

Electromagnetic pollution — How safe is safe?

The growing number of radio microwave transmitters is increasing the levels of electromagnetic radiation in which we live. A team of scientists is investigating the biological effects of this radiation with the goal of establishing safer levels.

"Every hour of the day we are sitting in the midst of electromagnetic pollution," says Dr. Harry Assenheim of the National Research Council's Division of Biological Sciences.

We know of the pollution of our rivers and seas, and air — but the type of pollution Dr. Assenheim refers to is probably new to most of us. Few people have heard of "electromagnetic

pollution", let alone how it arises and what protective steps can be taken against it. Dr. Assenheim explains: "Since the Second World War, there has been a rapid build-up in the number of radio stations, radar installations and microwave relays. In addition, the power levels and frequency range of transmitters has increased. If you add to this the eight million microwave ovens owned on this continent you begin to realize that we are being exposed to quite a lot of microwave and radio-frequency radiation". Dr. Assenheim feels that the effects and possible hazards of this radiation have never been properly investigated and that good safety standards need to be

established. "A level of radiation considered safe by the Russians is one thousand times lower than the Western standard," he says. "At one time, Western experts believed that the Russian levels were excessively low, but some present research indicates that there are effects to be found below the Western standard."

To avoid misconceptions, it is necessary to clarify what is meant by "electromagnetic radiation". It is the radiation which comes from radio, microwave and radar transmitters — and from microwave ovens. Unlike "atomic radiation", associated with atomic bombs, radioisotopes and nuclear power stations, "electromagnetic radi-



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A rat is being arranged in the microwave anechoic chamber for an investigation of the effects of microwave radiation on the blood-brain barrier.

Un rat est placé dans la chambre où il est irradié; ceci permet d'étudier les effets du rayonnement électromagnétique sur les échanges au niveau des capillaires cérébraux.