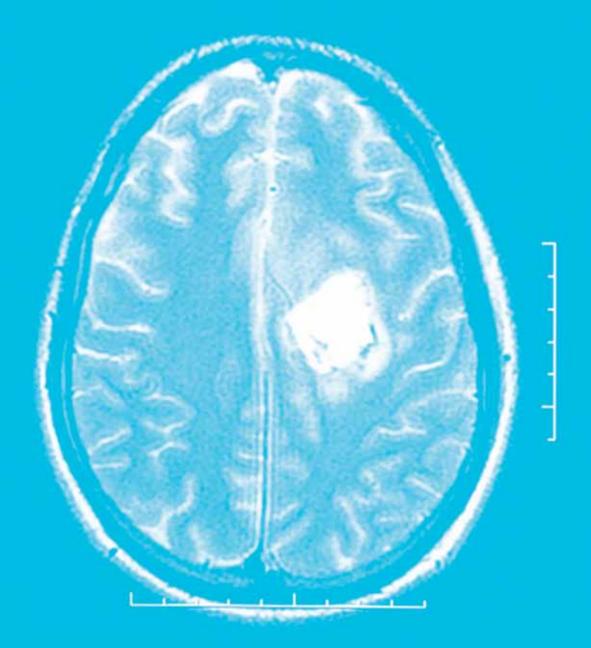


### www.radiationresearch.org Reg. Charity No: 1106304



# Who are the Radiation Research Trust?

## The Radiation Research Trust (RRT) are leading supporters of the precautionary approach to Electromagnetic Radiation.

The RRT gained charitable status in 2003 and is supported by MPs and MEPs from each of the UK political parties. We are also indebted to Independent Scientific, Public Health and Technical advisors.

The Radiation Research Trust (RRT) has developed an international network of campaigners, doctors, scientists, the media, politicians and officials. We work with cross party members of the UK and European parliaments offering help to provide advice and information for parliamentary questions and reports. Trustees have presented evidence at local Government level and the European Parliament and attended private meetings with European Director Generals and Directors at WHO in Geneva. We have also organised meetings at the House of Commons, The Royal Society, London, The Institute of Mechanical Engineers and presented at and attended many conferences/public meetings on a National and International level.

The Radiation Research Trust organised a major conference on the 8th & 9th September, 2008 entitled: 'Electromagnetic fields and health - a global issue' It was a major achievement to bring both sides of the debate together from the highest level in the world. This took place at the Royal Society, London. The RRT invited speakers from ICNIRP, WHO, the Russian National Committee on Non-Ionizing Radiation Protection and national bodies such as the UK Health Protection Agency and the MTHR. They were joined by Independent scientists, politicians, lawyers and concerned citizens, each offering differing viewpoints in order to encourage discussion around risk assessment.



Stakeholders from both sides of the debate presenting at the 2008 conference. Photograph taken at Westminster

RRT would like to raise public awareness of the health effects of radiation, namely from the increasingly popular mobile phone. Research shows a very strong connection between mobile phone use and sterility in males. There is also damning evidence that mobiles can cause

severe life-threatening development of brain tumours and neuro-degenerative disorders. Children are known to be more vulnerable.

The RRT strongly believe that these affects should no longer go ignored and we need to make far more people aware of the severe life changing damage mobile phones can cause.

As the RRT is a charity, we receive no money from government or corporations, relying entirely on donations from the public. Any donation you can make, big or small, will provide a valuable contribution to our work.

# Why is a Campaign Necessary?

#### Why? Because there is a critical need to improve communication of the potential impact of electromagnetic effects on the physical health of our society

Currently it is estimated that between 2.5% - 8% of the population could be suffering with a condition known as *electrosensitivity* (ES). ES victims are often unable to use their talents and capabilities to earn a living because their sensitivity to electromagnetic fields means they can't use everyday facilities such as public transport, or go into normal public areas which have wireless facilities (for example offices or cafes). These facilities, which most people take for granted, are denied to an electrosensitivity sufferer. This can limit the ability of the sufferer to operate in normal working environments.



Photo credit: Arvind Balaraman

With other forms of disability, society in the UK has taken the view that such a situation is unacceptable and legislated to ensure equal access and equal opportunities.

#### Why? Because there is a need for recognition that

**electrosensitivity is a disability** In Sweden, electrosensitivity is officially regarded as a functional impairment. The Canadian Human Rights Commission also recognises it as an environmental sensitivity and classifies it as a disability. Dr. Magda Havas, a professor of the Environmental and Resource Studies program at Trent University in Peterborough, is one of the few trying to track

the condition in Canada. Dr Havas estimates as much as 35% of the population may be suffering from moderate ES. She speculates that ES may also have an association with diseases such as multiple sclerosis and diabetes.

Why? Because there is a fertility risk Governments have been advised by numerous scientific sources of the damage mobile phones can cause on fertility and the health of children. So far, very little has been done to make the general public aware of any risks. RRT intends to spearhead a campaign that would ensure that mobile phone consumers have a more cautious approach to mobile phone use.

Why? Because there is a danger to children Furthermore, we will lobby the government to tighten regulations on the use of mobile phones, encouraging policy change to stop the targeting of advertising of mobile phones to children and include warning labels on mobile phones. A number of governments (including those of France and Israel) have now issued warnings to their citizens about reducing the use of mobile phones by children.

Why? Because there are inadequate government warnings of the dangers So far various governments have issued warnings to their citizens about reducing the use of mobiles by children, although there are currently no warnings about fertility (or we are unaware of any such warnings for men). But are mere warnings enough? RRT are hoping that a marketing campaign would quickly raise awareness of the issues and force the UK Government's hand to act!

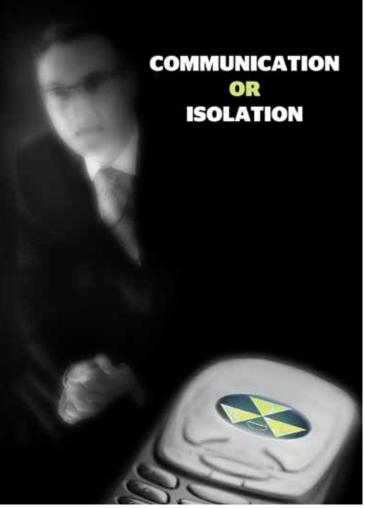
The RRT is planning a widespread interactive educational campaign to involve existing community groups and raise awareness of the health issues so that public pressure will force the UK Government to issue precautionary advice.

### **Budget costs are available on request**

# Is the canary bird singing again? Could you be suffering with electrosensitivity (ES)?

Could we be ignoring the early warning signs that electrosensitivity is giving us?

What are signs? Symptoms range from headaches, sleep problems, skin rashes, depression, dizziness, memory changes & heart palpitations following exposure to electromagnetic fields (EMFs). Symptoms normally diminish with distance from these sources.



Credit: Paul O'Connor

What causes ES? ES is a sensitivity to electromagnetic fields, for example from mobile phones, WiFi, wireless baby alarms, DECT cordless phones, smart meters, power lines or even minor electrical equipment. Symptoms are wide-ranging and UK doctors are not trained to recognise the condition, so could be misdiagnosing patients and treating them with medication for headaches, tinnitus, dizziness, memory deficits, irregular heart beat, sleep problems, depression and much more.

Are ES numbers increasing? An Austrian telephone study of a cross section of 526 people by Schroettner & Leitgeb (2008), showed that an increasing number of people suffer from nonspecific health symptoms such as headaches, sleep disturbances, difficulties in concentrating etc and attribute their ill health to electromagnetic hypersensitivity (EHS) and electromagnetic pollution. It showed an EHS prevalence of 3.5% compared with 2% estimated in 1994. A 2006 UK survey by Stacy Elititi in Bioelectromagnetics, aimed at a randomly selected group of 20,000 people found a prevalence of 4% for symptoms attributed to electromagnetic exposure.

The estimated 2.5% - 8% of the population who

could be suffering with acute symptoms may be becoming severely debilitated as a result of having to withdraw from society where wireless communication means they cannot go to everyday places without suffering from the ES symptoms outlined above.

Unlike Sweden and Canada, the UK and many other countries have not classified the condition as a functional impairment, and as a result are creating an invisible under-class who are denied the support and opportunities which could be available to sufferers of ES. It is wholly unacceptable to allow this sort of discrimination and goes against the UN 22 Standard Rules Human Rights for Persons with Functional Impairments.

# What is Electrosensitivity (EHS)?

#### The RRT are calling for the same rights and protection for people living in the UK as in Sweden. There is a critical need to improve communication of the potential impact of electro-magnetic effects on the physical health of our society.

What's in a name? Electrosensitivity is often described as radiation sickness. It is also referred to as RF sickness syndrome or microwave radiation sickness.

According to Medilexicon's medical dictionary: "*Radiation sickness* is a systemic condition caused by substantial whole-body irradiation, seen after nuclear explosions or accidents, rarely after radiotherapy. Manifestations depend on dosage, ranging from anorexia, nausea, vomiting, and mild leukopenia, to thrombocytopenia with hemorrhage, severe leukopenia with infection, anemia, central nervous system damage, and death."

Radiation exposure can also increase the probability of developing some other diseases, mainly cancer, tumors, and genetic damage. These are referred to as the stochastic effects of radiation, and are not included in the term radiation sickness. Stochastic effects often show up years after exposure. As the dose to an individual increases, the probability that cancer or a genetic effect will occur also increases.



Whether we call it radiation sickness, RF sickness syndrome or electrosensitivity, the Radiation Research Trust is determined to educate society on the potential impact of electromagnetic waves on health.

Our campaign will help the public take heed to the canary bird singing – and encourage further investigation into what could be the warning signs of the next big health risk

### **Campaign Posters & Ideas**

### **Fertility**

# Your future is in your hands

Medical experts are warning men not to keep their mobile phones in their pockets as this can have a direct effect on their fertility.

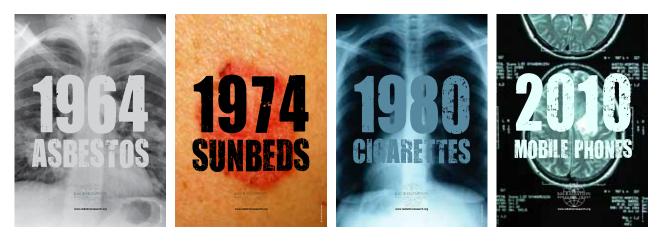




SAVE MALE

# **Campaign Posters & Ideas**

### **Brain Tumours**







### Who are the RRT?

### **Our Board of Trustees:**

#### **Mike Bell**

Devon based Scots lawyer who offers his extensive lobbying and public relations experience.

#### **Steve Miller**

World renowned chill-out producer & recording artist. Steve is very sensitive to non-ionising radiation eg: wifi, cell phone towers, etc, which has drastically changed his life.

#### **Eileen O'Connor**

#### **Director, Radiation Research Trust & Co-chair for international EMF Alliance**

Campaigner against the uncontrolled installation of phone masts and electromagnetic radiation. She contracted cancer while living within 100m of a phone mast in Wishaw, Sutton Coldfield.

#### **Graham Lamburn**

Technical Manager of Powerwatch UK.

#### **Brian Stein**

#### **Chairman, Radiation Research Trust**

Chief Executive Samworth Brothers Ltd, he suffers from electro-hypersensitivity.

### **Patrons**:

#### **Joe Benton MP**

Labour MP since 1997, and at the last general election had the largest majority of any MP in the House of Commons.

#### **Jill Evans MEP**

Plaid Cymru Member of the European Parliament for Wales.

#### **Dr lan Gibson**

He has a doctorate in biochemistry and was a successful researcher and academic before he became a Member of Parliament, where he was involved with many of Parliament's science committees and has a particular interest in combating cancer.

#### **Dr Caroline Lucas MP**

Caroline Lucas is the Green Party MP for Brighton Pavillion.

#### **Liz Lynne MEP**

Liberal Democrat MEP for the West Midlands Region, responsible for representing the people of the Black Country, Birmingham, Coventry, Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire.

### **Supporters:**

The EM Radiation Research Trust is attracting interest from every corner of society - Members of Parliament, prominent journalists and editors, scientists, academics, doctors; as well as members of the public.

#### Scientific, Public Health and Technical Advisors

The Radiation Research Trust (RRT) are leading supporters of the precautionary approach to Electromagnetic Radiation (EMR) and as such advocate release of substantial research funds from Government and Industry.

We are indebted to Independent Scientific, Public Health and Technical Advisors who have agreed to give advice to the RRT acting in good faith and without prejudice giving their time freely. The charity has benefited from the advice of:

Alvaro Augusto Almeida de Salles (Brazil) BSc MSc PhD Electrical Engineering Department, Federal University of Rio Grande do Sul Alfonso Balmori (Spain) PhD Dr Grahame Blackwell (UK) PhD Roger Coghill (UK) MA(Cantab,) C Biol MI Biol MA(Environ Mgt Dr Devra Davis (USA) PhD MPH Dr lan Dring(UK) BSc Joe Foster (UK) 27 year member with the International Association of Fire Fighter's, Local #18 Dr Andrew Goldsworthy (UK) BSc PhD Honorary Lecturer in Biology at Imperial College, London Professor Oleg Grigoryev (Russia) Head of Laboratory "Radiobiology and Hygiene for Non-Ionizing Radiation", Federal Medical Biophysical Centre of Federal Medical-Biological Agency of Russia Professor Yury Grigoryev (Russia) Chairman of Russian National Committee on Non-Ionizing Radiation Protection Örjan Hallberg (Sweden) MSc, Hallberg Independent Research Professor Magda Havas (Canada) | BSc PhD Associate Professor of Environmental & Resource Studies at Trent University Mae-Wan Ho (UK) BSc PhD FRSA Lloyd Morgan (USA) Senior Research Fellow, Environmental Health Trust & Member of **Bio-electromagnetocs society** Professor Mike J O'Carroll (UK) MA MSc PhD CMath CSci FIMA Professor Emeritus and formerly Pro Vice-Chancellor, University of Sunderland Professor Olle Johansson (Sweden) Associate Professor of The Experimental Dermatology Unit, Karolinska Institute Stockholm Professor Henry Lai (USA) Department of Bioengineering, University of Washington Dr. Lukas H. Margaritis (Greece) | PhD PrivDoz Professor of Cell Biology and Radiobiology, Athens University Alasdair Philips (UK) | BSc DAgE MIAgE Director of Powerwatch Prof. Dr. Nesrin Seyhan (Turkey) Director, Gazi Non-ionizing Radiation Protection Center - GNRP Zamir P. Shalita (Israel) | PhD Consultant on Electromagnetic & Chemical Hazards Barrie Trower (UK) | BEd Dr John Walker (UK) | PhD CPhys MInstP Stelios A Zinelis (Greece) | MD BA

# Appendix

We propose to create a powerful campaign using the tactics outlined below.

- Awareness campaign, improved website, leaflets, posters, stickers, badges and t-shirts/ promotional materials for individual campaigns to be used worldwide.
- Contact local, national and International groups for talks and debate about the issues, provide education packs and carry out public opinion surveys.
- Use Facebook and Twitter for spreading the message.
- Initiate short-term fully and independently funded research projects on fertility, child development/learning and Electrical Hypersensitivity (EHS).
- Regular information for doctors and other health professionals including CPD approved workshops.
- Develop an active stakeholder group for debate, awareness and interaction with Government.

### Appendix

#### **Goals**:

- To raise public awareness that high-levels of mobile phone use will not be good for their long-term health and that children's use should be restricted.
- To ensure that mandatory warning labels are printed on all new mobile phones, cordless DECT phones and their base units and a mandatory "safer use" information leaflet is included with every new mobile phone handset that is sold.
- To ensure Government-backed child-safety-awareness educational materials are used in schools as part of the general curriculum and are made freely available through government websites.
- To impel government, doctors, teachers, unions and officials to recognise electrosensitivity as a functional impairment and create protection, acceptance and equal opportunities for sufferers.
- Diagnostics and therapy for EHS people.

#### **Strategies**:

- Lobby the UK Government and European Commission to take action on the recommendations from MEPs to recognise persons that suffer from electrohypersensitivity as being disabled so as to grant them adequate protection as well as equal opportunities.
- Raise funds to carry out independent EHS research working with the Russian National Committee on Non-Ionising Radiation Protection to adopt the protocol for diagnostics and therapy for people suffering with EHS. The Protocol takes into account the individual conditions and sensitivity of each person.
- Using existing community groups to activate societal involvement in the debate and awareness of this issue is important for our children's health.
- Shift public sentiment from "mobile phones are probably ok" to general acceptance that "mobile phone use isn't completely safe".
- Promote active engagement of opinion leaders in the debate, e.g. doctors, teachers, parenting advisers, health charities, children's charities and environmental charities.
- Build an active stakeholder group, by developing good links with other organisations, for coherent debate at both public and governmental levels.

Use the stakeholder group to develop serious negotiations regarding public information and awareness with civil servants, Government Ministers and the telecoms industry.

An international working group of scientists, researchers and public health policy professionals produced the 2007 BioInitiative report. The report provides detailed scientific information on health impacts when people are exposed to electromagnetic radiation hundreds or even thousands of times below the current ICNIRP guidelines.

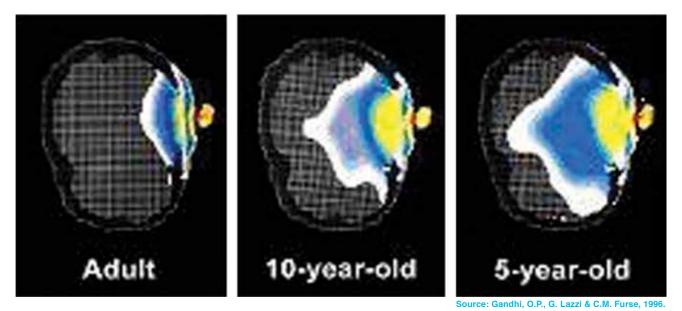
The authors reviewed more than 2000 scientific studies and concluded that the existing public safety limits are inadequate to protect public health. From a public health policy standpoint, new public safety limits, and limits on further deployment of risky technology.

#### **DNA in human cells**

A European study, called REFLEX, was carried out from 2000 to 2004 and involved 12 research groups across 7 European countries, costing more than €3 million. REFLEX found that radiation from mobile phones breaks DNA in human cells, confirming important findings already in the scientific literature from Lai and Singh at the University of Washington in Seattle, USA.

#### **MEPs vote for the precautionary approach**

In September 2008, MEPs voted 522 to 16 to urge ministers across Europe to bring in



stricter radiation limits and said: "The limits on exposure to electromagnetic fields (EMFs)

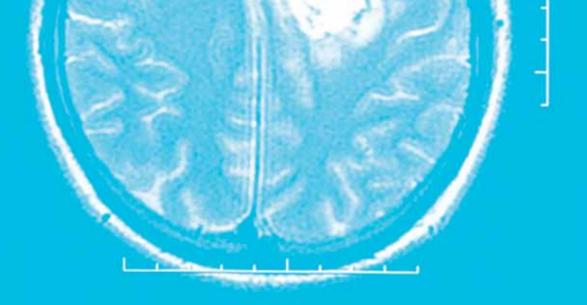
"The potential risk to children's health is very high and a completely new problem. Use of mobile phones for those under 18 or pregnant should be restricted. Children have a unique vulnerability as they grow and develop; there are 'windows of susceptibility' periods when their organs and systems may be particularly sensitive to the effect of certain environmental threats. The existing standards cannot guarantee the safe, healthy development of the next generation."

*Professor Yury Grigoriev,* Chairman of Russian National Committee on Non-Ionizing Radiation Protection

which points in its conclusions to the health risks posed by emissions from devices such as mobile telephones, UMTS, Wi-Fi, WiMax and Bluetooth, and also DECT telephones".

European Parliament resolution of 2 April 2009 on health concerns associated with electromagnetic fields (2008/2211(INI))
The report was adopted with 559 MEP votes in favour, 22 against and 8 abstentions.





# Can we afford to wait another 10 years before we take action?

