

During a court case in 1998, Dr McKinley, a senior scientist with the National Radiological Protection Board, explained that their data on tissue conductivity had been supplied to them by Microwave Consultants Ltd, which is on the payroll of a cell phone company. It transpired that virtually none of the NRPB documents is peer reviewed and that Dr McKinley himself had not authored any experimental studies; in fact he admitted he had no expertise in biology.

The industry also tries to control the science by controlling the interpretation of findings and how they are presented – if they ever are – to the general public. Many corporations have their own “team” who travel to all meetings, and whose job it is to create negative “spin” on presentations that point to possible harm or suggest caution. Not only are the science labs, government offices and science interest groups associated with cell-phone science becoming puppets of the phone industry, but the media are so heavily influenced by the phone companies that it is becoming increasingly difficult to disseminate impartial information and comments, even though they may be of long term benefit to the industry, and are vital for public health.

The auction of 3G licences to the mobile phone companies brought in £22.5 billion plus an annual income of around 15 billion to the UK exchequer. No wonder that when commercial interests are at stake there seem to be outright denial of relevant scientific data.

SAFETY LEVELS: When it comes to asking about safety, concerning TETRA or any other communication instrument, not one single independent consultant is able to give an answer. If anyone asks whether a certain level of electromagnetic pollution is safe they are usually quoted a UK safety limit laid down by the NRPB/HPA. In fact evidence from many medical and scientific bodies shows that no one can be sure there is a safe level. Countless studies have clearly demonstrated that biological systems can be impaired even by extremely low levels of radiation.

Electromagnetic radiation is 3000 times higher than it was 10 years ago and these levels are set to increase as more people use electronic equipment. We are bombarded with an *accumulation* of radiation from satellites, power supplies, radar, broadcast antennas, - in fact all electrical systems and appliances. More people are becoming electro-sensitive and most are unaware of what is really attacking their body. Doctors are generally in the dark about the effects of EMF pollution, partly because they follow government guidelines and receive no training in this area.

At the moment there really is no cure for the problem apart from avoidance, though there is the opportunity to develop systems that can be of true benefit to us all in terms of health and performance if the electronics and telecommunications industries could be persuaded to listen – unfortunately money rules!

You pick up the mobile/cordless phone once, twice, ten times a day – or only a few times a month. But, each and every time, you’re gambling that this time’ won’t be the occasion when the radiation causes irreparable damage to your brain. It only takes a seemingly small damage trauma at a very small location to result in tissue damage, DNA damage, or chromosome mutations.

ELECTROMAGNETIC POLLUTION

Many people are now aware that electromagnetic fields [EMF] can be detrimental to health, and for decades, evidence has existed showing that electromagnetic fields can damage all biological systems. The human body, which contains two-thirds salty water, is an excellent conductor of these fields. Electrical signals carried through the airwaves can create interference with our body’s finely tuned biological circuits, especially in the head area! The awful truth is that we are living in a vast smog of electromagnetic pollution which is growing denser with every day that passes. Many more children and adults than previously recorded now suffer a range of health problems including cancer and brain damage that can often be linked to electromagnetic pollution.

These disturbances may include headaches, insomnia, short-term memory loss, palpitations, skin disorders, and noises in the ears [which often worsen when normal background noise is low], as well as more serious conditions. However, people may find these symptoms lessen or disappear when they are in different surroundings, away from home or work. We therefore need to identify the danger zones in the home, workplace and outside environment. During the day, most of us move around in and out of these “hot spots” and we need to be aware of the risks, especially in places where we spend much time, such as in bed, sitting in our armchair and at work.

You may have heard of the “the sick-building syndrome” where people suffer from headaches, eyestrain, dry eyes, sore throats, tiredness, aching limbs, and other flu like symptoms as a result of being bombarded with electromagnetic, chemical, or other kinds of pollution within the home, office or factory environment.

A report in May 2002 New Scientist informed us of a development of a weapon using intense electromagnet fields producing effects “ranging from disruption of short-term memory to total loss of control of voluntary bodily functions”. We already have his kind of weapon in the mobile phone!

SCIENCE – Scientists have discovered that microwave radiation from mobile phone transmissions affect the brain in a process known as heat shock – *an effect similar to heating the brain but with no actual rise in temperature*. Heat shock causes the body to release proteins, which can damage or kill brain cells. Geneticist Dr David De Pomerai told how tests showed exposure for an hour to mobile phone radiation can double the heat shock proteins in cells. Dr Alan Preece of Bristol University revealed the same radiation caused vessels to dilate, thus creating a rush of blood to the head. Other studies have found that microwaves also weaken the blood brain barrier, which protects the brain against blood stream infections. Other research shows that they have specific effects on brain cells and brain function that can lead to brain degenerative diseases, cancer and weakening of the immune system.

It has been found that many lymphocytic leukaemia sufferers live close to power lines, underground mains cables and transformers, or spend long periods of time close to equipment that emits this kind of radiation. Myeloid cancer cases appear to be clustered around radio and TV masts. Such findings suggest that 50 Hz and RF frequencies [*which include mobile phone frequencies*] may affect living systems in various ways. The power levels from mobile signals are also known to increase four to six fold after rain has fallen and during periods of low cloud.

Over the past seven years, some who suffer tinnitus and live close to mobile phone masts have found that their condition is noticeably worst during this kind of weather.

Health risks also arise from digital cordless [DECT] telephones. The base unit that cradles the handset and functions as transmitter and receiver produces an electrical field that is actually greater than that of a mobile phone. Since it radiates even when the phone is not being used, it is like using a mobile phone non-stop. These phones should never be put in bedrooms or close to where people sit. Better still dump them, along with baby alarms, which also emit dangerous EMF radiation. As the very young are more vulnerable, cots and beds should always be placed well away from electrical wiring and appliances, and from metal objects such as radiators, which act like antennas for microwave and other radiation. Russia is against the use of cell phones by youngsters less than 16 years, and they are now forbidden in French schools.

Other high-risk devices that emit microwave radiation include WiFi, WLAN, WIMAX, wireless interactive whiteboards, and burglar alarms using microwave detectors. Operating WLAN systems in schools is equivalent to having a mobile phone mast permanently emitting life-threatening pulsed microwaves within the classroom. Tests carried out by the NRPB [National Radiological Protection Board, now called the Health Protection Agency – HPA] revealed that ultraviolet beams from projectors used with electronic whiteboards in most schools could damage the eyes. The viewers peripheral retina can be over-exposed even when they are not looking directly at the projector's apparent light source, or damaged if they look into the beam from a few yards away just for twenty seconds. Other radiation effects noted in schools include short-term memory loss, headaches, nosebleeds, hyperactivity, and lack of concentration.

Suspicion that electrical fields cause respiratory illness dates back to the 1950s, when it was found that placing asthmatics in areas with low electrical fields got rid of their symptoms. A new study by scientists at Imperial College London suggests that electrical fields from computers, televisions and other everyday items make people more prone to asthma, influenza and other respiratory diseases.

This research provides additional academic backing for campaigner's demands for precautionary measures to be taken against the thickening electro-smog we are exposed to from sources such as mobile phones and their masts, WiFi systems and household electrical devices. As the amount of electro-smog has multiplied many times over in recent years, science has increasingly indicated that it can cause a wide range of ailments, from respiratory diseases to difficulties in concentrating, from sleeplessness to cancer – a matter that campaigners are very keen to publicise.

Scientists have found that the electrical fields given off by a wide variety of household items, including computers, televisions, cookers, lamps, and even wiring, can charge minuscule particles in the air such as viruses, bacteria, allergens and highly toxic pollutants. Because many of these are so tiny – less than 80 times the thickness of the human hair – they often remain airborne almost indefinitely and so are can be readily inhaled. If they carry increased electrical charge they are more likely to stick to the tissue of the lungs and respiratory tract and to human skin, thereby increasing risk of infection and impact on the body.

The higher the electrical field and particle charge, the greater the danger, as particles with greater charge can hit the tissue with greater speed. As they crash land they become deformed, which makes them more firmly stuck and harder to remove. Electrostatic charges, such as those given off by clothing and sheets made from synthetic materials, add to the problem. Research has also shown that high electrical fields greatly reduce concentrations of charged molecular oxygen, which is readily absorbed by the body, enhances biological functions and can kill harmful microbes.

TETRA [Terrestrial Trunk Radio Systems] is a microwave frequency now used by our police force and other bodies throughout the UK. The frequency of 17.6 Hz emits pulses occurring 17.6 times per second that match brain frequencies, and it is believed that this can penetrate deep into the brain, damaging cell communication. An article in the *Daily Telegraph* disclosed that six people at a police station at North Walsham, Norfolk, including a Chief Inspector, other officers and civilian workers, blamed their health problems on a TETRA communications system.

Chief Inspector Strong and his staff believe that bouts of dizziness and severe headaches began when a new TETRA transmitter was installed. About 25 other people living nearby also complained of similar symptoms and others of repeated nosebleeds, especially among children, along with disturbed sleep and skin problems. The officers, who had been referred to the Force's doctor, were warned not to discuss this publicly and are apparently forbidden to speak out. One month previously the family of a police motorcyclist, who had died of cancer of the oesophagus, said he had complained of headaches when he began to use his TETRA handset, and was convinced it was to blame for his condition.

The government's £2.9 billion TETRA system is to cover all 53 police forces in England, Scotland and Wales. Users are trapped in a system where huge financial and political pressures demand it is a success at all costs. Hundreds of officers have said they believe their health is now suffering. Campaign groups fighting against installing the system's 3,500 transmitters near their homes and schools throughout the UK are totally ignored by the Government, who continue to say there is no proven health risk. What's more, Government inspectors often overrule local council planning departments who oppose planning applications from mobile phone operators. People's health is being sacrificed for the sake of profit!

POLICY – The cell-phone industry controls the policy arm of the cell-phone science by being a major contributor of research funds, and by making sure that its personnel are placed on safety standard committees and even the World Health Organisation's EMF study projects. Thus, all the relevant policy bodies are led by cell-phone personnel and consultants, or have a majority of them on their staffs. This is even true of scientific organisations. The Bioelectromagnetics Society [BEMS] which should be made up of independent scientists has a large contingent of members who work for the cell phone companies or are paid consultants. In the UK the HPA is funded roughly half from the industries it represents and half from the Government, thus all of its associates have a financial interest in recommending the product, even if it may prove to be unsafe. Every single spokesperson on safety issues is linked in one way or another with the communications industry.