

## Electrosensitivity Briefing v2 Oct 2019

Modern Biology tells us that all life is electromagnetic, and sensitive. Cells communicate and operate not just with chemicals, but also with electricity and 'electronics'. 'Gates' in cell membranes for ions such as calcium, magnesium, sodium, potassium and chloride result in communication that is amplified millions of times for a tiny stimulus. This applies to humans, plants, insects, animals and all life forms, some of which navigate on minute magnetic fields. This is why our eyes can respond to a single photon in darkness (a tiny energy) and our ears, adjusted to silence, to a billionth of a watt of sound. The heart is a large electromagnetic organ, with a measurable field over a metre from the body, whilst the brain is known to produce EM signals.

Electricity has transformed society, first as a power source, and latterly through communication, first wired, now wireless. Electric current produces both magnetic and electric fields, whilst wireless relies upon radiofrequency (microwave) transmissions. Current UK safety limits derive from ICNIRP, (International Commission on Non-Ionising Radiation Protection) advice, which gives short term (6 or 30 minute) thermal limits only, on the basis that heating to less than one degree C, averaged over the whole body, is harmless. ICNIRP's advice unfortunately ignores all modern biology telling us that life is electromagnetic – because of course EM fields will interact with each other. Maybe ICNIRP has made this error because they rely upon Schwan's invalidated thermal hypothesis from the 1950s, and because their dozen or so experts include no practicing medical doctors or biologists who understand this. Furthermore, they ignore or dismiss thousands of scientific studies showing mechanisms of harm (selected ones here <http://www.es-uk.info/wp-content/uploads/2018/11/02.3-Selected-ES-and-EHS-Studies-2018.pdf>), including the recent National Toxicology Programme and Ramazzini Institute studies showing cancer in rats from near and far field RF – which were hardly reported in the UK press. Half of the world has set much lower safety limits than UK, in the case of Russia, for instance, because they have studied the adverse effects of EM Fields on humans since the 1930s.

Humans, however, are affected by EM fields, some catastrophically. It is estimated that 3-5 % are moderately affected, some 20% mildly, and less than 1% severely. What might you notice? Headaches, tinnitus, brain fog, palpitations, dizziness and loss of concentration are common early effects.

Over 20 years ago Dr Andrew Tresidder, then a GP in Chard, Somerset, discovered that a child's headaches were caused by an electric field near the head of the bed. The mother reliably proved this by leaving the TV in the next room plugged in some nights, and not on others – the child's headaches correlated with the TV being on standby. This led Dr Tresidder to research the area from literature available, and diagnose a number of others with symptoms caused by environmental agents. The key issue was that peoples' symptoms

resolved when the electric field was switched off, and returned when on again. This occurred for some people with wifi routers. More recently, as a trustee of charity ESUK, Dr Tresidder has seen many cases of people affected by EM fields, some severely

The widespread use of wifi (transmitting 24/7), cordless phones (transmitting 24/7), alarm sensors (transmitting 24/7), and other domestic hi-tech use, including the frequently transmitting smart meters, is causing people symptoms that range from mild to severe. In fact, with smart phones next to them, and blue tooth in their cars and computers, many people are irradiated 24/7 by what much of the insurance industry calls a 'pollutant' – and declines to cover liability for. Those unaffected by symptoms may be tempted to ridicule those who are. The whole issue is an inconvenient truth, and unfortunately because doctors are not taught about the issue, most people will not be diagnosed except when they themselves observe cause and effect.

The current UK Government response to MPs who write on behalf of their affected constituents is unhelpful, especially as it relies upon ICNIRP's outdated reliance that 'non-thermal equals non-harmful' – in contradiction to thousands of scientific papers. It also relies upon a scientific approach that is flawed, flawed because it ignores the case studies of the constituents, and relies upon research with a flawed conclusion, such as the 2005 Kings College study, where the psychologists concluded that the effects were psychological – because they failed to take into account the fact that 'Sham' was not sham, it was active – so sensitive participants responded to all three exposures. In fact this study is excellent in all effects except the conclusion (see p6-7 of <http://www.es-uk.info/wp-content/uploads/2019/08/ES-letter-psych-paper-Novengineers-2018.pdf> for a critique)

The UK Government advice on RF - 2G, 3G, 4G and 5G unfortunately derives its health advice from this approach, based upon ICNIRP.

The ES-UK website has a great deal of information assembled by the Chair, Michael Bevington and others, with hundreds of scientific studies quoted, and letters from Dr Tresidder both for patients to show their doctors to help consider the diagnosis <http://www.es-uk.info/wp-content/uploads/2019/08/ES-GP-patient-letter-Aug-19.pdf> , and for doctors to help them understand the issue (above).

People with ES may well be the canaries in the coalmine, warning us all of the potential effects upon our health – however, society must consider carefully whether it is happy to sanction the 24/7 irradiation of people with what the insurance industry describes as a pollutant.

Andrew Tresidder 8.10.19

<http://www.es-uk.info/wp-content/uploads/2018/11/02.1-ES-UK-Information-Leaflet-2018.pdf>