

Resumen del Informe
"Estudio piloto sobre la exposición
ambiental a los campos magnéticos
de frecuencia extremadamente
baja (CEM-FEB). FASE I."



ARTICLE DATA

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LINK

Synthesis of the Report Pilot study on environmental exposure to Extremely Low Frequency Magnetic Fields (ELF-EMF). PHASE I

The exposure of the population to extremely low frequency magnetic fields (ELF-EMF) from 1 Hz to 100 kHz has prompted concern among certain social groups due to the hypothetical relationship between low levels of 50 Hz/60 Hz EMF exposure (0.3 μ T-0.4 μ T) and childhood leukaemia.

The limits for population exposure were set by the Council of Health Ministers of the European Union in *Recommendation 199/519/EC (1)*, which established the theoretical reference levels for EMF exposure in relation to 50 Hz magnetic fields based on the available scientific evidence at the time of publication **(2)**.

In Spain, EMF exposure levels are regulated by *Royal Decree 1066/2001, of 28 September (3)*. However, in view of the passage of time and the published evidence **(4,5,6)**, a review and update of the same is necessary.

For these reasons, one of the key objectives of the *Strategic Health and Environment Plan 2022-2026 (7)* is to update *Royal Decree 1066/2001* in accordance with the latest guidelines, recommendations and scientific knowledge.

The main objective is to analyse the level of environmental exposure of the Spanish population to extremely low frequency electromagnetic fields (ELF-EMF), to establish specific regulations and to facilitate coordination and cooperation between the Ministry of Health and the Autonomous Communities.

To this end, a pilot study **(8)** was carried out in a limited number of Spanish cities, Albacete, Cáceres and Madrid, with the aim of studying the levels emitted by different infrastructures and those observed in different population environments, taking into account the variety and wide distribution of emission sources of this type of frequency (50 Hz).

The measurement protocol developed was based on the relevant national and international regulations **(9,10,11)**, and on the *technical document TR 170* of ARPANSA (Australian Radiation Protection and Nuclear Safety Agency) **(12)**.

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