

ICBE-EMF

Chair

John W. Frank, MD
University of Edinburgh
United Kingdom

Vice Chair

Paul Héroux, PhD
McGill University
Canada

Senior Advisor

Ronald L. Melnick, PhD
Former U.S. National
Toxicology Program
USA

Managing Director

Elizabeth Kelley, MA
Electromagnetic Safety
Alliance, Inc.
USA

Commissioners:

David Carpenter MD, MPA
University at Albany,
New York, U.S.A.

Suleyman Dasdag, PhD
Istanbul Medeniyet
University
Turkey

Álvaro de Salles, PhD
Federal University of Rio
Grande do Sul (UFRGS)
Brazil

Claudio Fernández
Rodríguez, M.A. Federal
Institute of Education
Science and Technology of
Rio Grande do Sul
(IFRS) Brazil

Joel M. Moskowitz, PhD
University of California,
Berkeley, USA

Igor Yakymenko PhD
Department of Public Health
at Kyiv Medical University
Ukraine

Alasdair Philips, B.Sc.,
Eng., MIEEE
United Kingdom

SUBMISSION TO THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Docket: HHS-OASH-2026-0397

Submitted by: Elizabeth Kelley, Managing Director, on behalf of the International Commission on the Biological Effects of Electromagnetic Fields ([ICBE-EMF](https://www.icbe-emf.org))

October 21, 2026

Executive Summary

We submit this comment to the U.S. Department of Health and Human Services (HHS) on behalf of the International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF), a multidisciplinary international consortium of scientists, doctors, and researchers with expertise in the biological and health effects of non-ionizing electromagnetic field (EMF) frequencies up to 300 GHz, founded in 2021.

We request that HHS commission an independent, transparent, multidisciplinary assessment of the health and ecological evidence concerning non-ionizing electromagnetic fields (EMF). The assessment should consider chronic and low-level exposures, non-thermal biological endpoints, and susceptible populations, and should inform a review of federal exposure guidance. Published studies have reported oxidative stress, genetic effects, detrimental changes in the reproductive and immunological systems, learning and memory deficits, and other biological outcomes, although the consistency, clinical significance, and causal interpretation of these findings vary by endpoint and exposure. The International Agency for Research on Cancer (IARC) has classified extremely low-frequency (ELF) magnetic fields¹ and radiofrequency electromagnetic fields² as possibly carcinogenic to humans (Group 2B). We request a formal HHS response and a public scientific workshop within 90 days.

Background and Scientific Basis for Concern

The International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF) is a multidisciplinary international consortium of scientists, doctors, and researchers with expertise in the biological and health effects of non-ionizing electromagnetic field (EMF) frequencies up to 300 GHz, founded in 2021. Our primary purpose is to make expert scientific recommendations that ensure public health and environmental protection regarding wireless and non-ionizing electromagnetic fields (EMFs) based on the best peer-reviewed research publications, which include, and go beyond, establishing numerical EMF exposure guidelines.

We identify several areas warranting independent evaluation:

- **Cellular stress and oxidative damage** (such as cardiovascular disease and diabetes)
- **Genetic effects**
- **Reproductive and developmental outcomes**
- **Neurological outcomes** (such as Parkinson's Disease) and cognitive outcomes
- **Cancer risk**
- **Effects on plants, animals, and ecosystems**

Particular attention should be given to long-term exposure, children³, pregnant women, workers, and individuals reporting electromagnetic hypersensitivity (EHS)⁴. These categories should be assessed separately, with transparent grading of evidence and explicit acknowledgment of uncertainty.

In 2022, ICBE-EMF published *"Scientific evidence invalidates health assumptions underlying the FCC and ICNIRP exposure limit determinations for radiofrequency radiation: implications for 5G"*⁵ in the

Special Experts:

Hava Bektaş,
Department Of Biophysics,
Faculty of Medicine Van
Yüzüncü Yıl University,
Van, Türkiye

Fiorella Belpoggi PhD
Emerita Scientific Director,
Ramazzini Institute,
Bologna, Italy

Kent Chamberlin PhD
Past-Chair, Professor
Emeritus in the Department
of Electrical and Computer
Engineering, University of
New Hampshire
USA

*Served on the New
Hampshire State
Commission on 5G*

Lennart Hardell MD, PhD
The Environment and
Cancer Research Foundation
Sweden

Martha Herbert, MD, PhD
Pediatric Neurologist,
Neuroscientist
USA

Kavindra Kesari, PhD
Aalto University
Finland

Don Maisch, PhD
Tasmania, Australia

Erica Mallery-Blythe
BSBM
Physicians' Health Initiative
for Radiation and
Environment
United Kingdom

Albert M. Manville, II, PhD
Former branch chief,
Division of Migratory Bird
Management, U.S. Fish &
Wildlife Service
Environmental Sciences and
Policy Division
Johns Hopkins University
USA

Theodora Scarato MSW
Environmental Health
Sciences
USA

journal *Environmental Health*.⁶ The authors noted that effects observed at exposures below the assumed threshold specific absorption rate (SAR) include non-thermal induction of reactive oxygen species, DNA damage, cardiomyopathy, carcinogenicity, sperm damage, and neurological effects including electromagnetic hypersensitivity.

Furthermore, multiple human studies have found statistically significant associations between radiofrequency radiation (RFR) exposure and increased brain and thyroid cancer risk. Yet, in 2020, despite the body of evidence reviewed in this article, the FCC⁷ and ICNIRP^{8,9} reaffirmed the same exposure limits established in the 1990s. Consequently, these exposure limits—which are based on false suppositions—do not adequately protect workers, children, hypersensitive individuals, and the general population from short-term or long-term RFR exposures. **Thus, health-protective exposure limits for humans and the environment are urgently needed. These limits must be based on scientific evidence rather than erroneous assumptions, especially given the increasing worldwide exposure of people and the environment to RFR, including novel forms of radiation from 5G telecommunications and beyond, for which there are no adequate health effects studies.**

Exposure policy has changed very little over the last four decades, and major revisions are long overdue. Over this time, wireless communications devices and the wireless network infrastructure supporting them have grown exponentially. According to CTIA, over 579 million mobile connections are active in the United States, and 98% of American adults own a cell phone. For over three decades, except for the NTP cellphone carcinogenicity study, ongoing research on EMF safety in the United States—other than research funded by the wireless and electrical power industries—has become nonexistent.

The preponderance of peer-reviewed research published since 1990 has found significant adverse effects from exposure to radio frequency radiation and extremely low frequency and static electromagnetic fields.

Dr. Henry Lai, **Professor Emeritus at the University of Washington, Editor Emeritus of the journal, *Electromagnetic Biology and Medicine*, and an emeritus member of the International Commission on the Biological Effects of EMF**, has compiled summaries of the research on the biological effects of exposure to radio frequency (RFR) and extremely low frequency (ELF) and static electromagnetic fields (EMF) that shows the preponderance of peer-reviewed research published since 1990 has found significant adverse effects from exposure to radio frequency radiation and extremely low frequency and static electromagnetic fields. His set of abstracts¹⁰ which covers the period from 1990 through May 2026 constitutes a comprehensive collection of the peer-reviewed publications of *in vivo* and *in vitro* research.

The global wireless industry has effectively placed a "cone of silence" over this issue. In the United States, the Food and Drug Administration (FDA) has become a captive agency, maintaining the position that there is no credible evidence showing cell phones are harmful. This position is echoed by governments at all levels nationwide and in most other nations, even though an independent government-sponsored review of the current body of scientific evidence has yet to be conducted.

WHO Systematic Reviews

The World Health Organization (WHO) Systematic Reviews (SRs) are being used as a pretext to dismiss scientific research showing harmful radiofrequency radiation effects. Beginning in 2021, the WHO sponsored a series of SRs of scientific evidence on radiofrequency radiation by funding the studies, writing the study protocols, and selecting participating scientists. None of the independent scientists who signed the International EMF Scientist Appeal¹¹ and applied to serve on the study committees were

Wenjun Sun, PhD
Zhejiang University's
School of Medicine,
Hangzhou
China

selected. No SR was conducted on genetic effects, and a planned SR on thermal heating effects was never published.

The published SRs claimed "no compelling evidence" that RF-EMF exposures within typical current regulatory limits in many nations have significant health or biological effects, with two important exceptions:

1. The WHO review of laboratory animal evidence on cancers¹²
2. The WHO review of adverse reproductive effects.^{13 14}

Both reviews concluded that there was "high certainty of evidence" that exposures to RFR are associated with increased cancer risk and decreased male fertility.

After these SRs were published, the methodological quality of the majority of these WHO reviews (specifically all those reporting negative findings) was noted by ICBE-EMF and other experts to be severely deficient. Nearly all the reviews were heavily biased toward concluding "no evidence of causation" when a more scientifically accurate conclusion would have been "no convincing evidence of causation or of absence of causation". **Indeed, a striking aspect of the primary research studies covered in the WHO reviews is their low scientific quality, leading to an overall lack of conclusive evidence of causation.**

On the basis of these concerns, ICBE-EMF members published several peer-reviewed critiques of the WHO reviews. The most comprehensive of these critiques covers all the WHO reviews in detail, enumerating their numerous methodological weaknesses¹⁵

We are deeply concerned that the WHO will take action, based in part on the reported findings of these SRs, to release a revised Environmental Health Criteria (EHC) monograph shortly and conclude that there is "no compelling evidence" that radiofrequency radiation exposures have significant health or biological effects. The WHO has endorsed the thermal-based EMF exposure limits issued by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), a non-governmental organization sponsored by the German government with close industry ties that is officially recognized as a WHO-affiliated organization. WHO is calling for all nations to harmonize their guidelines with ICNIRP guidelines. Should the EHC monograph include this conclusion on RFR, this may motivate the International Agency for Research on Cancer (IARC) to cancel plans to schedule a re-review of radiofrequency radiation.

Requested Actions by HHS

- **Place an immediate moratorium on the further development of 5G and 6G wireless technology until safety is demonstrated.**
- **Commission an Independent Assessment:** Convene a multidisciplinary panel with transparent selection criteria, conflict-of-interest disclosures, published methods, and meaningful representation from biological, medical, epidemiological, engineering, and environmental sciences.
- **Consider ICBE-EMF's threshold dose findings:** Consider incorporating the cancer and reproductive toxicological threshold dose findings reported by ICBE-EMF into an independent government-sponsored review when revising FCC RF exposure limits.
- **Formally recognize Electromagnetic Hypersensitivity as an EMF-induced external cause of injury** by public health agencies world-wide and the greater recognition of the needs of those who are EHS-disabled, so they have access to safer homes, healthcare, education, employment, opportunities, and equity of access in all public domains

- **Convene a Public Workshop Within 90 Days:** Invite federal agencies, independent researchers, clinicians, affected communities, and stakeholders; publish the agenda, evidence submissions, and proceedings.
- **Coordinate Federal Agency Responsibilities:**
 - **NIH/NIEHS:** Identify research priorities on mechanisms, chronic exposure, and health outcomes.
 - **FDA/CDRH:** Review relevant device-safety evidence.
 - **CDC/ATSDR:** Assess communication strategies and susceptible-population needs.
 - **CDC/NIOSH:** Evaluate occupational exposure and workplace health concerns.
- **Review Exposure Guidance and Research Needs:** Use the assessment to determine whether updates to federal guidance, exposure characterization, clinical research, surveillance, or targeted research funding are warranted (including consideration of low-intensity, non-thermal endpoints).
- **Publish Response and Implementation Timetable:** Identify a lead HHS office, responsible agencies, milestones, and opportunities for public comment.

ICBE-EMF Specific Requests

- **Place an immediate moratorium on the further development of 5G and 6G wireless technology until safety is demonstrated.**
- **Consider threshold dose findings:** Incorporate the cancer and reproductive toxicological threshold dose findings reported by ICBE-EMF into an independent government-sponsored review when revising FCC RF exposure limits.
- **Formally recognize Electromagnetic Hypersensitivity as an EMF-induced external cause of injury by public health agencies world-wide** and the greater recognition of the needs of those who are EHS-disabled, so they have access to safer homes, healthcare, education, employment, opportunities, and equity of access in all public domains
- **Protect vulnerable populations:** Protect children and pregnant women in accordance with the Child Health Position Paper recommendations.
- **Strengthen regulatory standards:** Update and strengthen guidelines and regulatory exposure standards.
- **Encourage safer technology:** Encourage manufacturers to adopt the low-cost engineering solutions and antenna designs outlined in ICBE-EMF publications.
- **Address electrical infrastructure:** Require electric utilities responsible for the generation, transmission, distribution and monitoring of electricity to maintain adequate power quality and proper wiring to minimize harmful ground currents.
- **Public education:** Fully inform the public regarding potential health risks from electromagnetic energy and educate them on harm-reduction strategies.
- **Medical training:** Educate medical professionals on the biological effects of electromagnetic energy and provide clinical training regarding patients with electromagnetic hypersensitivity.
- **Independent research funding:** Fund research and training on EMF and health that is independent of industry, and mandate industry cooperation with researchers.

Highlights of Selected ICBE-EMF Publications and Position Statements

1. “Scientific evidence invalidates health assumptions underlying the FCC and ICNIRP exposure limit determinations for radiofrequency radiation: implications for 5G.”¹⁶

Summary: Demonstrates how the U.S. Federal Communications Commission (FCC) and ICNIRP have ignored hundreds of scientific studies documenting adverse health effects at exposures below the threshold dose claimed by these agencies, which was used to establish human exposure limits. Adverse effects observed below the assumed threshold SAR include non-thermal induction of reactive oxygen species, DNA damage, cardiomyopathy, carcinogenicity, sperm damage, and neurological effects including electromagnetic hypersensitivity. Multiple human studies have found statistically significant associations between RFR exposure and increased brain and thyroid cancer risk. Yet, in 2020, the FCC and ICNIRP reaffirmed the same limits established in the 1990s. Consequently, these exposure limits, which are based on false suppositions, do not adequately protect workers, children, hypersensitive individuals, and the general population from short-term or long-term RFR exposure. Health-protective exposure limits based on scientific evidence are urgently needed.

The authors concluded: *An independent assessment based on 30 years of scientific evidence is required, the public should be informed of health risks and harm reduction, and ICBE-EMF calls for an immediate moratorium on further development of 5G wireless technologies until safety is demonstrated.*

The 14 False Assumptions Made by FCC and ICNIRP in Their RF Exposure Guidelines:

A) Effects of RF radiation at exposures below the putative threshold SAR of 4 W/kg:

- **Assumption 1:** There is a threshold exposure for any adverse health effect caused by RF radiation; in the frequency range of 100 kHz to 6 GHz, it is a whole-body exposure that exceeds an SAR of 4 W/kg. Any biological effect of RF radiation above the threshold exposure is due to tissue heating.
- **Assumption 2:** RF radiation is incapable of causing DNA damage other than by heating; there is no mechanism for non-thermal DNA damage.
- **Assumption 3:** Two to seven exposures to RF radiation for up to one hour duration are sufficient to exclude adverse effects for any duration of exposure, including chronic exposures.
- **Assumption 4:** No additional effects would occur from RF radiation with co-exposure to other environmental agents.

• **B) Factors affecting dosimetry:**

- **Assumption 5:** Health effects are dependent only on the SAR value; carrier wave modulations, frequency, or pulsing do not matter except as they influence the SAR.

• **C) Human brain cancer risk:**

- **Assumption 6:** The multiple human studies that find associations between exposure to cell phone RF radiation and increases in brain cancer risk are flawed because of biases

in published case-control studies, and because brain cancer rates have remained steady since wireless communication device use became widespread.

- **D) Individual variations in exposure and sensitivity to RF-EMF:**

- **Assumption 7:** There are no differences among individuals, including children, in the absorption of RF-EMF and susceptibility to this radiation.
- **Assumption 8:** There are no differences among individuals in their sensitivity to RF radiation-induced health effects.

- **E) Applied safety factors for EMF-RF workers and the general population:**

Assumption 9: A 50-fold safety factor for whole body exposure to RF radiation is adequate for protecting the general population from any health risks from RF radiation.

Assumption 10: A 10-fold safety factor for whole body exposure to RF radiation is adequate for protecting workers from any health risks from RF radiation.

Assumption 11: Exposure of any gram of cube-shaped tissue up to 1.6 W/kg, or 10 grams of cube-shaped tissue up to 2 W/kg, (duration not specified) will not increase the risk of that tissue to any toxic or carcinogenic effects in the general population.

Assumption 12: Exposure of any gram of cube-shaped tissue up to 8 W/kg, or 10 grams of cube-shaped tissue up to 10 W/kg, (duration not specified) will not increase the risk of that tissue to any toxic or carcinogenic effects in workers.

F) Environmental exposure to RF radiation:

Assumption 13: There is no concern for environmental effects of RF radiation or for effects on wildlife or household pets.

G) 5G (5th generation wireless):

Assumption 14: No health effects data are needed for exposures to 5G; safety is assumed because penetration is limited to the skin ("minimal body penetration").

3. Letter to the Editor: "The Systematic Review on RF-EMF Exposure and Cancer by Karipidis et al. (2024) has serious Flaws that Undermine the Validity of the Study's Conclusions" ¹⁷

Summary: ICBE-EMF identified numerous methodological flaws in Karipidis et al. ¹⁸ ICBE-EMF concluded: *"We find that few, if any, of the RF-EMF exposure/tumor associations examined by Karipidis et al. have been the subject of sufficiently replicated, high-quality primary studies, of adequate power and follow-up time, to warrant any legitimate scientific certainty about the absence of causation, especially when accounting for the animal studies of RF-EMF carcinogenicity ^{19 20 21} The overall GRADE recommendations in this paper appear to reflect biases of the authors. In contrast to the authors' rating of the evidence for RF-EMF exposures NOT causing these tumors as being of 'moderate certainty,' we*

contend there is no scientific justification for concluding there is any certainty that RF-EMF exposures do not cause cancer."

3. "The WHO-Commissioned Systematic Reviews on Health Effects of Radiation Provide No Assurance of Safety" ²²

Summary: The authors concluded that, instead of assessing the scientific evidence on human health risks from RF-EMF exposures comprehensively, these SRs create a false sense of safety that undermines public health protection. In light of mounting scientific evidence published over the past 30 years—including animal studies on cancer and reproductive effects reported in SR2, SR4A, and SR4B—and widespread population exposures, there is a clear need to reduce exposures and strengthen safety limits, especially for pregnant women, children, and people with chronic health conditions. Revised science-based guidelines protective of human health and the environment are urgently needed, and the WHO-commissioned SRs cannot be relied upon for the forthcoming WHO EHC monograph.

The authors concluded: "Because of serious flaws in the reviews and meta-analyses, the WHO-commissioned SRs cannot be used as proof of the safety of cell phones or other wireless communication devices and should not be relied upon for the forthcoming WHO EHC monograph."

4. "Exposure limits to radiofrequency EMF do not account for cancer risk or reproductive toxicity assessed from data in experimental animals." ²³

Summary: ICBE-EMF authors reanalyzed the data from two SR papers and found that the derived hourly SAR dose at a 1×10^{-5} cancer risk ranges from approximately 0.8 to 5 mW/kg (noting that cancer risk increases with increasing duration of RF-EMF exposure. For the protection of male fertility, the estimated SAR exposure limit was 3.3 to 10 mW/kg. These health-protective whole-body values are significantly lower than current whole-body exposure limits of 0.08 W/kg (80 mW/kg) established by ICNIRP and the FCC. For the general public, current regulatory limits are 15- to 900-fold higher than exposure levels associated with a 1×10^{-5} cancer risk (depending on the duration of daily exposure) and 8- to 24-fold higher than levels protective of male reproductive health.

The authors "strongly recommend an independent re-evaluation of RF-EMF exposure limits integrating 30 years of scientific data and applies rigorous health-protective methodologies."

5. Conflicting views in experimental carcinogenesis: a commentary on design and methodological deficiencies in the follow-up validation studies on radiofrequency radiation²⁴

Summary: Examines two recent carcinogenicity studies from Japan and Korea conducted following the positive National Toxicology Program (NTP) study on RFR. The Japanese and Korean follow-up studies used fewer animals per group, a single RFR exposure group, and a lower exposure level than the NTP study. While the NTP study revealed the carcinogenicity of RFR, the Japanese and Korean studies, which had reduced statistical power compared with the NTP study, reached conflicting conclusions compared to the more robust NTP study.

In general, studies with weaker doses, fewer exposure groups, and reduced statistical power should not be used to invalidate more robust research.

6. “Cell Phone Radiation Exposure Limits and Engineering Solutions”²⁵

Summary: Identifies seven ways the Institute of Electrical and Electronics Engineers (IEEE) restricted its risk assessment in the 1990s:

1. Inappropriate focus on heat, ignoring sub-thermal effects.
2. Reliance on short-term exposure experiments.
3. Overlooking time/amplitude characteristics of RFR signals.
4. Ignoring carcinogenicity, hypersensitivity, and other health conditions connected with RFR.
5. Measuring cellphone SAR at arbitrary distances from the head.
6. Averaging SAR doses at volumetric/mass scales are irrelevant to health.
7. Using unrealistic cell phone SAR estimations.

Proposed Low-Cost Solutions & Recommendations:

- Block phone RFR emissions (while retaining reception) when positioned close to the head or body.
- Modify antenna patterns (to hemispherical) to reduce Percent of Power absorbed in the Head (PPHead) and body while increasing Percent of Power Radiated (PPR) away from the user.
- Automated protocol-based reductions of RFR emission frequency, call duration, or integrated dose based on estimated effective radiated power over time.

7. Position Paper: “Electromagnetic Hypersensitivity (EHS) is a humanitarian crisis that requires an urgent response” (2024)²⁶

Key Statements:

“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.”

“Recognition should lead to increased public awareness, research funding, and strengthened calls for lower EMF exposure limits.”

“Low-EMF essential spaces must be urgently established in residential, workplace, school, and public domains to reduce symptom severity and lower the incidence of EHS.”

8. Position Paper on Child Health: We Are Urgently Calling for Safeguards to Protect Children (2026)²⁷

Key Statements:

‘The right to a safe and healthy environment is fundamental to children’s human rights. Schools are places for learning and development, both of which can be impacted by exposure to EMF. Because children

cannot choose the environments in which they live and learn, adults have both a moral and legal responsibility to ensure those environments are safe.”

“Children are now exposed daily to multiple sources of artificially generated non-ionizing EMF, including the RFR from cell phones, Wi-Fi laptops and Wi-Fi networks in schools, wireless earbuds, smart-watches, wireless wearables, and cell towers. They are exposed to ELF-EMF from nearby power lines, substations, and electrical wiring, as well as electrically powered equipment. These exposures have increased dramatically to levels unprecedented in human history.”

Recommendations to Governments to protect Children’s Health:

- Update national exposure limits on wireless, power frequency, and non-ionizing EMF to reflect current scientific evidence and protect against biological effects.
- Fund independent research on long-term, cumulative biological and health effects of non-ionizing EMF.
- Require independent pre-market safety testing and post-market surveillance for EMF-emitting devices.
- Ensure wireless radiation compliance tests for cell phones, Wi-Fi laptops and other RF radiation-emitting devices reflect children’s physiology and the way they use devices today, in direct body contact.
- Halt the introduction of new technologies until rigorous pre-market safety testing is performed.
- Inform families about health risks and educate them on reducing exposure from cell phones, wireless devices, and electronics.
- Adopt risk mitigation policies that reduce children's daily exposures at home and school and limit wireless device use.
- Promote industry innovation for safer technology, including wired networks and low-emission designs.
- Establish low-EMF spaces in schools as a priority.

A Safer Classroom: EMF Mitigation Steps For Schools To Protect Children, Teachers, And Staff

- Replace all Wi-Fi networks with hardwired, shielded Ethernet internet connections.
- Purchase laptops and tablets with Ethernet capability, and with easy steps to disable wireless antennas so that computers connect to the internet with Ethernet only.
- Require that all cell phones be powered off for the entire school day and stored in a Faraday box or other shielded storage to reduce unnecessary RF exposure and minimize classroom distractions.
- Require that all devices and technology equipment used in schools have wireless transmitters (intentional radiators) disabled, ensuring that no wireless radiation sources operate within school buildings.
- Provide wired telephones for personnel in all classrooms
- Educate students, staff, and families on the risks of wireless and EMF exposure and how to reduce exposure.
- Minimize ELF exposures by ensuring adequate grounding, use of shielded cabling, twisted wiring, and devices with low ELF emissions.
- Ensure students are at a distance from electrical equipment and charging stations.
- Prohibit cell towers/base stations and other wireless emitting antennas on or near school property as is already the policy in some countries and U.S. school districts.¹⁶⁵

- Prohibit high-voltage power lines and electrical substations on or near school property.
- School boards should maintain a team that can routinely conduct transparent, independent real-time EMF measurements (including body-worn dosimeters) in classrooms, playgrounds, and sports fields to ensure the lowest possible levels are maintained.
- Continuously mitigate as required to ensure the above principles are adhered to.

About ICBE-EMF

The International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF) is composed of independent academic and government researchers specializing in the biological and health effects of non-ionizing EMF frequencies up to 300 GHz. Our 25 members reside across 11 nations and represent diverse fields, including bioengineering, biophysics, cancer epidemiology, education, electrical engineering, environmental medicine, trauma medicine, health administration, medical oncology, pediatric neurology, psychology, physics, physiology, public health research, radiation biology, toxicological pathology, social welfare, wildlife biology, radiation biology, and bioengineering.

- **1 member** served on the 2001 WHO International Agency for Research on Cancer (IARC) Working Group evaluating the carcinogenicity of extremely low-frequency EMF.
- **4 members** served on the 2011 IARC Working Group evaluating radiofrequency EMF carcinogenicity.
- **2 members** have advised the World Health Organization.
- **2 members** are former members of the Bioelectromagnetics Society (BEMS), one of whom served as BEMS President.
- **2 members** have directed national government research programs.

References

- ¹ IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Vol. 80 (Non-Ionizing Radiation, Part 1: Static and Extremely Low-Frequency Electric and Magnetic Fields): <http://monographs.iarc.fr/ENG/Monographs/vol80>
- ² IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Vol. 102 (Non-Ionizing Radiation, Part 2: Radiofrequency Electromagnetic Fields): <http://monographs.iarc.fr/ENG/Monographs/vol102/>
- ³ ICBE-EMF Position Statement: Safeguarding Children's Health in the Digital Age: Addressing Screen Time, Wireless Radiation, Extremely-Low Frequency, Nonionizing Electromagnetic Fields Exposures. 2024 <https://icbe-emf.org/wp-content/uploads/2026/09/ICBE-EMF-Child-Health-Cell-Phone-Cell-Tower-EMF-Position-Statement-PDF-982026-1.pdf>
- ⁴ ICBE-EMF Position Paper: <https://icbe-emf.org/wp-content/uploads/2025/01/ELECTROMAGNETIC-HYPERSENSITIVITY-EHS-IS-A-HUMANITARIAN-CRISIS-THAT-REQUIRES-AN-URGENT-RESPONSE-1.pdf> 2024.
- ⁵ 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.
- ⁷ FCC's Radiofrequency Radiation Human Exposure Limits, eCFR: 47 CFR 1.1310 <https://www.ecfr.gov/current/title-47/chapter-I/subchapter-A/part-1/subpart-I/section-1.1310>

⁸ International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines (1998):

<http://www.icnirp.org/cms/upload/publications/ICNIR-Pemfgdl.pdf>

⁹ ICNIRP Statement on EMF Exposure Guidelines: <http://www.icnirp.org/cms/upload/publications/ICNIRP-StatementEMF.pdf>

¹⁰ Dr. Henry Lai's RF Abstracts

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¹¹ International EMF Scientist Appeal, <https://emfscientist.org>

¹² Mevissen M, Ducray A, Ward JM, Kopp-Schneider, McNamee JP, Wood WW, Rivero TM, Straif K. Effects of radiofrequency electromagnetic field exposure on cancer in laboratory animal studies, a systematic review. *Environ Int.* 2025;199:109482. 10.1016/j.envint.2025.109482.

¹³ Cordelli E, Ardoino L, Benassi B, Consales C, Eleuteri P, Marino C, Sciortino M, Villani P, Brinkworth H, Chen M, P McNamee G, Wood J, Belackova AW, Verbeek L, Pacchierotti J. Effects of radiofrequency electromagnetic field (RF-EMF) exposure on male fertility: A systematic review of experimental studies on non-human mammals and human sperm in vitro. *Environ Int.* 2024;185:108509. 10.1016/j.envint.2024.108509

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