



## **EM Radiation Research Trust (RRT) Response to UK HSA Position on EMFs, EHS and Current Guidance**

**17th May 2026**

A May 2026 position published by the UK Health Security Agency (UK HSA) continues to state that adverse health effects are not established below current ICNIRP exposure limits. They write that the WHO, SCHEER and AGNIR reviews suggest the symptoms reported are not directly related to electromagnetic fields (EMFs) and, although they admit the symptoms are real, they imply they are due to other causes, including psychological ones (e.g. “unjustified worrying”).

<https://www.gov.uk/government/publications/electromagnetic-fields/electromagnetic-fields-electromagnetic-hypersensitivity>

They purposely ignore an established, still expanding and increasingly coherent body of peer-reviewed scientific literature, clinical observations, and real-world case evidence reported in relation to exposure to electromagnetic fields.

The lived experience of individuals reporting electromagnetic hypersensitivity (EHS), together with the findings of mechanistic research, clinical case reports, and legal and educational outcomes, raises legitimate questions about whether current exposure assumptions adequately reflect biological variability and real-world exposure conditions.

The current established body of evidence makes their continued old policy increasingly difficult to justify as being appropriate for public safety.

It is now eighteen years since the former UK Health Protection Agency Chair, Sir William Stewart, stated at the 2008 EM Radiation Research Trust conference that scientific evidence suggested biological effects may occur below existing guidelines, that populations vary in susceptibility, and that it was not possible to conclude that RF exposure within guideline limits is entirely without potential adverse health effects. He therefore recommended a precautionary approach.

[https://radiationresearch.org/wp-content/uploads/2018/06/010920\\_stewart.pdf](https://radiationresearch.org/wp-content/uploads/2018/06/010920_stewart.pdf)

Today, peer-reviewed research continues to report a wide range of biological and health effects from radiofrequency exposure, alongside an unprecedented, pervasive and cumulative level of exposure to what is now effectively a constant background of ‘electrosmog’ across everyday life.

The pulsing fields in electric and hybrid (EV and pHEV) cars up to about 30 kHz (VLF) significantly exceed the 1998 ICNIRP Guideline levels.

<https://microwavenews.com/news-center/wakeup-call-ev-industry>

In this context, continued reliance on reassurance based solely on compliance with ICNIRP limits is simply not credible as a standalone public health position. It is worse than that—they set 1–100 kHz guidelines that are the highest in Europe and 3.6-fold higher than current ICNIRP 50 Hz magnetic field guidelines.

### **1. Mechanistic science supporting biological sensitivity**

The 2024 paper by Denis Henshaw and Alasdair Philips, *A mechanistic understanding of human magnetoreception validates the phenomenon of electromagnetic hypersensitivity (EHS)*, presents a mechanistic framework through which weak environmental electromagnetic fields interact with biological systems.

<https://www.tandfonline.com/doi/full/10.1080/09553002.2024.2435329>

This describes the biological responses occurring at exposure levels well below current regulatory limits and the high level of mechanistic understanding of the processes involved.

### **2. Children’s vulnerability and developmental sensitivity**

Michael Bevington (2026) notes that children may experience higher relative exposure to electromagnetic fields compared with adults due to anatomical and physiological differences. A child’s thinner skull, differing body proportions, and higher tissue water content result in greater penetration and altered absorption characteristics in certain tissues, including the eyes and brain.

<https://www.openaccessgovernment.org/article/electromagnetic-hypersensitivity-ehs-and-children/206025/>

The paper further highlights that children and young people, from foetal development through adolescence, are undergoing critical stages of neurological development that are more sensitive to environmental stressors, including electromagnetic exposures.

#### **Key concerns include:**

- Increased biological sensitivity in developing neurological systems.
- Continuous exposure in homes and schools from Wi-Fi, mobile devices, masts, and smart systems.
- Absence of long-term exposure limits specifically designed for children.
- Regulatory frameworks that do not adequately account for vulnerable subpopulations.

These concerns align with longstanding independent scientific calls for precautionary guidance.

### 3. Starkey 2016 and institutional review limitations

Sarah Starkey's 2016 analysis of UK advisory processes highlighted structural limitations in the evaluation of electromagnetic field research, including selective weighting of evidence and under-recognition of non-thermal biological effects.

<https://www.degruyterbrill.com/document/doi/10.1515/reveh-2016-0060/html>

Her critique examined how scientific conclusions informing UK policy were shaped through advisory frameworks relying heavily on narrow criteria of evidence selection and interpretation.

This raises an important policy question: to what extent do current UKHSA positions continue to rely upon assessments produced under earlier advisory structures, and whether sufficient re-evaluation has occurred in light of subsequent peer-reviewed research and evolving understanding of biological mechanisms.

Continued reliance on historic advisory conclusions, without transparent comprehensive reappraisal, risks embedding outdated assumptions within current public health guidance.

### 4. ICNIRP guidelines and acknowledged limitations within the framework

ICNIRP guidelines are only based on acute effects of exposure to radiofrequency and low-frequency electromagnetic fields, principally nerve stimulation and tissue heating. Their stated objective is to prevent established adverse health effects arising from these recognised mechanisms under short-term exposure conditions. However, they have nothing to do with the established body of evidence of adverse health effects from long-term exposure to environmental electromagnetic fields.

As a result, compliance with ICNIRP exposure limits should not be interpreted as evidence of biological safety, but rather as adherence to a framework that bears little relevance to today's complex, chronic, and ubiquitous 'electrosmog' exposure environment.

This distinction has also been acknowledged by ICNIRP representatives themselves. During the 2008 EM Radiation Research Trust conference, former ICNIRP Chair Paolo Vecchia stated that **ICNIRP guidelines are “not mandatory prescriptions for safety,” “not the last word on the issue,” and “not defensive walls for industry or others.”**

[https://radiationresearch.org/wp-content/uploads/2018/06/021145\\_vecchia.pdf](https://radiationresearch.org/wp-content/uploads/2018/06/021145_vecchia.pdf)

### 5. Real-world harm and lived experience

The case of Velma Lyrae involves an individual who reports developing severe symptoms consistent with electromagnetic hypersensitivity, including neuropathic pain and sensory disturbances, which she associates with environmental exposure to wireless technologies such as mobile phone masts and Wi-Fi systems.

Her case, supported by medical evidence in housing-related legal proceedings, highlights both the impact reported by individuals with EHS symptoms and the limitations of ICNIRP compliance as a sole benchmark.

<https://www.localgovernmentlawyer.co.uk/housing-law/397-housing-news/99387-high-court-quashes-decision-that-homeless-application-was-not-fresh-application>

## 6. Children, schools, and reported EHS-related impacts

There is a growing body of reported case evidence involving children and adolescents experiencing significant health and functional difficulties which they and their families associate with environmental electromagnetic exposure and symptoms described as consistent with EHS.

One widely referenced UK case is that of Jenny Fry, a school student from Oxfordshire, England. Her family reported that she experienced severe and escalating symptoms during her attendance at school, which they attributed to environmental electromagnetic exposure in and around the school setting. Jenny died in June 2015, and her case has since been cited in discussions relating to EHS, safeguarding considerations in educational environments, and the siting of wireless infrastructure near schools.

<https://radiationresearch.org/%f0%9f%99%8f-in-loving-memory-of-jenny-fry-marking-ten-years-since-her-passing-in-june-2015/>

In addition, PHIRE (Physicians' Health Initiative for Radiation and Environment) has reported a legal case in which a child was granted educational support measures following recognition of significant health-related difficulties described in the context of electromagnetic sensitivity. <https://phiremedical.org/news/>

These cases form part of a broader pattern of reported symptom onset or worsening in environments with increasing wireless infrastructure density, including schools.

The consistency of these reported experiences raises important safeguarding and welfare considerations that warrant careful assessment rather than automatic dismissal.

This concern is also reflected internationally in the ***International Declaration on the Human Rights of Children in the Digital Age***.

<https://www.thechildrensdeclaration.org/the-declaration>

The Declaration affirms that: "The legal duty to protect children and enforce these rights on their behalf is the obligation of all adults, particularly parents, legal guardians and others in positions of authority. This protection of children is a basic legal principle... increasingly recognised as part of international customary law."

This principle is directly relevant in the context of environmental exposures in schools and public spaces. It reinforces that where credible reports of harm exist, particularly involving children, public authorities have a duty to act with caution and to prioritise protection.

The Declaration further highlights three interrelated areas of concern: **screen time addiction, involuntary exposure to non-ionizing radiation (NIR), and commercial exploitation of children**. These factors underscore the need for a precautionary approach to emerging technologies and environments where children are exposed without informed consent or adequate safeguards.

## 7. Clinical and independent scientific observations

Clinical observations reported by UK general practitioners, including Andrew Tresidder, describe recurring patient presentations involving headaches, sleep disturbance, cognitive dysfunction, fatigue, and neurological symptoms reported in association with wireless exposure, with improvement noted following exposure reduction.

<https://www.es-uk.info/wp-content/uploads/2020/07/ES-GP-patient-letter-June-20.pdf>

International researchers including Lennart Hardell and Mona Nilsson have documented case reports and environmental exposure investigations in which individuals describe rapid symptom onset near wireless infrastructure and symptom improvement following relocation.

<https://www.degruyterbrill.com/document/doi/10.1515/reveh-2024-0017/html>

These reports describe reproducible patterns that warrant formal scientific investigation and precautionary public health consideration.

## **8. Havana syndrome and anomalous health incidents**

The phenomenon commonly referred to as “Havana syndrome” has introduced further complexity into scientific and policy discussions concerning non-thermal electromagnetic exposure.

Reported symptoms have included sudden neurological onset, cognitive impairment, dizziness, auditory effects, and sensory disturbances.

Beatrice Golomb reviewed reported cases in a peer-reviewed 2018 paper and concluded that pulsed radiofrequency and microwave radiation represented a plausible mechanism consistent with reported injuries.

<https://pubmed.ncbi.nlm.nih.gov/30183509>

This strengthens the broader scientific understanding that biological interactions with non-thermal electromagnetic exposures remain a legitimate and pressing area of ongoing investigation and concern, and one that warrants formal recognition alongside appropriate protections for the public.

## **9. The policy gap: research versus real-world impact**

Current regulatory messaging continues to emphasise that no action is required while scientific uncertainty and further research continue.

However, this position increasingly conflicts with:

- Mechanistic evidence of biological interaction.
- Epidemiological signals in exposure studies.
- Documented clinical observations.
- Educational and legal accommodation outcomes.
- Growing reports of EHS internationally.

We are now well beyond the point at which uncertainty could reasonably be used to justify inaction.

The weight of accumulated evidence can no longer be dismissed. It has long since required decisive precautionary action to protect public health, measures that should have been formally recognised and implemented years ago, well before Sir William Stewart called for a precautionary approach at our 2008 conference.

The continued failure to act in the face of this evidence now raises serious questions of governance and public health accountability. To persist with inaction at this stage is increasingly difficult to reconcile with the fundamental duty of care owed to the public and risks constituting a serious failure of public health responsibility.

### **10. When will enough be enough?**

How many individuals must report consistent symptom patterns before biological sensitivity is formally acknowledged within public health frameworks?

How many children must struggle in school environments before exposure conditions are reconsidered?

How many families must face severe disruption before precaution becomes policy?

The reported case evidence already exists. The lived experience already exists. Biological plausibility is reflected within the scientific literature.

The question is no longer whether warning signals exist, but how long those signals will continue to be minimised before precautionary public health measures are implemented.

### **11. Conclusion**

The EM Radiation Research Trust maintains that the current weight of scientific, clinical, and real-world evidence now justifies an urgent and formal shift toward precautionary public health policy, with particular attention to children and other vulnerable groups.

A regulatory framework based primarily on ICNIRP thermal thresholds and short-term exposure assumptions is wholly inadequate in an era of continuous, whole-population exposure to wireless technologies.

A precautionary public health approach is therefore urgently required. This must explicitly account for established and emerging biological effects, cumulative and lifelong exposure, individual susceptibility, and the growing body of evidence demonstrating non-thermal mechanisms through which electromagnetic fields interact with biological systems.

Public trust in the institutions responsible for safeguarding health is already being eroded, and continued failure to act in the face of established evidence will be judged both now and in history as a fundamental failure of public health responsibility.

This is no longer a matter for future consideration; it is a present-day accountability issue that demands urgent correction.

### **EM Radiation Research Trust**

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