

# The Wireless Revolution

*The Health Implications  
and  
The Way Forward*



# What are the dangers?

- **There are multiple dangers associated with wireless technology.**
- *"Cancer Clusters" have been found around Mobile Phone Masts, up to 400 metres from a mast. People living near each other and close to a mast have ended up with rare cancers at nearly the same time as each other. These people live where they are getting the strongest signal from the nearby mast(s). This has been the case in Devon, Lincolnshire and Staffordshire. (the only places that volunteers have been able to check so far)*
- *People living in these areas, close to masts commonly find they get many common symptoms including **heart palpitations (flutters)**, lots of **headaches, nose bleeds, problems sleeping, itchy burning skin** and feel really **depressed**. [mastsanity.org/info-guides-/masts-guide.html](http://mastsanity.org/info-guides-/masts-guide.html)*
- Microwave sickness including migraines, strokes, heart attacks, depression, cancers and autoimmune diseases.

# The Technology and How it Works

- The technology was never pre-market tested for safety.
- Microwave Radiation is constantly emitted from mobile phone masts
- What are microwaves?
- *Microwaves are a form of electromagnetic radiation, like light waves or radio waves, and occupy a part of the electromagnetic spectrum of power, or energy. Microwaves are used to relay long distance telephone signals, television programs, and computer information across the earth or to a satellite in space.*
- The pulses and wave forms are also linked to health effects
- *A problem with digital signals is that their rapid rise and fall times generate a very large number of harmonics (multiples of the basic frequency). When these are used to modulate carrier waves, they generate very wide sidebands on either side of the carrier frequency, which actually carry the information. The width of each sideband corresponds to the frequency of the highest harmonic of the signal to be transmitted and is likely to overlap with the frequencies to which our bodies are sensitive.*

# What sort of devices emit this radiation?

- **DECT phone**
- **Other wireless devices including digital cordless phones, wireless internet, WiFi, digital cordless baby monitors, mobile phones, low energy light bulbs, some smart meters, some game consoles e.g. Wii, etc.**
- **The type of radiation emitted is in the microwave part of the electromagnetic spectrum at levels trillions of times higher than the natural background levels.**

# ICNIRP and the Guidelines

- No protection, thermal limits only.
- Short durations envisaged

*The ICNIRP guidelines, upon which government decisions about electromagnetic safety are currently based, only take the **thermal** effects, i.e. the heating of body tissue into account and only cover **short term** exposures, as this ICNIRP quote from the guideline document testifies: "these guidelines are based on short-term immediate health effects such as stimulation of peripheral nerves and muscles, shocks and burns caused by touching conducting objects and elevated tissue temperatures resulting from absorption of energy during exposure to EMF". Paolo Vecchia, Chairman for ICNIRP presented at the RRT conference in September, 2008. In his presentation, he made it very clear that, "the ICNIRP guidelines are neither mandatory prescriptions for safety, the 'last word' on the issue nor are they defensive walls for Industry or others."*

# Scientific Evidence for adverse health effects

- The Stewart Report, 2000
- ECOLOG
- EPIDEMIOLOGICAL STUDIES (effects on people in real life situations – note Governments will NOT fund any of these)
- - including Cancer Clusters
- MOBILE PHONE STUDIES- Interphone and Hardell
- In VITRO Studies
- REFLEX
- The BioInitiative Report
- Simple Blood Tests – such as by Magda Havas see [tinyurl.com/magda-blood](http://tinyurl.com/magda-blood) and [tinyurl.com/magda-dect](http://tinyurl.com/magda-dect)
- And Many Others

# Scientific Evidence for adverse health effects (cont.)

- Hecht and Balzer

*Prof. Dr. Karl Hecht and his associate Hans-Ullrich Balzer were commissioned in 1996 by the German Federal Institute for Telecommunication to carry out research on the Russian technical literature about the health-damaging and biological effect of high-frequency electromagnetic radiations from the years 1960-1996. In 1997, the authors submitted the report, which was based on 878 scientific works, to the sponsor. The data was so damning that the report immediately disappeared into the archive. [tinyurl.com/hecht-hazard](http://tinyurl.com/hecht-hazard)*

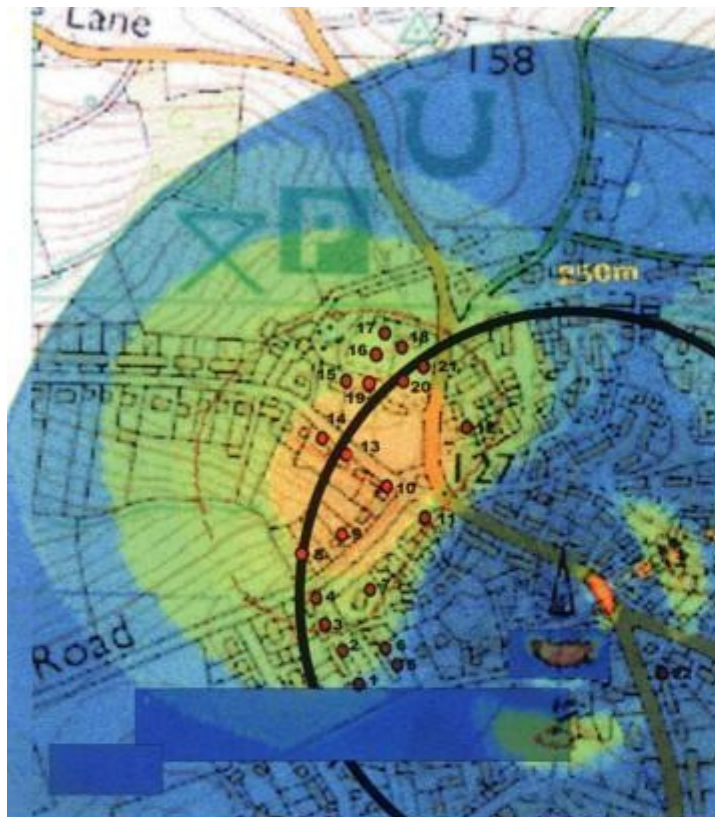
- Naila 10 Year Study 1994-2004

*Doctors looked at nearly 1000 medical records. They found that patients who had lived within 400 metres of a mast for 10 years were much more likely to get cancer than those further away. Patients fell ill with cancer nearly 8 years younger. 5 years after the mast was installed the chance of people getting cancer near to the mast was 3 times higher than it was for people further away. Other studies have shown the same kind of pattern.*

- Dr. Walker's UK Cancer Cluster Investigations

*In conjunction with Eileen O'Connor of The Radiation Research Trust, using data collected by a Mast Sanity worker from ill-health clusters around masts, Dr. Walker has produced maps of some cancer clusters. He has superimposed on those maps approximate plots of the field intensity from the mast in question in each case. These are based on observations as to the type of antenna, its height and direction.*

# Cancer Clusters

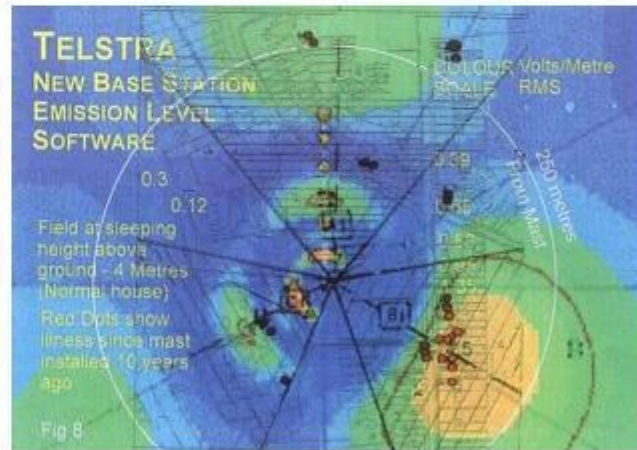
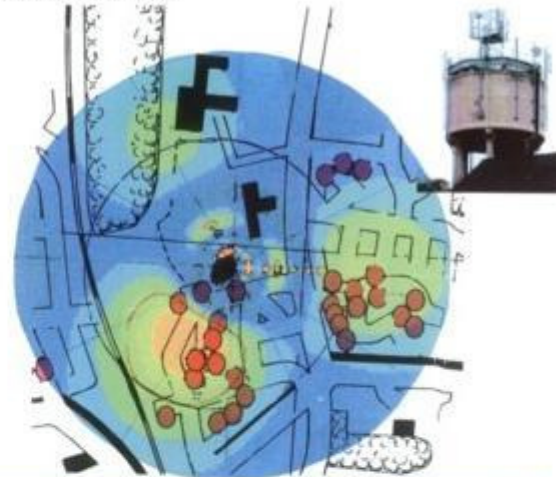


**Key:**

- maximum intensity areas
- medium intensity areas
- lower intensity areas
- ill-health cases

**Devon**

**Lincolnshire**



**Staffordshire**

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# Medical Evidence and Appeals

- Doctors Appeals such as the 50,000+ signature Freiburger Appeal
- Irish Doctors Appeal (IDEA)
- West Kempton (Germany)

*When Doctors in a town in Germany (West Kempton) decided to prove that it was the Mobile Phone Mast that was causing health problems they took lots of blood samples from people before and after a new mast was put up and turned on. The people also stopped using their mobiles, cordless phones, wireless internet and other wireless/mobile gadgets too.*

*The results were very clear. The levels of two vital chemicals serotonin and melatonin found in the blood were found to be seriously altered once the mast was turned on.*

*Serotonin levels were halved. Serotonin controls your mood, anger, aggression, body temperature, sleep, sexuality, appetite and metabolism. Many of the people found themselves feeling moody, depressed, tired, and lethargic. Some also felt agitated and had lost their appetites. Nearly all felt really down.*

*The people's Melatonin levels were too high during the day and much too low at night. Melatonin is a hormone that is important in boosting the immune system and fighting cancer. It protects your DNA from damage. Since it also helps regulate sleep you want it high at night time otherwise you will be restless at night and tired during the day. If your immune system isn't boosted enough you will become ill easier, stay ill longer and can't fight cancer so well. The Doctors wanted the Mobile Phone Mast to be turned off again.*

# Corruption, Vested Interests and Influence

- Many Medical Charities and Organisations have financial links with Telecoms companies
- The recent case of Patricia Hewitt – the former health secretary – her links with BT plus her alleged willingness to alter policy for outside influences
- The Government's links with Vodafone through Vodafone chairman Sir John Bond as the government's ambassador to industry and his predecessor Sarin etc.
- Scottish Environment Protection Agency is part of a pension scheme that puts millions of pounds into Vodafone, BT and others

# Effects on Nature

- There is mounting Scientific evidence for devastating effects on wildlife
- The disappearance of the bees through weakening of their immune systems and effects on their navigation via magnetite (see [tinyurl.com/birdsbeesandmankind](http://tinyurl.com/birdsbeesandmankind) )

Virtually all animal immune systems are under the control of their circadian rhythms. This is to make the best use of limited bodily resources, which are diverted from physical activity during the day to the immune system and the repair of damage at night. If these rhythms are disrupted, or their amplitude reduced by electromagnetic radiation, nothing they control can ever function at full power. Consequently, bees affected in this way may die, seemingly of other causes, including attack by pathogens to which they might otherwise be resistant.

# Body Voltage and Dirty Electricity

- *"... the 20th century epidemic of the so called diseases of civilization including cardiovascular disease, cancer and diabetes and suicide was caused by electrification not by lifestyle. A large proportion of these diseases may therefore be preventable."* (i)
- Released in the year 2000 a study of 44,788 sets of twins from Sweden, Denmark and Finland concluded that environmental factors were the initiating event in the majority of cancers. (ii) The strongest contender and most likely culprit is artificial (man-made) electromagnetic radiation.
- (i) Milham S, Historical evidence that electrification caused the 20th century epidemic of "diseases of civilization" Med Hypotheses (2009), doi: 10.1016/j.mehy.2009.08.032
- (ii) Lichtenstein P, Holm NV, Verkasalo PK, Iliadou A, Kaprio J, Koskenvuo M et al., "Environmental and heritable factors in the causation of cancer: Analyses of cohorts of twins from Sweden, Denmark, and Finland", N Engl J Med 2000; 343:78-85
- Donna Fisher's two books, "Silent Fields: The Growing Cancer Cluster Story When Electricity Kills..." and "More Silent Fields: Cancer and the Dirty Electricity Plague The Missing Link..." <http://omega.twoday.net/stories/6040876/>
- Electromagnetic signals, such as from Mobile Phone Masts, result in induced electrical currents at right angles to the signal direction. In combination with the electrical wiring in your home this can have a negative effect on your wellbeing and health. High levels of electric fields can result in high levels of Body Voltage. The human nervous system is working with low-voltage electric impulses. The electric fields are a stress factor for your nervous system, which may explain the wide variety of symptoms they can cause, most prominently a general lack of wellbeing, restlessness and anxiousness and ever increasing insomnia.

# Solutions - Nationally

- Invest in Optical Fibre to Point of Delivery – invest from 50p/month tax on monthly contracts (fixed and mobile) and 1p per call/text on pay-as-you-go
- Stipulate Universal Roaming to ensure only 1 set of masts anywhere
- Reduce all masts power to As Low As Reasonably Practicable (ALARP) Levels for outside roaming only at levels discussed in the BioInitiative Report and the London Resolution  
[mastsanity.org/the-london-resolution.html](http://mastsanity.org/the-london-resolution.html)
- Adopt the ‘Orchid’ approach\* (i.e. transmitting only when in use – off all other times) to all domestic wireless devices such as DECT, WiFi, SureSignal
- \* see next slide

# Solutions – What Can I do?

- **Remember, You have A Choice. If you really do care about your family, your friends, yourself and the world you live in, please do the following:**
- Give Up Your Gadget Dependency! Enjoy the world around you for real – exercise don't Wii-Fit!
- Cancel Your Mobile Phone Contract ASAP if you have one (If you are worried about emergencies swap to “pay as you go” until you are happy to do without.)
- If you must keep your phone, use it as little as possible and just stick to talking and texting – ignore all other functions and activities.
- Realise that every call, text or iPhone browse needs a mast, and that more calls, texts or browsing mean more masts and transmitters nearby.
- Turn off your WiFi and use wires (home plug if you must) instead. Use a corded phone instead of a cordless (DECT) phone. Stop using any other wireless gadgets or games consoles.
- Put Health First, NOT the profits of the Phone and Gadget companies. They will not pay for you to get well again, so don't give them the money to make you sick in the first place. You can't buy your health or your life back, nor those of your children or family, if they become ill or die.
- Tell everyone about this issue.
- If you need to protect yourselves from nearby Mobile Phone Masts (remember microwave radiation from Mobile Phone Masts can extend for up to hundreds of metres, so it is not just houses right next to a mast that are affected), there are shielding materials that stop much of the microwave radiation. See [tinyurl.com/em-screening](http://tinyurl.com/em-screening) , and tell others about this too.
- Write to your MP or Parliamentary Candidates and local Councillors to tell them that you too are concerned about the health issues and demand that they take real action.
- Take action by joining support groups such as Mast Sanity
- If you already live near a mast you should consider shielding your home from the microwaves
- If you or your neighbours 'must' have a cordless phone buy an 'Orchid' [lowradiation.co.uk](http://lowradiation.co.uk) (only on when needed) phone, use wired internet connections and landlines where ever possible

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# The Way Forward

There are alternatives

- **Visual Light Communications**

Light is better than radio waves when it comes to some wireless communications, according to Penn State engineers. Optical communications systems could provide faster, more secure communications with wider bandwidth and would be suitable for restricted areas like hospitals, aircraft and factories.

Sending information via light waves either in physical light guides or wirelessly is not new, but existing wireless systems either require direct line of sight or are diffused and have low signal strength. The researchers chose to take a different approach using multi-element transmitters and multi-branch optical receivers in a quasi-diffuse configuration.

The system uses a high-powered laser diode -- a device that converts electricity into light -- as the optical transmitter and an avalanche photo diode -- a device that converts light to electricity -- as the receiver. The light bounces off the walls and is picked up by the receiver.

# Questions

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# Mast Sanity

[www.mastsanity.org](http://www.mastsanity.org)



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*Please Note: The views expressed by the author may not necessarily reflect the views or policies of Mast Sanity.*

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