"An Unofficial View" of Health v Mobile phone Mast Non Ionizing Radiation

Dr J.C. Walker - Chartered Physicist - September 2005

Abstract

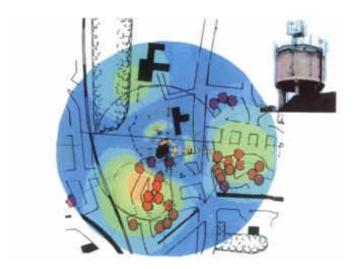
There is now very self sustaining and well agreeing information over several countries:

Question 1: Is there any effect of mobile telephone base station radiation on living beings e.g. human and animal health?

- There are results of ill people in houses in beam patches (7 patches) so far tested (120 ill people by 2005)
- There is about 3 times the average rate of Cancer. in the beam patches.
- Ill people in flats in mast beams in Midlands (600 ill people)
- Ill people in a school near mast (75 ill pupils and teachers)

Question 2 : How is the incidence of ill health related to the strength of the radiation?

- In Spain Navarro & Oldfield 0.13 volts/metre for an Odds ratio of 39 for increased depressive tendency.
- In UK Beam patches about 1,5 volts/metre outside correspond to about 0.5 volts/metre inside buildings
- In Germany Bamberger <0.06 volts/metre give 30% illness, 0.06 -0.2 volts/metre gives 60% illness
- These values are relatively close compared to ICNRP 41 volts/metre!



Patch of illness around masts in Lincolnshire

Introduction

Newspaper cuttings were collected a few years ago, of illness near mobile telephone base station masts around this country and some from Europe. The worst case was 4 cancers in 5 adjacent houses by an old mast; this seemed to be too much of a coincidence. [Evening Standard 20 February 2002] Most of the articles were followed up by a visit, to find the extent of the illnesses at each location.

A more scientific approach was needed.

It was found that three pole mast beams, 120 degrees apart, often hit the ground at a distance away from the mast equal to 10 times the height of the mast and it is here, at the area of highest field intensity, that the illness patches occur.

Question 1. Is there any effect of mobile telephone base station radiation on living beings e.g. human and animal health?

Human Data available

A HOUSES

(1) 7 patches of illness were found in the highest signal level of the radiation (non ionizing) near masts around the country. Approximate simulated average fields were used, this is of the order of 1.5 Volts/metre outdoors and corresponds to 0.5 Volts/metre indoors.

1a) The number of ill people:

- in a single beam patch is proportional to the cumulative integrated dose of radiation received over the years e.g. 8 ill after 8 years, 21 ill after 13 years and
- in a two beam crossing patch, 31 ill after 11 years.
- 1b) The radius away from the mast of both beam patch and illness patch agrees well.
- 1c) The angular phase of the illness patch relates to the angular position of the poles of the mast e.g. 120 degrees or 240 degrees (maximum error so far only 12 degrees).

B) FLATS

600 people were found to be ill in flats which were at high field levels. Note: - in multi story flats, each person's rooms are all on the same side of the building, so the inhabitants cannot escape the radiation unless they sleep in the corridor!

C) SCHOOLS

Surveys in schools

A survey in a Warwickshire school, close to a multi array mast 11 years old, showed the teachers to be twice as ill as the pupils (The teachers have more years at the school and therefore get a larger integrated cumulative dose of radiation) and the pupils to be twice as ill as the population in a West Midlands town with a merely 2 year old mast.

If the data answers Question ${\bf 1}$ in the affirmative, then the next question is:

Question 2. How is the incidence of ill health related to the strength of the radiation?

The latest Bamberger study from Germany shows well (at 4 levels of radiation) the relation between the ICNIRP (International Commission on Non Ionizing Radiation Protection) Guidelines, the local Salzburg Guidelines and the levels for 60% illness at 0.06 – 0.2 volts/metre, and 94% illness at 0.21 – 0.6 volts/metre in the 356 people studied

Note - the level in the beam patches in Question 1 is 1.5 volts per metre externally which is of the order of 0.5 volts/metre internally in houses. This agrees fairly well with the more detailed Bamberger study.

This also agrees well with the Oldfield Navarro results of 0.13 volts/metre for an Odds ratio of 39 for increased depressive tendency.

The remaining question is:-

Question 3 What are the mechanisms by which illness are caused?

If over time, radiation suppresses our nightly melatonin cycle, evolved by all vertebrae (humans and animals) etc over many millennia, then our immune system protection against cosmic rays is seriously compromised.

I have not yet found an old mast that has not got an illness patch. If you have any data which disagrees with the above, if there is any, I would be glad to receive it.

"An Unofficial View" of Official Views

About 1997, ICNIRP (International Commission for Non Ionizing Radiation Protection) took a very narrow view of the reasons for susceptibility of the bodies of living beings to Non Ionizing Radiation. They merely considered the heating effect and ignored the most important effects. They persuaded most governments and institutions with plausible arguments to their view. They did not know then what we know now. They had no feel that on this earth "we see through glass as but darkly".

It is easy to think that, although some of us can stand a few years of radiation without any obvious effects, that there is no effect. However this is really living in myth land and ignoring what is going on.

1) An Establishment statement

The balance of evidence to date suggests that exposures to RF radiation below NRPB and ICNRP guidelines do not cause adverse health effects to the general population

This is a non quantitative statement that has been static for several years. It is more political than scientific. It is a chameleon, depending on the population which is being considered.

- a) If this is applied to the general population of UK then it is apparently True. But highly diluted results are being obtained due to averaging many people outside beam patches with a few people inside beam patches.
- b) But if this is applied to the general population of a Beam Patch, then it is False. The illness applies to up to 50% of the people, with an illness density of about 3 times that of the surrounding area which is at a much lower radiated field level.

2) An Establishment view

There are so many masts about that there is sure to be some coincidences with random cancer clusters.

The data on the previous page shows that mast induced illness is very far from being random and is in fact extremely determinate.

Note - if mast induced illness is random, then it is out of control of the establishment and from an economic viewpoint, then maximum wealth should be generated by the expansion of the mobile telephone industry.

3) A Consensus view.

People feel they are safer if their views agree with the "general consensus" however it is possible on odd occasions that this view may be erroneous particularly when:-

 A new situation occurs - much higher frequency, digital, squarer waves, as compared to the old lower frequency sinusoidal waves of broadcasting.

The establishment will pretend it is not a new situation.

b) And from my work so far, I feel that ICNIRP's decision was extremely misleading, because they had not got the data then that we have now.

The establishment will attempt to defend the old consensus by calling new scientific data merely anecdotal and by destructively fastening on unimportant points and neglecting important points.

Defence of an old consensus can be very unfair scientifically.

4) Paralysis of advancement of knowledge by cutting funding

Several scientists have said that there was no funding for key work.

At Universities students who wanted to do worthwhile work were dissuaded because it would be controversial (Universities depend on Government for their funding).

This means that any real work must be done voluntarily by a retired scientist within the cost limits of the volunteer.

- 5) The Suppression of anti policy statements has maintained the myth for several years.
- 6) Generalisations and "logicality" not rooted in actuality do not help health.

Instrumentation

The Acousticom makes one aware of radiation, but it does to a certain extent indicate the source.

However a digital frequency analyser is much more versatile and about one tenth of the cost of the old analogue versions

TheSpectran HF 6080 has a directional aerial and can detect amongst other things GSM 900, GSM1800, UMTS, Dect etc

It can be hand held and gives an Acousticom sound of the wave modulation and % of ICNIRP level as well as the spectra etc and two channel storage of signals etc.