



Mobile Phone Masts (Cell Towers)

Mobile Phone Masts have been steadily spreading across the landscape over the last few years and there are now tens of thousands of them around in the UK – by the roads, on the top of buildings (some in the form of small boxes on the side of buildings), on top of schools, hospitals, universities, close to homes, shops and offices, etc.

They are supposed to be discreet, are taken for granted as an everyday item and barely even considered beyond that. With the existing GSM networks, current 3G roll-out and forthcoming WiMax rollout, escape from masts (and their microwave emissions) is becoming almost impossible.

Problems

Recent investigations into “Cancer Clusters” in the UK where several people in specific localities have developed rare forms of cancer at a similar time have each been shown to correspond with areas receiving the highest microwave emissions from a nearby Mobile Telephone Mast. This has been the case in Devon, Lincolnshire and Staffordshire.

There is no reason to believe that the situation is any different elsewhere. Such “Cancer Clusters” undoubtedly exist widely. Groups of people with similar ill health conditions may be appearing near to Mobile Telephone Masts which have been erected in the last few years. It is likely that symptoms such as heart palpitations, recurring headaches, sleep disorders, itchy burning skin, depression and various types of cancer etc. are becoming more commonplace around other masts. If only the Government would investigate this situation.

Periods spent away from home when these symptoms disappear are usually indicative of ill-health being caused by environmental factors – such as a Mobile Telephone Mast.



It must be noted that the Government's Safety (ICNIRP) exposure guidelines adhered to by Mobile Telephone Masts prevent only against short term heat shocks and burns (thermal heating effects). They are not designed to protect against long term exposure ^[11], nor against the non thermal, i.e. non heating, biological effects. In essence, these ICNIRP guidelines are useless, since they offer no protection at all against the long term and non-thermal effects of microwave radiation – and it is these, the long term and non-thermal effects from the microwave radiation that cause the adverse health effects that are suffered.

These Non-Thermal Effects, detailed in the research by truly Independent Scientists, are increasingly found to occur amongst real people within the population at large who are exposed to Mobile Telephone Mast radiation. Many German and European doctors (equivalent to our GPs) are so concerned that they have signed up to the “Freiburger Appeal” to demand that health concerns over Mobile Telephone Masts are taken seriously. Other similar appeals exist across Europe ^[8]. The Doctors note many symptoms increasingly seen by them in the vicinity of Mobile Telephone Masts.

They are: Learning, concentration, and behavioural disorders (e.g. attention deficit disorder, ADD); Extreme fluctuations in blood pressure, ever harder to influence with medications; Heart rhythm disorders; Heart attacks and strokes among an increasingly younger population; Brain-degenerative diseases (e.g. Alzheimer's) and Epilepsy ^[9]; Cancerous afflictions: leukaemia, brain tumours; Headaches, migraines; Chronic exhaustion; Inner agitation; Sleeplessness, daytime sleepiness; Tinnitus; Susceptibility to infection; Nervous and connective tissue pains, for which the usual causes do not explain even the most conspicuous symptoms.

Actions

Remember, There Is A Choice. If you really do care about your friends, your family, yourself and the world you live in, please do the following:

- Cancel Your Mobile Phone Contract ASAP if you have one (If you are concerned about emergencies swap to “pay as you go” until you are happy to do without.) You must realise that every user demands a mast, and that demand ensures a mast (or several) outside someone's home. Put Health First, NOT the profits of the telecommunication and consumer electronics industries. They will not pay for you to get well again, so do not give them the money to make you sick in the first place. You cannot buy your health or your life back, nor those of your children or family, if they are cruelly taken away.
- If you must keep your phone, use it as little as possible and keep your usage of it to talking and texting – ignoring all other functions and activities.
- Tell everyone about this leaflet, its contents and where to get it from.
- Become informed by reading the Referenced sources and inform others.
- Write to your MP and local Councillors to tell them that you too are concerned about the health issues and demand that they take action.
- Take action by joining support groups such as Mast Sanity

We know that the Industry and Government say that this technology is all safe – they have a vested interest, of course. The Industry have spent billions of pounds on the technology and need to recoup it and profit from it too, and the Government, of course, have gained billions of pounds via licenses and are still gaining billions in taxation each year. Neither can afford to admit that the technology is harmful.

Since when should we listen and give so much weight to those with vested interests amounting to billions of pounds and more in their products? When else does this happen, that we listen most to those who make and gain from the product, instead of those independent of it? It is really preposterous.

If nothing else, please look into the facts for yourself – take care to look at the work of truly Independent scientists, a good place to start would be the Research section below and its references to Independent Research.

Glossary

COM – Microwave Monitor/Meter - measures microwave fields from DECT etc.

EMF - Electromagnetic Field - The electromagnetic field is a physical field produced by electrically charged objects. It affects the behaviour of charged objects in the vicinity of the field. The field can be viewed as the combination of an electric field and a magnetic field.

GSM/2G - Global System for Mobile communications is the most popular standard for 2G mobile phones.

HPA – UK Health Protection Agency – The Government Agency charged with protecting health.

ICNIRP – International Commission on Non-Ionizing Radiation Protection – the self-appointed body of Engineers and Scientists currently setting exposure limits for Mobile Phone Masts and other microwave devices.

WiMax – Worldwide Interoperability for Microwave Access, is a wireless technology that provides for the transmission of data in a variety of ways, ranging from point-to-point links to full mobile cellular-type access. It claims to enable the delivery of last mile wireless broadband access as an alternative to cable and telephone land lines.

3G/UMTS - Universal Mobile Telecommunications System (UMTS) is the third-generation (3G) mobile phone technology used in the UK. UMTS was designed to succeed the 2G GSM networks.

Research

In Kempten West, Germany ^[10], blood samples were taken from residents before and a few months after a new Mobile Phone Mast became operational. The residents removed other wireless microwave devices such as DECT and Wi-fi from their homes weeks before the blood tests were taken. Where the relative Electromagnetic field strengths were measured before and after there was a several fold increase in the electromagnetic RF radiation exposure.

The findings were very clear. Almost the whole group – 84% - were found to have their serotonin levels cut by nearly half once the mast was operational. This went along with a clear increase in depressive mood disturbances, lethargy and listlessness, appetite disturbances, inner agitation and reduced quality of life experienced by nearly all of the residents. Additionally, melatonin levels were found to be reduced by nearly half in more than half of the group – raising the likelihood of sleep disturbances and its likely cancer promoting risk from reduced immune system activity. There was also an increase in the daytime melatonin level that is normally substantially lower than the night time melatonin level. This has resulted in restless night time sleep and lethargy during the day time for those affected.

In summary, since there were no other significant changes to the living conditions of the residents it can clearly be seen that the addition of a Mobile Phone Mast in the vicinity has had a detrimental effect on the health of residents. The Doctors in Kempten West stated that the mast should be turned off again for the sake of residents' health.

A clear cancer link was shown with residents living near Mobile Telephone Masts in a 10-year Study in the town of Naila, half-way between Berlin and Munich in Germany. ^[12]

Using the data from almost 1000 patients the study showed that the proportion of newly diagnosed cancer cases was significantly higher among those patients who had lived for the past ten years at a distance of up to 400 metres from the Mobile Telephone Mast, which has been in operation since 1993, compared to those patients living further away, and that the patients fell ill on average 8 years earlier.

In the years 1999-2004, i.e. after five years' operation of the transmitter installation, the relative risk of getting cancer had trebled for the residents of the area in the proximity of the installation compared to the inhabitants of Naila outside the area.

Previously, Santini and Santini (2001) and Santini et al (2002) ^[7] surveyed people living up to 300m from Mobile Telephone Masts. There was a statistical match between distance from Mobile Telephone Masts and health problems: tiredness up to 300m; headache, sleep disruption, 'discomfort' up to 200m; depression, memory loss, dizziness, visual disturbances up to 100m. Women were more susceptible than men.

Dr John Walker of Sutton Coldfield ^[13] has been conducting research into the distribution of ill-health in clusters around masts. Not just one mast, but many of them all around the UK, are playing host to a variety of ailments that destroy people's lives, destroy families, in some cases destroy communities.

Cancer (various types), Thyroid disorders, Motor Neurone Disease, Parkinsons Disease, etc, etc. The statistical probability of such a 'repeatable experiment' being pure chance reduces with every such cluster that occurs. I.e. if the odds of one such cluster are one in a thousand then the odds of two such clusters are one in a million. The odds of three such clusters are one in a billion - and so it goes on. In fact, the likelihood of just one cluster of the sort we're seeing now is very much lower, since they include abnormal numbers of what naturally were very rare conditions like Motor Neurone Disease.

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 of those 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.

It must be noted that Dr. Walker's work has been a good starter in this area, but really needs delving into fully now by properly funded epidemiology studies. Enough evidence has been obtained by Dr. Walker to justify full-scale studies within the UK and/or Europe (and, indeed, to put the current proliferation of microwave radiation that we are all subjected to on hold immediately). It is only through the most robust work and self-criticism that we will obtain the true picture and the extent of the health issues that we face. We need to research in the "controversial areas" i.e. the health areas which currently have to be avoided by those Scientists funded by the Government and or Industry.

Unfortunately, the government continues to deny us any study into these Cancer/ill health Clusters.

It should not be down to unpaid members of the Public to voluntarily, out of desperation, do the work of the Health Protection Agency (as is currently the case) just because it itself is unable or unwilling to accept unpalatable facts or its failings thus far.

In late 2007 an international group of 14 scientists, researchers and public health policy professionals released a report^[2] – The BioInitiative Report - concerning microwave exposure and concluded that "*The body of evidence at hand suggests that bio-effects and health impacts can and do occur at exquisitely low exposure levels: levels that can be thousands of times below public safety limits*". Additionally the report concluded that it is the information carried by electromagnetic radiation (microwaves) (rather than heat) that causes biological changes. This echoed the findings of the earlier Ecolog Report^[1] a counterpart of the better-known Stewart Report^[4,5]. In 2007 in Australia the Democrat Party, the 3rd largest political party there commissioned its own report^[3] which backed up the findings of the

Europe's top environmental watchdog, the EEA, is similarly concerned^[6]- calling for immediate action to reduce exposure to radiation from Wi-Fi, mobile phones and their masts. It suggests that delay could lead to a health crisis similar to those caused by asbestos, smoking and lead in petrol.

Professor Jacqueline McGlade, the EEA's executive director, said: "*Recent research and reviews on the long-term effects of radiations from mobile telecommunications suggest that it would be prudent for health authorities to recommend actions to reduce exposures, especially to vulnerable groups, such as children.*"

Ending in 2004 the EU backed REFLEX^[15] study (12 research teams in 7 countries) researched the effects of electromagnetic fields on human cells in vitro. This study also found evidence for single and double DNA strand breaks and other cell damage which could lead to cancer.

The most likely Damage Mechanisms within the body^[16] that appear to cause the health issues associated with Mobile Phone Masts are the reduction in night-time melatonin levels, (melatonin protects the DNA and assists the immune system), the effects upon nitric oxide (NO) production (too much NO can lead to Multiple Sclerosis, diabetes and cancer, whilst too little can cause high blood pressure and damage the arteries), the removal of calcium ions (calcium ions are linked to communication within and between cells, if they leak they stimulate cell growth but also promote cancer growth, if too much calcium enters cells toxins are kept in whilst nutrients are kept out – damaging the cell) and DNA fragmentation (which causes loss of fertility and damage to future generations)^[14].

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