References *(with some additional remarks)*

[1] Data taken from National Health and Nutrition Examination Survey, conducted by the National Center for Health Statistics of the Centers for Disease Control and Prevention.

'Prevalence of metal implants among US adults aged 40 years and older,' Qiu-Fu Wang, Yu-Chen Tang, Hao-Ran Liao, Miao Lei, Wei Dong, Ze-Yu Liu, Jie Hao, Zhen-Ming Hu, *'Scientific Reports'* (2025) 15:584 www.nature.com/scientificreports https://doi.org/10.1038/s41598-024-8430-0

[2] Spectacles – 'Metal-framed spectacles and implants and specific absorption rate among adults and children using mobile phones at 00/1800/2100 Mhz, Joo, E, Szasz, A, Szendro, P, E*lectromagnetic Biol Med*, 2006, 25(2):103-12.

[3] 'How titanium implants act as antennas for electromagnetic fields.'
www.dnaesthetics.de/2019/10/biological-dentistry-electromagnetic-field-ceramic-implants/?lang=en

[4]'Numerical analysis of the effect of 5G electromagnetic radiation on human head with metallic implants, Deepshikha Bhargava, Phadungsak Rattanadecho, *Thermal Science and Engineering Progress*, 22 June 2026, 2451-9049, www.sciencedirect.com/journal/thermal-science-and-engineering-progress

[5] 'Scientific evidence invalidates health assumptions underlying the FCC and ICNIRP exposure limit determinations for radiofrequency radiation: implications for 5G.'
ICBE-EMF (International Commission on the Biological Effects of Electromagnetic Fields)
'Environmental Health', (2022) 21:92, https://doi.org/10.1186/s12940-022-00900-9

[6] The F.C.C. continue to invite I.C.N.I.R.P. to participate in public debates as evidenced in their Public Notice DA 26-997, ET Docket No. 13-84. The F.C.C. describe ICNIRP as:

> "*an international non-profit organization comprised of **independent scientific experts** that provides scientific advice and guidance on the health and environmental effects of non-ionising radiation (NIR) to protect people and the environment from detrimental NIR exposure."]*

[see The International Commission on Non-Ionizing Radiation Protection: Conflicts of Interest, corporate interests and the push for 5G, Michele Rivasi & Klaus Buchner (Members of the European Parliament), Brussels, June 2020

> *"Compliance with the present guidelines may not necessarily preclude interference with or effects on medical devices such as metallic prostheses … Advice on avoiding these problems is beyond the scope of the present document but is available elsewhere."*

[The "elsewhere" in both cases turned out to be relevant to pacemakers* but not metal implants. This was not a casual exclusion but an intentional redirection as those who checked it discovered.]

[7a] ICNIRP Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields (up to 300 GHz), published in: *Health Physics* 74 (4):494-522; 1998

[7b] ICNIRP Guidelines for limiting exposure to time-varying electric and magnetic fields (1Hz to 100 kHz) *Health Physics*, DOI:10.1097/HP.0b013el81f06c86, 2010

[7c] 'Purpose and Scope' from ICNIRP Guidelines for limiting exposure to EMFs (100 kHz to 300 gHz), *Health Physics* 118(5): 483-524; 2020.
https://www.icnirp.org/cms/upload/publications/ICNIRPrfgdl2020.pdf

[8] *Medical devices / metallic implants may involve special health and safety problems when the individual using them is exposed to electromagnetic fields. This standard does not necessarily provide protection against interference with such devices or hardware. The recipient and provider of these devices should be aware of the potential for hazards and precautions that may be necessary with such devices."*

C95.6 IEEE Standard for Safety Levels with Respect to Human Exposure to EMFs, 0-3 kHz, IEEE, 6.12, p34; Standards Co-ordinating Committee 28, IEEE International Committee on Electromagnetic Safety on NIR, Institute of Electrical and Electronics Engineers, 2002

[9] 'Is the government informing the public of risks associated with 5G roll out?' Update from barrister Philip Rule on the U.K. Administrative Court's hearing of the judicial review of the Secretary of State's alleged failure to address the evidence of risks to human health posed by 5G technology" and on key vulnerable groups. No. 5 Chambers (2023). KC for the claimants: human rights barrister, Sir Michael Mansfield.

[10] on-line video interview with Professor Marino, 22 Jul 2009. Andrew Marino, PhD, JD is a retired biophysicist and lawyer specialising in the biological effects of electromagnetic energy. Working closely with Dr. Robert Becker for much of his career, Marino has played a pivotal role in understating the impacts of non-native electromagnetic fields via stress response pathways in animals and humans. His work has raised fundamental questions about the safety of wireless communications technologies, powerlines and the ever-growing number of gadgets we are surrounded by."

[11] *"Their [National Agency ANFR of France] …. corroborate our findings that most cell phones will exceed the safety guidelines when held against the body by factors of 1.6-3.7 times for the European/ICNIRP standard or by factors as high as 11 if 1-g SAR values were to be measured as required by the U.S. FCC."*

'Microwave emissions from Cell Phones Exceed Safety Limits in Europe and the US when touching the body', Om P. Gandhi (Life Fellow IEEE), IEEE Access (April 18 2019), p47050, Volume 7, 2019, 10,1198/ACCESS.2019.2906017

eg *"iPhone's SAR measurement may exceed the FCC exposure guidelines for body-worn operation if positioned less than 15 mm (5/8th inch) from the body. When using iPhone near your body for voice calls or for wireless data transmission over a cellular network, keep iPhone at least 15 mm (5/8th inch) away from the body, and only use carrying cases, belt clips or holsters that do not have metal parts and that maintain at least 15 mm (5/8th inch) separation between iPhone and the body."*

Cited in: 'Major Device Safety Warnings', C4ST (Canadians for Safe Technology)