New Zealand

Report on EMF Activities

10th International Advisory Committee on EMF

June 2005

Exposure standards

Exposure Standards and guidelines used in New Zealand have remained unchanged over the past year, and are based on the ICNIRP guidelines. Several local authorities have included these recommendations in planning rules. The New Zealand Ministry of Health continues to recommend that where possible, low or no cost interventions should be voluntarily applied in order to avoid or reduce exposures. This is consistent with Ministry recommendations on exposures from other agents, and recognises the impossibility of proving any agent absolutely safe, and the fact that questions have been raised and research in these areas is continuing.

As discussed in 2004, consideration has been given to updating the section of the New Zealand RF field exposure Standard concerning measurements (NZ Standard 6609:1990 Part 2). The relatively small number of people involved in this area in New Zealand favoured the development of a Code of Practice rather than a Standard. However, just as work was about to start on this, we were invited to participate in a project initiated by Standards Australia to review the Australian RF measurement Standard (which is identical to NZS 6609:1990 Part 2), and for now will pursue that path.

The New Zealand Ministry for the Environment (MfE) has stated its intention to investigate the development of National Environmental Standards (NES) covering radio transmitters and transmission lines. These Standards would have the status of regulations under the Resource Management Act. While it is likely that exposure controls would form part of these Standards, they could also cover areas such as amenity values, bulk and location, noise etc. An NES on radio transmitters would most likely be based on the *National Guidelines on Managing the Health Effects of Radiofrequency Transmissions* published in 2000.

The revised Radiation Protection Act is now being drafted, and it is intended that the revised Act will allow the introduction of regulations to control potentially hazardous sources of non-ionising radiation if needed.

Research activities

The *Interagency Committee on the Health Effects of Non-Ionising Fields* continues to meet twice a year to provide the New Zealand Director General of Health with scientific and technical advice on any potential health effects from exposures to ELF and RF fields. In November 2004 the Committee released a Report to Ministers summarising findings since preparing its previous Report to Ministers. The Report endorsed continuation of exposure recommendations based on the ICNIRP guidelines, and the voluntary application of low or no cost measures to reduce exposures. The report is available at www.nrl.moh.govt.nz/ELF-RFReporttoMinisters.pdf.

The NZ arm of the INTERPHONE study has completed data collection, and data is now being prepared for analysis. The first papers should be written by the end of the year.

Public concerns

Public interest and concern over ELF fields has been stimulated by a proposal to build a new 400 kV transmission line through mostly farming country south of Auckland. This would be the first 400 kV line in New Zealand, and the first transmission line of any length to be constructed for many years. A number of specific health issues have been raised, including the potential for effects due to corona ions.

A urologist, who lives within a few hundred metres of the proposed new transmission line, prepared a "survey of the medical literature" in which he concluded that "There is … a large and highly respected body of opinion that health risks do exist. This clearly seems to be the mainstream view now." The Ministry of Health commissioned Dr Mark Elwood to peer review this survey. Dr Elwood found that the choice of studies considered in the survey appeared to be biased in favour of those that showed positive associations, and that several recent and important studies were omitted while older, more limited, studies were included. The overall conclusion of there being a mainstream view that health risks exist is not supported by the findings of recent reviews by bodies such as ICNIRP, NRPB/AGNIR and IARC.

Coincidentally, the possibility that exposure to ELF fields may be responsible for a "cancer cluster" in west Auckland has also been raised in the media. The interest arose through there being three cases of cancer in young people who had all been born at the same hospital and attended the same primary school (although two of them did not attend the school for very long). Other cases in the area were also added to the apparent cluster. An investigation by the regional public health service found that cancer rates in the area were no different from elsewhere, and that as several different types of cancer were involved, with no known common risk factor, no further investigations were warranted. Nevertheless, reporters have continued to pursue the issue, and most recently have suggested that ELF fields may be involved, either in the homes, or at the school.

Others

The New Zealand Commerce Commission brought a successful prosecution against the distributor of a product which was claimed to "to block up to 97% of near field radiation". The product was a small patch of material to be stuck on to the phone's earpiece, which clearly had no chance of meting the claims. The Commission and the National Radiation Laboratory have previously been contacted by other companies thinking about importing similar products, who had been warned that they should be very careful that any performance claims (especially with regard to exposure reduction) could be backed up by relevant test reports. The owner of one company which did promote such a product was about to be prosecuted but left the country.

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