



## Electromagnetic Hypersensitivity (EHS) is a humanitarian crisis that requires an urgent response.

ICBE-EMF is dedicated to the protection of humans and other species from the harmful effects of non-ionizing radiation. Of highest concern are children, pregnant women, and those with chronic health conditions including those who are Electromagnetically Hypersensitive (EHS). We attribute the growth of EHS to the rapid expansion in anthropogenic (human-caused) electromagnetic fields. EHS symptoms may occur through use of devices or exposure to infrastructure, such as mobile phones, DECT cordless landlines, Wi-Fi/Bluetooth enabled computers, Wi-Fi routers, smart meters, base station antennas, electric vehicles, power lines, household electrical appliances and other low intensity exposures.

All biology uses electromagnetic fields as well as chemical signalling. Widely used EMF (electrical and magnetic fields) are new and very different from those found in nature, making them disruptive to normal biological functioning, even at what are labelled as low levels.

EHS is a multisystemic physical response, with symptoms that can vary among individuals due to anatomical and physiological differences. Symptoms can include sleep problems, fatigue, headache, dizziness, heart palpitation, tinnitus (ringing in the ear), skin rash, chemical sensitivity, visual, sensory, and mood disturbances. The US National Council on Disability's 2022 Health Equity Framework, recognizes that "electrical hypersensitivity is associated with the use of wireless communications and electrical technologies and other sources of non-ionizing radiation, which may trigger disabling and life-threatening cardiac, respiratory, neurological, and other adverse physical reactions." 1

The distress and disability associated with EHS is recognised by numerous social, scientific and medical organisations (WHO, 2004<sup>2</sup>). According to the European Commission's EESC 2019 *Report on Digitalization: Challenge for Europe*, "Each day the number of EHS sufferers increases: according to new estimates, between 3% and 5% of the population are electro-sensitive, meaning that some 13 million Europeans may suffer from this syndrome, which has various names: electro-sensitivity, Wi-Fi syndrome, microwave syndrome, electromagnetic hypersensitivity, etc." As these technologies continue to expand, the incidence of EHS will grow.

Many of these exposures are involuntary and now inescapable. Common outcomes of this are job, school and home loss, separation from family and friends, inability to access medical care and general lack of access to all areas of the public domain. The unmitigated, neglected widespread disruption of lives <sup>4,5</sup> is inhumane and deeply troubling.

## Our serious concern: EHS is an escalating humanitarian crisis

The European Academy for Environmental Medicine (EUROPAEM)<sup>6</sup> reports that EHS symptoms are occurring in response to low intensity exposures, which are orders of magnitude below the exposure limits currently supported by many governments. Current exposure limits do not protect those with EHS and there are no medical registries or trainings to facilitate appropriate registration or support for this group. Government regulatory agencies should—but do not—investigate claims of harm and update policies to ensure greater protection for, not only the health and welfare of the population<sup>7</sup>, but for plants and animals and their habitats as well<sup>8</sup>. Due to low medical awareness, most cases of EHS are unrecognized or misdiagnosed, wasting healthcare resources due to inappropriate treatment.

ICBE-EMF has been reviewing multiple types of scientific evidence and individual case reports<sup>9</sup> closely and contributing to Electromagnetic Hypersensitivity science. Our goal is to see EHS formally recognized as an *EMF-induced external cause of injury* by public health agencies worldwide, and greater recognition of the needs of those who are EHS-disabled, so they have access to safer homes, healthcare, education, employment, opportunities, amenities, and equity of access in all public domains. Such recognition should lead to increased public awareness, research funding, and strengthened calls for lower EMF exposure limits. *EHS persons must be provided with low EMF spaces for residence, work, school and general public domain access. Low EMF essential spaces need to be urgently established—* not just to reduce severity for people with EHS, but to broadly reduce the incidence of EHS.

## References

<sup>1</sup> U.S. National Council on Disabilities *Framework to End Health Disparities of People with Disabilities*, 2022 ncd-framework-to-end-health-disparities-of-people-with-disabilities.pdf, pg. 10 item #6.

<sup>6</sup> Belyaev I, Dean A, Eger H, Hubmann G, Jandrisovits R, Kern M, Kundi M, Moshammer H, Lercher P, Müller K, Oberfeld G, Ohnsorge P, Pelzmann P, Scheingraber C, Thill R. *EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses*. Rev Environ Health. 2016 Sep 1;31(3):363-97. doi: 10.1515/reveh-2016-0011. PMID: 27454111. https://doi.org/10.1515/reveh-2016-0011. EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses - PubMed (nih.gov)

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<sup>&</sup>lt;sup>2</sup> Electromagnetic hypersensitivity: proceedings, International Workshop on Electromagnetic Field Hypersensitivity, Prague, Czech Republic, October 25-27, 2004, Meeting report, 13 May 2006. https://www.who.int/publications/i/item/9789241594127

<sup>&</sup>lt;sup>3</sup> European Economic and Social Committee. Digitalization: *Challenges for Europe*, 2019, Chapter 3, pg. 85.https://www.eesc.europa.eu/sites/default/files/files/qe-01-19-295-en-n.pdf

<sup>&</sup>lt;sup>4</sup> European Commission EHS Workshop, *Electromagnetic-hyper-sensitivity: The state of science*. April 13, 2023. Hosted by MEP Michele Rivasi. Reported by Europeans for Safe Connections <a href="https://esc-info.eu/en/european-citizens-travel-to-the-eu-parliament-to-present-an-unpopular-issue/">https://esc-info.eu/en/european-citizens-travel-to-the-eu-parliament-to-present-an-unpopular-issue/</a> (French and English)

<sup>&</sup>lt;sup>7</sup> International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF). *Scientific evidence invalidates health assumptions underlying the FCC and ICNIRP exposure limit determinations for radiofrequency radiation: implications for 5G.* Environ Health. 2022 Oct 18;21(1):92. doi: 10.1186/s12940-022-00900-9. PMID: 36253855; PMCID: PMC9576312. <a href="https://icbe-emf.org/wpcontent/uploads/2022/10/ICBE-EMF-paper-12940">https://icbe-emf.org/wpcontent/uploads/2022/10/ICBE-EMF-paper-12940</a> 2022 900 OnlinePDF Patched-1.pdf

<sup>&</sup>lt;sup>8</sup> Levitt BB, Lai HC, Manville AM 2nd. *Low-level EMF effects on wildlife and plants: What research tells us about an ecosystem approach.* Front Public Health. 2022 Nov 25;10:1000840. doi: 10.3389/fpubh.2022.1000840. PMID: 36505009; PMCID: PMC9732734. <u>Low-level EMF effects on wildlife and plants: What research tells us about an ecosystem approach - PMC (nih.gov)</u>

<sup>&</sup>lt;sup>9</sup> Hardell, Lennart and Nilsson, Mona. "Summary of seven Swedish case reports on the microwave syndrome associated with 5G radiofrequency radiation" Reviews on Environmental Health, 2024. <a href="https://doi.org/10.1515/reveh-2024-0017">https://doi.org/10.1515/reveh-2024-0017</a>. <a href="https://doi.org/10.1515/reveh-2024-0017">Summary of seven Swedish case reports on the microwave syndrome associated with 5G radiofrequency radiation - PubMed (nih.gov)</a>