

You are here: [Home Page](#) > [More issues](#) > [Radiations and EMF](#)

## WHO publication on Electromagnetic Fields (EMF)

According to a [World Health Organisation Report](#) up to **1 in 20 childhood leukaemias may be attributable to electromagnetic fields**, with as many as 5% of cases of childhood leukaemia due to low-frequency magnetic field exposure.

The principle objective of the WHO study, published in June 2007, was to review the scientific literature on the biological effects of exposure to extremely low frequency (ELF) electric and magnetic fields, in order to assess health risks associated with exposure, and make recommendations on potential health protection programs. Frequencies studied ranged from 0 Hz to 100 kHz.

Report findings state that: "If the association between magnetic fields and childhood leukaemia is causal, the number of cases worldwide that might be attributable to magnetic field exposure is estimated to range from 100 to 2400 cases per year, based on values for the year 2000, representing 0.2 to 4.95% of the total incidence for that year."

Prior to this, in 2002 the [International Agency for Research on Cancer \(IARC\)](#) published a monograph that classified ELF magnetic fields as "possibly carcinogenic to humans".

Modern life relies heavily on electricity, and electric and magnetic fields are associated with all electricity flows. Consequently, EMF have become ubiquitous in our environment. It is known that exposure to EMF at extremely low frequencies induces electric fields and currents inside the body. However, the exact link between childhood leukaemia and extremely low frequency EMF remains unclear.

Based upon this research, the WHO recommends that government and industry should monitor science and that gaps in current knowledge form the basis of a new research agenda.

Whilst childhood leukaemia is a relatively rare disease, in Europe childhood cancer is increasing by more than 1% per year. Thus, although in the global context public health impact of extremely low frequency EMF may be limited, it may prove to be significant in Europe.

*Written on 20th June 2007.*