

COMMENT ON THE INDIVIDUAL SENSITIVITY TO WIRELESS RADIATION

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(Full CV available: <https://betweenrockandhardplace.wordpress.com/cv-june-2020/>)

Education:

- DSc in Molecular Biology, Jagiellonian University, Krakow, Poland (1983)
- PhD in Biochemistry/Cell Biology, University of Helsinki, Finland (1990)

Current duties:

- Adjunct Professor of Biochemistry (Dosentti), University of Helsinki, Finland (1992-present)
- Chief Editor of the specialty 'Radiation and Health' at Frontiers in Public Health, Lausanne, Switzerland.

Past duties:

- Research Professor at Radiation and Nuclear Safety Authority, Helsinki, Finland (2000-2013)
- Visiting Professor at Harvard Medical School, Boston, MA, USA (1997-99)
- Guangbiao Professor at Zhejiang University School of Medicine, Hangzhou, China (2006-09)
- Visiting Professor at Swinburne University of Technology, Hawthorn/Melbourne, Victoria, Australia (2012-13)

Internationally acknowledged expert in research on biological/health effects of mobile phone radiation.

Selected expert duties:

- In 2003, WHO invited expert for revision of research agenda;
- In 2007, invited expert presenting for the US National Academies;
- In 2009, testified in US Senate hearing on Wireless Radiation and Health;
- In 2011, IARC invited expert for classification of cell phone radiation carcinogenicity.

THE BRIEF STATEMENT ON INDIVIDUAL SENSITIVITY TO WIRELESS RADIATION

Part of the population considers themselves sensitive to the man-made electromagnetic radiation emitted by wireless communication devices and networks (wireless radiation). It is logical to consider that the sensitivity to wireless radiation exists, like individual sensitivities to all environmental pollutants, whether natural or man-made.

The sensitivity, called microwave disease, or electromagnetic hyper-sensitivity (EHS), or idiopathic environmental intolerance attributed to electromagnetic fields (IEI-EMF), is characterized by a variety of non-specific symptoms that the self-declared sensitive persons claim to experience when exposed to wireless radiation.

My systematic review of the to-date research on possible causes of sensitivity to wireless radiation has concluded that studies are of insufficient quality to find the link between wireless radiation exposures and sensitivity symptoms experienced by some persons [1]. As I presented it, the scientific methodology used to discover it is of insufficient quality because it focuses on psychological reactions of the affected persons instead of examining biochemical and physiological effects of wireless exposures in human volunteers. To date, studies attempting to examine biochemical markers of sensitivity are of very poor and unreliable quality [2, 3].

The WHO, the ICNIRP, and the IEEE-ICES all agree that the symptoms experienced by the affected persons are a real-life impairment, but neither of the organizations nor governments has demonstrated any intention to find out what the biochemical/physiological cause of the symptoms is. Performed by me analysis of the public health policies around the world has shown that the self-declared sensitive persons are not taken care by the available public health policies. Sensitive persons are left to fend for themselves in their support groups or are advised to seek care from physicians whose medical education doesn't include the issue of individual sensitivity to wireless radiation or the effects of wireless radiation on the human body [4, 5].

Currently, there is a strong scientific disagreement within the scientific community, which is divided into two strongly opposing camps, about how dangerous to health exposures to wireless radiation are. Attempts to find a scientific consensus are being mostly dismissed [6].

The only way to find out the cause of symptoms experienced by persons self-declared as sensitive to wireless radiation is to perform human volunteer studies where biochemical and physiological effects of exposures to wireless radiation will be examined. Such studies are ethically possible, as shown in a research study published by my research group [7]. In my recent review, I have justified this approach and proposed ways to proceed [8].

References

1. [Review of the scientific evidence on the individual sensitivity to electromagnetic fields \(EHS\).](#) Leszczynski D. Rev Environ Health. 2021 Jul 6;37(3):423-450. doi: 10.1515/reveh-2021-0038. Print 2022 Sep 27.
2. [Belpomme and Irigaray should rectify their own data into scientifically acceptable format.](#) Leszczynski D. Rev Environ Health. 2021 Oct 7;37(3):463-465. doi: 10.1515/reveh-2021-0130. Print 2022 Sep 27.
3. [Dariusz Leszczynski responds to comments of Maël Dieudonné on Leszczynski's review of the scientific evidence on the individual sensitivity to electromagnetic fields \(EHS\).](#) Leszczynski D. Rev Environ Health. 2022 Mar 9;38(3):589-590. doi: 10.1515/reveh-2022-0034. Print 2023 Sep 26.
4. [The lack of international and national health policies to protect persons with self-declared electromagnetic hypersensitivity.](#) Leszczynski D. Rev Environ Health. 2022 Oct 26;39(2):163-189. doi: 10.1515/reveh-2022-0108. Print 2024 Jun 25.
5. [Pilot questionnaire survey shows the lack of diagnostic criteria for electromagnetic hypersensitivity: a viewpoint.](#) Leszczynski D. 2025 Jul 14;11:35. doi: 10.21037/mhealth-25-4.
6. [Call for consensus debate on mobile phone radiation and health: Are current safety guidelines sufficient to protect everyone's health?](#) Leszczynski D. Front Public Health. 2022 Dec 15;10:1085821. doi: 10.3389/fpubh.2022.1085821.
7. [Mobile phone radiation might alter protein expression in human skin.](#) Karinen A, Heinävaara S, Nylund R, Leszczynski D. BMC Genomics. 2008 Feb 11;9:77. doi: 10.1186/1471-2164-9-77. PMID: 18267023; PMCID: PMC2258283.

8. [Wireless radiation and health: making the case for proteomics research of individual sensitivity.](#)
Leszczynski D. Front Public Health. 2025 Jan 10;12:1543818. doi: 10.3389/fpubh.2024.1543818.