Leszczynski to Dr Chan, Director of the WHO, 27th December 2014:

"Dear Director Chan, EMF Project that is part of the World Health Organization, is currently preparing the so-called Environmental Health Criteria (EHC) for radiation emitted by the cell phones and other wireless communication devices. The process of preparing the EHC is dominated by the representatives of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) that is an NGO registered in Germany. In my opinion, the WHO EMF Project together with the ICNIRP limit scientific debate on the possible health effects of the radiation emitted by wireless communication devices." The reply of 15th February 2015 came from Emilie van Deventer, the leader of one of the very two organisations which, as Prof. Leszczynski pointed out to the WHO Director, limits scientific debate: "The upcoming WHO EHC monograph on radio frequency fields is expected to be co-published with the International Labour Organization and the International Commission on Non-Ionizing Radiation Protection (ICNIRP), a NGO in official relations with WHO." (BRHP, 15th February 2015)



## Most cancers are "environmental and lifestyle"

The World Health Organisation's IARC strongly rejected a recent suggestion that most cancers are caused by 'bad luck': "A majority of the most common cancers occurring worldwide are strongly related to environmental and lifestyle exposures." (Press Release, 14th January 2015)

# LEGAL ACTIONS AND INSURANCE

## **\$0.25M damages for phone mast cancer**

On 1st February 2015 the Seventh Chamber of the Paraná Regional Labour Court in Brazil awarded compensation to a Curitiba technician who worked for 15 years from 1986 maintaining telephone towers and developed a rare type of bone cancer. Nokia Solutions and Networks in Brazil Telecommunications Ltd., formerly Siemens SA, will pay \$250,000 punitive damages plus a lifetime monthly pension of 50% of final salary, subject to appeal. In 2002, a rare type of bone cancer tumour was found in the worker's right thigh. He underwent several surgeries, but retired due to disability, aged 37. Three other co-workers developed the same type of cancer and died aged 28, 39 and 45. The judges noted that an expert report presented information from the medical literature linking EM radiation with cellular and genetic phenomena that promote cancer. They also considered that the company was wrong in failing to prevent and monitor risks, and failing to control radiation exposure of workers (MRE, 1st December 2014).

## **German court case recognition of ES**

"In the middle of the year 2006, an US-American patient moved to Bavaria for job reasons. At his new living place, he suffered from multiple symptoms mostly unknown from his past. First, his night sleep was disturbed for several hours by different high and low tones. Later, he suffered from tachycardias, cephalgias and nose bleeding as well as pains all over the body. After that neurological deficits appeared also during the day: coordination difficulties, difficulties finding words, even word loss, confusion, difficulties in concentrating and dizziness. At first, it was not possible for any doctor to associate this great variety of symptoms with an underlying disease. Technical high-frequency measurements carried out in 2007 detected signals appearing at night which were above the limiting value stipulated in Germany ... The problems recurred under the daily high frequency impact at technical working places, which is very common nowadays, so that working became impossible for the patient. With the judicial acknowledgment of the EM sensitivity disorder in the year 2012, the diagnosed health damage was classified as pension relevant retroactively as of 2008." (Eger H, "Causal, Legally Recognized Proof of the Damage Potential of Technical Highfrequency Fields - a Case Report", Umwelt-Medizin-Gesellschaft, 2014).

## **Telecoms admitted non-thermal effects in 1990s non-thermal patents**

Mobile phone companies appear to admit to non-thermal effects in some radiation-reducing patents. Patents were secured by Hitachi in 1991, Mitsubishi in 1992 and Alcatel N.V. in 1996. "On July 28, 1998, Nokia received a patent for a shield layer between the antenna and the user to reduce the EM irradiation of the user. The Nokia patent application states: 'It has been suggested that modulated RF radiation induces changes in the electrical status, i.e., in the ion

balance of nerves. A continuous localized exposure to RF irradiation has been suggested to weaken myelin sheets of cells and to eventually lead to an impairment of hearing capability, vertigo, etc. It has been suggested that RF irradiation may stimulate extra growth among supportive cells in the nerve system, which in the worst case it has been suggested could [lead] to a development of malignant tumors, e.g., glioma.'" "Nokia received another patent on Dec. 29, 1998, for an accessory radio-frequency unit that 'decreases radiation towards the user's head.'" (Reily Gregson: "Manufacturers own patent to cut radiation" RCRWireless News, 4th June 2001)

## **"The time for action in the public health and regulatory sectors is upon us"**

Legal cases for compensation for ES from mobile phone and similar radiation could be helped by the ruling on 8th August 2014 by Judge Frederick H. Weisberg in the Superior Court for the District of Columbia, USA, over cases alleging brain tumours caused by mobile phones use. He accepted evidence presented by trial lawyers as permissible under the Court's rules under the Dyas/Frye test: "If there is even a reasonable possibility that cell phone radiation is carcinogenic, the time for action in the public health and regulatory sectors is upon us. Even though the financial and social cost of restricting such devices would be significant, those costs pale in comparison to the cost in human lives from doing nothing, only to discover thirty or forty years from now that the early signs were pointing in the right direction. If the probability of carcinogenicity is low, but the magnitude of the potential harm is high, good public policy dictates that the risk should not be ignored."

## **EM insurance risks**

A report by A.M. Best in the USA argues that the dangers to the ¼ million people who work near to mobile phone masts and antennas are more clearly established than for mobiles themselves. It lists thermal effects such as eye damage, sterility and cognitive impairments, but does not mention the established non-thermal effects now accepted by parts of ICNIRP and the WHO (A.M. Best's Briefings: "Emerging Technologies Pose Significant Risks with Possible Long-Tail Losses", 11th February 2015).

## **Lloyds in 2010: claims under product liability policies**

Lloyds of London: "Electro-magnetic fields from mobile phones: recent developments" of 2010 stated: "If EMF is proved to cause an increased risk of brain cancer it is likely the insurance industry will see claims under product liability policies for bodily injury.... The issue of asbestos and its implications is widely known throughout the insurance industry, and many comparisons can be drawn with EMF – the initial impression that it was a 'wonder product' coupled with potential very long-term serious health issues not understood at the start of its use. Like asbestos any EMF litigation will probably be long and complex – similar issues could occur such as the definition of

an actionable injury, policy triggers and apportioning liability....Should EMF prove to cause brain cancer, or any other adverse health effects, it is likely the main effect on the insurance industry will concern product liability claims for bodily injury ... new scientific developments coupled with a small number of key legal cases can change the situation very rapidly.”

### Israel: legal battles over intolerance to WiFi

In August 2012 the attorney Daphne Thovr from her home in the mountains of New York joined the national parents' health forum and the petition filed by attorney Michael Bach, to prohibit installation of wireless networks in Israeli schools; it included eight affidavits of victims of radiation, including a girl of 15. This was in response to the Supreme Court which ruled in July 2012 that the State should release data on the number of children who suffered from EHS, and state the actions taken on the matter. The State in November 2013 submitted a letter from Prof. Siegel Sadezky, director of the information centre on non-ionizing radiation and of Gertner Institute for Epidemiology and Health, who wrote that there is no medical diagnosis of the condition and therefore numbers cannot be estimated and other pollutants may be responsible. In response 13 other petitioners filed affidavits of school children in Israel who have sensitivity to radiation, and five opinions of international experts, including Professor Eliyahu Richter. Richter wrote: “Unfortunately, to my knowledge, the Ministry of Health did nothing to check the extent of the condition in Israel. I receive disturbing reports of children who started to suffer from EHS in Israel and abroad, after WiFi systems were introduced to their schools. I have no doubt that because of the Knesset's support for networks in schools, the number of children joining the ranks of those suffering from EHS will continue to grow, due to chronic exposure to radiation all day. And I stress that although it is a rare disease, nevertheless it is a condition with an increasing prevalence. Children have a thin skull, which causes higher radiation penetration into their brains, and because their nervous system is still developing, so this population is at increased risk of EHS.”

On 3rd February 2014 the Chief Justice, judge Gronis, again demanded that the State estimate how many children in Israel suffer from EHS. The petitioners

submitted evidence of more than 100 children. This led the High Court to issue an order against the State, whereby the State has to declare again why it did not install wired internet in schools, when recommended. In the State's answer, Dr Isabella Krkis, Environmental Epidemiology Department of the Ministry of Health, claimed that “it is unlikely that this intolerance will go so high as 8.5%” but nevertheless recommended “keeping the children from potential exposure to such electrical panels and WiFi.” The final step in the argument will take place in February 2015, to decide whether the Supreme Court prohibits the installation of WiFi networks in schools. (Smadar Salton: Israel Today, 26th December 2014)

### Federal lawsuit for violation of ADA

Bill Metallo, a veteran in Orange County, Florida, USA, who suffered skin problems and sleepless nights from 'smart' meter radiation, has filed a federal lawsuit against OUC for violating the Americans with Disabilities Act (Kenneth Craig, 9wft.com News, 2nd December 2014)



### 9 cancer cases and 1 EHS in polluted school

A school in Bear Sheva, Israel, has had 9 teachers with cancer in the past few years. The school has high magnetic fields at 7-32 mG and featured on the leading Israeli news ynet website on 11th November 2014. Recommendations in Israel are for a daily average of 4mG, and yearly of 2mG. Some of the classrooms and offices were evacuated. Sara (alias name) is an EHS person. She first noticed that her iPhone is giving her headaches. After a while she contacted the website norad4u.com but refused to make the urgent changes recommended and continued using her smart phone and other wireless devices, until she become very severely EHS. A few months ago she had to leave her apartment, where RF radiation come through the walls and floor, and moved to a tent in field. Later on, when it started raining, she moved to shelters and a deserted house, and spent several nights in her car and a couple of nights in desert settlement. People tried to put some temporary RF protection into her apartment, but the levels were still higher than she could endure. (norad4u, 11th December 2014)

## ES STORIES

### Cambridge graduate: EHS “changed my entire life”

The Daily Mail featured Mary Coales, a 63-year-old Cambridge graduate and former high-flying civil servant, who lives in London. She cannot go to theatres, restaurants, airports, or parks because of her electrosensitivity. For hospital appointments she has to wait outside until the very last moment, while trips

to the supermarket are conducted at lightning speed. Walking down the road can cause a terrible shooting pain in her mouth, so when she goes out she wears a top from silver and polyamide called Aaronia Shield, made in Germany and costing £70 per yard. “Before I developed EHS in 2012, I wouldn't have believed the condition existed. The idea of becoming ill because of the technology I'd used for years without previously having any problems is surreal. But the pain I've suffered is

very real. At its worst, it has felt like I'm being tasered inside my mouth. I've had to change my entire life to find ways to avoid being exposed to WiFi and phone signals. WiFi is everywhere now, so it's very difficult to avoid. It's even more difficult to avoid people with mobile phones. I hardly ever go to public places, and only go to friends' houses if they have switched everything off beforehand.”

When Mary Coales first began to experience a sharp pain in her mouth

in October 2012, she attributed it to a reaction to chemicals in the flame-retardant foam material that her builders used to fill a hole in the kitchen wall. Three months later, after having the material replaced, she suffered the same symptoms when she used her laptop, mobile and TV. “I began to wonder if my reaction was chemical after all, so I started to experiment on myself. I went out for lunch with my niece, who had an iPad with her, and I held it close to my face. Immediately, I felt a sharp sting in my mouth. Suddenly, I couldn’t watch TV, use my computer, use a phone, or even switch on the lights in my house without pain. It was very frightening.” Through a friend, Mary met a man with electrosensitivity, who introduced her to the society ElectroSensitivity UK, which has 1,000 members. Mary says: “I also went to see my GP, and, although he took me seriously, he didn’t know what to do. I was offered cognitive behavioural therapy, used to treat people with psychological problems like depression, and it did nothing to address the actual sensitivity.” Instead, she took advice from other sufferers. “I changed my light bulbs from compact fluorescent tubes to old incandescent or halogen bulbs, which emit lower levels of radiation. I had my WiFi replaced with wired broadband, and a filter installed on my landline to remove the broadband signal from my phone line. I was told that, as I had a lot of metal fillings in my mouth, it would be a good idea to get rid of them, as they conduct electricity. Over six months, I had them removed and replaced with non-metallic ones. I also follow a very healthy diet.”

Mary believes she has reduced her symptoms, but her life is very difficult. “I’ve had to give up a lot of things I loved, including the tour-guiding I did around the city of London. And my council is in the process of launching WiFi across my entire district. Its IT department can’t guarantee it won’t appear on my street.”

Dr Andrew Tresidder, an NHS GP in Somerset and ES-UK trustee, was also quoted. He has seen many patients complaining of symptoms of EHS. “Electro-sensitivity is a very real illness. We don’t really know exactly how it happens, but, given how sensitive the cells in our bodies are to other types of energy waves, such as sound or light, it would be surprising

if we weren’t sensitive to other kinds of frequency, such as radio waves. I hope that, at some point soon, the NHS and Public Health England will be able to reconsider their current stance and start taking it seriously.”

But Professor Malcolm Sperrin, of the Royal Berkshire NHS Foundation Trust, claimed: “There’s no evidence of a correlation between WiFi and mobile phone signals and illness. If electrosensitivity was real, we’d expect to have been seeing it since radios were first used a century ago. My feeling is that the symptoms could be the result of people worrying about this technology, rather than the technology itself.” [Sperrin is factually inaccurate. His claim, sadly still typical of parts of the radiation industry and the UK’s Department of Health, is invalid: electrosensitivity has been known for over 80 years, starting with telephone, radio and radar workers, and there are plenty of peer-reviewed studies showing that it is nothing to do with fear, but is a physical reaction, especially of the autonomic nervous system. The World Health Organisation’s ICNIRP, along with other international groups, now accepts electrosensitivity symptoms as caused by electromagnetic exposure. – Ed.] (Polly Dunbar: “Could WiFi be harming your health? That’s what a growing number of people believe is triggering their headaches, nausea and crippling pain”, Daily Mail, 24th November 2014)

### **Musician: “irregular heartbeat and breathing problems”**

Musician and ES sufferer Ricky Gardiner, 66, who played guitar for Iggy Pop and David Bowie in the seventies, now lives in rural Carmarthenshire, West Wales with his wife, Virginia. His symptoms began in the late eighties, and he believes they were caused by five computers he used to produce music. “It started as a strange warmth inside my body, but, by the mid-nineties, I was very unwell, with an irregular heartbeat and breathing problems.” For many years he was unable to work because of his illness. “I’ve tried everything. I’ve slept inside a canopy made from fabric to block out the radiation, and painted my house with a graphite paint. I still use a computer for my music, but I don’t have WiFi and I sit on the other side of the room from

the monitor and use binoculars to see the screen.” Although Ricky feels he is managing his condition, he is angry that EHS is not taken more seriously. “The telecoms industry is the biggest money-spinner the world’s ever known, so it’s easier to dismiss us as nutcases than question whether it’s right for us to be bombarded with electromagnetic waves.” (Polly Dunbar, Daily Mail, 24th November 2014)

### **Teacher forced out by WiFi: “I can hardly go anywhere”**

Sue Brown, 53, a married mother of two



from Gloucester, had to resign as a teacher at a prestigious independent school three years ago after WiFi was installed there, and has taken early retirement. “I’d always been very healthy, but then, for no apparent reason, I started to find it difficult to sleep at night. I developed terrible pains in my head and sometimes I’d feel nauseous. My doctor gave me strong painkillers, but nothing worked. He wondered if I might have a brain tumour, but in the school holidays, the symptoms would almost disappear. I loved my job, but had to resign. Later, I discovered from the school’s IT technician that WiFi had been installed at the same time as my symptoms started.” Sue’s symptoms eased after she left work, but returned when she had a new broadband hub installed in her home. “Now, I can hardly go anywhere, because WiFi is so widespread. The symptoms are horrendous, but, when I talk about them, people look at me as though I’m mad. For us, this is very real.” (Polly Dunbar, Daily Mail, 24th November 2014)

### **“Maryland woman suffers acute radiation exposure from a bank of smart meters”**

“I am sharing my story because this can happen to anyone. I moved into a condo on August 29, 2014, I was in good health. On the evening I moved in, I began to experience a burning sensation, dizziness, constant pressure in my head, and unusual vaginal bleeding. I started hearing a high-pitched sound. That night I couldn’t fall asleep at all. These symptoms continued the next day. I was very concerned. I

didn't know what was happening. I've never experienced these symptoms before. The only change was my new living space. I hired an environmental inspector. The inspector found extremely high levels of Electromagnetic Radiation. This condo has 26 smart meters installed outside its kitchen wall. I also went to see my doctor. My doctor confirmed that these symptoms I experienced were consistent with acute radiation exposure. I was advised not to live in this unit to prevent further health damage. I moved out August 31, 2014. All the symptoms were gone within 2 days. I am now living in a place without smart meters – and I am able to live a normal life. I never thought utility meters could actually make me sick.” (3 minutes: [www.youtube.com/watch?v=F9QZuWPw6Y0&feature=youtu.be](http://www.youtube.com/watch?v=F9QZuWPw6Y0&feature=youtu.be))

### “Unable to sleep, exhausted, anxious, rashes, a racing heart”

Electric “smart” meters were installed in Cindy deBac’s Scottsdale, Arizona, neighbourhood in 2012. She recalls the day a new meter was mounted on her home as a sort of digital Pearl Harbour attack. “I’ve never been so sick in my life,” she says. “Nausea, a crushing migraine headache, and painful heart palpitations laid me low right away.” Healthy and exuberant before the installation, deBac became unable to sleep normally. She soon became exhausted and tearfully anxious as she struggled with rashes and a chronically racing heart. For respite she spent nights away in her car. One of her dogs died of cancer within six months of the meter’s installation and the other developed large tumours. Today Cindy leads a global educational crusade to warn others about the myriad devastating health effects that electromagnetic radiation can unleash.

(Amy Worthington: “How Dangerous and Expensive Became ‘Smart’: An Exposé of the ‘Smart Grid’” Weston A. Price, 19th January 2015)

### Cordless phone causes Restless Leg Syndrome

“Hearing that a cordless phone had so much radiation, give me cause to think. My husband had severe restless leg syndrome, till the point that it was physically hurting him and keeping us both from sleeping. We were thinking about sleeping separately. Our family doctor had



given different ideas and medication over the years, but nothing alleviated the problem. So

after this Women’s meeting I put the cordless units away, without telling my husband the reason. After a week I introduced my husband to the concept of radiation from appliances and gadgets and if he had seen any change. Well; he had not slept so well in many years, and the same goes for me. Thank you for helping us to make the healthy change to a life without restless legs.” (Shirley, to Martin Weatherall, posted 7th February 2015, Omega News)

### Water ‘smart’ meter: “headache and painful eye”

“I began experiencing adverse health symptoms (that I never had before) immediately after installation of a water ‘smart meter’. My symptoms included: headache (rapid vibration of temple veins); painful eye, and ‘prickling’ nasal sensations; body temperature and blood pressure increases; shortness of breath; nausea and dizziness; fluctuating heartbeat; and ultimately, a seizure causing loss of control of my legs. Two months prior to these symptoms, I had an annual medical exam and was given a clean bill of health. After my seizure, I had the following tests: thyroid evaluation, EEG, eye exam, and MRI. I experienced temple and eye sensations near the end of the MRI. I was again given a clean bill of health. Our bioelectric nature has been known since the late 1700s, when Galvani showed that nerves transmit signals via ‘electricity’. We are electromagnetic beings, and it has been shown scientifically that external EMFs affect our nervous system. One example: TMS (transcranial magnetic stimulation) uses external EM pulses to the brain for treating neurological disorders.” (John Endres: “We must recognize wireless and health problems are linked” The Cap Times, 13th January 2015)

### Public speaker: “couldn’t form a complete sentence”

From one of several stories in Michael Gaynor: “Town without Wi-Fi” (Washingtonian, January 2015). “Monique Grimes had just moved to Florida for a new job when the syndrome started. On the third

morning in her St. Petersburg apartment, she woke with a harsh thumping in her chest: heart palpitations. Within hours, it felt as if someone had tied a thick rubber band around her head. Then came nausea, fatigue, ringing in her left ear—an onslaught of maladies, all at once, and she had no idea why. “I was trying to come up with every excuse in the world for what was happening to me,” she says. “Moving is stressful, but the symptoms just kept piling on.”

In 2012, after a decade as the owner of a Connecticut catering company and an office worker in finance and construction, Grimes had gone to Florida to be a speaker for a public-policy group. A week or two into the job, whatever was afflicting her still wasn’t abating, and before long her speech became so jumbled that she couldn’t form a complete sentence in front of an audience. She saw an internist, a neurologist, then a psychiatrist, and still had no explanation. “If we can’t test it,” one said, “it doesn’t exist.” Grimes started poking around online and soon remembered reading an article about the potentially deleterious health effects of the new “smart” electricity meters that were rolling out across the country. The devices send customers’ usage data back to the utility over wireless signals. Did her building have them? She went outside to inspect the place and found no fewer than 17 of the meters strapped to the side of the building. Grimes went back online and found herself scrolling through tale after tale of people all over the world getting sick from the devices. And it wasn’t just smart meters. It turned out there was a whole community of people out there who called themselves “electrosensitives”. She went back to her doctors with her newfound evidence of EHS, relieved to have sorted out the mystery. But she got no sympathy. As she puts it, “They look at you like you have three heads.” Grimes moved to a new building, then another, and six more times, but at each turn a smart-meter rollout wasn’t far behind. “I sat down there in Florida,” she says, “and just prayed to God: ‘Where is my way out?’” It was then that she discovered Green Bank in West Virginia.”



## 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.

**ElectroSensitivity UK**

www.es-uk.info

### What does ES-UK do?

- ES-UK runs a helpline to support people with ES, their friends and family, to ensure there is a sympathetic ear to hear individuals' experiences and to offer information and practical help, where possible.
- We have information on ES, what it is, and what you can do about it, to enable you to improve your health and explain to others, including your medical contacts, the real nature of your condition.
- We support a directory of services and products suitable for ES people.
- We send out a quarterly newsletter keeping people informed about others' experiences, with tips from sufferers about what helps them, information about ES in the workplace and at home, and national and international news, including new research.
- We maintain a website with information and news, for those who can use computers.
- We do our best to educate the medical profession about ES.
- We do our best to educate Public Health England (PHE) and its Advisory Group on Non-ionising Radiation (AGNIR), the two government groups responsible for the UK's high levels of exposure which cause ES.
- We do our best to educate officials involved with benefits, disability issues, employment, hospitals, housing, public services, schools, shopping and transport.

### Contact

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Scientific Advisers: Dr Andrew Goldsworthy, Dr Magda Havas,  
Professor Denis Henshaw, Professor Olle Johansson

ES-UK is an independent charity founded in 2003.  
It is financed by donations. Registered No. 1103018.

ES-UK, September 2013

Electro-sensitivity (ES) is a condition which can develop when people are exposed to things like computers, cordless phones, low energy lighting, mobile phones, mobile phone masts, powerlines, smart meters, substations and WiFi.



**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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### Aims of ES-UK

1. To help people suffering from electro-sensitivity
2. To educate the public about electro-sensitivity and related areas

### Support ES-UK

A donation of £15 per year, or whatever you can afford, helps with the running costs of ES-UK. Cheques, payable to ES-UK, should be sent to The Treasurer, BM Box ES-UK, London, WC1N 3XX, from whom you can obtain Standing Order, Direct Debit and Gift Aid declaration forms.

### Newsletter

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

### Donations

Donations should be sent to the BM Box, London.



for all people sensitised by electro-magnetic fields and radiation

## ElectroSensitivity UK

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**Telephone: 0845 643 9748**

Alternatively, if you have access to email,  
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