

**ELECTROMAGNETIC
FIELDS AND
PUBLIC HEALTH**

**TECHNICAL REPORT OF
THE BOARD OF INDEPENDENT EXPERTS**

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EXPERTS

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RECOMMENDATIONS

1. As a precautionary principle, the Ministry of Health should develop rules to establish the application of the principles stated in 1999 by the Recommendation of the Council of Health Ministers of the European Union (CHMEU), including aspects concerning medical products such as metal prostheses, pacemakers, cardiac defibrillators and cochlear implants.
2. There is a clear social concern about the effects of EMF on public health. This is due to a rapid technological development, the lack of detailed information and a distorted perception of the risk. To avoid these problems the Ministry of Health should draw up and distribute information in an easily wording format, to inform the population about current knowledge of the effects of EMF on public health.
3. The health authorities of Central and Regional governments should encourage clinical, experimental and epidemiological research into the effects of exposure to EMF from any emission source. Therefore, the Fondo de Investigaciones Sanitarias (FIS) and other research programmes should establish priority funding for research into these areas.
4. With respect to the extremely low frequency (ELF) of EMF, epidemiological studies should be performed on populations exposed to levels above 0.4 μ T. New studies on the general population are not recommended because, as previous epidemiological studies have shown, these would not provide new relevant information.

5. The evaluation, management and communication of the risk derived from exposure to EMF require that the national and regional health authorities provide adequate technical and professional resources. The Environmental Health Departments of the public health authorities should undertake the management of new environmental risks that have direct impact on public health. These Departments must be reorganized and reinforced to efficiently address such a task.
6. The health authorities should carry out informative campaigns for the public promoting the rational use of cell phones to reduce excessive and unnecessary exposure, especially in children, adolescents, pregnant women, persons of active implants etc. Campaigns should be developed to ban the use of cell phones while driving or in highly sensitive areas in hospitals.
7. The legal procedure for the application, authorisation, installation and inspection of telephone antennas should be clarified in order to guarantee that citizens are well informed when they have to make decisions about installing this type of equipment on their properties.
8. The manufacturers of cell phones should classify and label their products in relation to the intensity of their emissions. Labelling should be easy for the user to understand.

9. As a precautionary principle, the direct emission beam from telephone antennas should not point at sensitive areas such as schools, health centres, hospitals or public parks. In areas where it is possible, more effective measures should be implemented to promote shared use of the base stations by the operating companies to minimise or reduce the visual impact of these antennas.

10. As established in 1999 by the Recommendation of the Council of Ministers of the European Union, risk assessments studies should be carried out to identify the sources or practises that give rise to electromagnetic exposure in individuals, in order to adopt the appropriate measures for health protection.

11. As a precautionary principle, this Board of Experts recommends regulating the installation of new high-power lines in order to avoid unjustified perception of risk and unnecessary exposures.

This Board proposes that Article 25 of the Reglamento de Líneas de Alta Tensión (Regulation concerning high-power lines) be updated to redefine minimum safety distances between the wires and buildings, houses or private or public facilities.

CONCLUSIONS

- After reviewing the huge amount of scientific information published, the Board of Independent Experts considers that exposure to EMF within the limits established in the Recommendations of the Council of Health Ministers of the European Union (CHMEU) concerning exposure of the general public to EMF from 0 Hz to 300 GHz, cannot be declared to produce adverse effects on human health. Therefore, the Board concludes that fulfilment of the Council's Recommendation is sufficient to guarantee protection of the population.
- Although exposure to EMF at levels below those specified in the Recommendations of the CHMEU could induce biological responses under experimental conditions, health damage to humans has not been demonstrated. However, epidemiological studies addressing the potential long-term harmful effects of exposure to radiofrequencies have not been carried out.
- To date, a biological mechanism has not yet been established that can explain a possible causal relationship between exposure to EMF and an increased risk of any specific disease.
- In spite of the fact that most studies indicate an absence of harm to health, as a precautionary principle, it is advisable to promote medical control and epidemiological surveillance of exposure in an attempt to assess possible medium and long-term effects of EMF.

- In accordance with previous conclusions, this Board considers that, at current emission strengths, at the distances calculated according to criteria of the Recommendation by CHMEU and on the basis of current available scientific evidence, cell phone antennas do not represent a public health hazard. Similarly, current evidence does not suggest an association between the use of cell phones and harmful health effects.