FCC

Comment Tracking Number

#mvi-kbak-24eh

Re: HHS-OASH-2026-0397, Request for Information on EMFs, RF Radiation, and Wireless Radiation Exposure

I submit this comment as a concerned member of the public suffering with EHS. I ask HHS to treat this RFI as the first step toward full implementation of the federal electronic-product-radiation responsibilities established by Public Law 90-602 and now codified at 21 U.S.C. sections 360hh through 360ss.

Questions 5, 6, and 12 — Standards and evidence below current limits: Current FCC limits are organized primarily around avoiding acute thermal effects. They were not developed as lifetime cancer, reproductive, developmental, or neurological risk standards. HHS should independently evaluate the National Toxicology Program findings, the Ramazzini Institute findings, the WHO-commissioned animal-cancer and reproductive reviews including all corrigenda, and the 2026 Melnick-Moskowitz quantitative risk assessment. HHS should reproduce the risk calculations, publish sensitivity analyses, and explain whether the current whole-body public limit is protective across a lifetime.

Questions 5(p), 8, and 13 — Real-world exposure and waveform: Exposure classification should include carrier frequency, field amplitude, pulse repetition, pulse width, duty cycle, rise and fall times, peak-to-average ratio, modulation, polarization, beamforming, simultaneous frequencies, distance, near-body operation, cumulative duration, developmental timing, and recovery interval. Studies should compare different waveforms at the same average SAR or power density. Average absorbed power should not be presumed to capture every biologically relevant characteristic.

Questions 11 and 15 — Sensitive populations and infrastructure: HHS should establish separate assessment and guidance for children, pregnancy, workers, people with implanted devices, and people with preexisting conditions. It should evaluate cumulative exposure in homes, schools, childcare facilities, healthcare settings, workplaces, and neighborhoods with dense antenna deployment.

Questions 10, 16, and 17 — Surveillance and federal research: HHS should restore an independent, long-term RF research program with modern waveforms, prenatal and juvenile cohorts, reproductive and multigenerational endpoints, blinded pathology, preregistration, open data, and independent dosimetry. CDC should develop exposure and health surveillance; NIH should fund mechanisms and replication; FDA should evaluate electronic-product-radiation performance, disclosure, and exposure-reduction options under existing law.

Question 16 — Bioelectric mechanisms: Federal research should measure time-resolved calcium signaling, membrane voltage, mitochondrial membrane potential, ATP and redox dynamics, reactive oxygen species, gene-expression timing, DNA repair, mitochondrial quality control, and post-exposure recovery. The 2026 *Cell* study identifying CYB5B-dependent EMF transduction through

rhythmic calcium oscillations provides a concrete experimental lead. Voltage-gated S4 sensor pathways, mitochondrial amplification, and spin-sensitive redox chemistry should be tested with knockout, rescue, and pathway-specific controls.

Questions 5(o), 9, and 18 — Exposure reduction and alternatives: HHS should develop and test practical methods to minimize unnecessary exposure, as contemplated by 21 U.S.C. section 360ii. Recommendations should prioritize fiber and Ethernet for fixed connections, wired operation where mobility is unnecessary, meaningful radio-off controls, transparent consumer disclosure, and Li-Fi compatibility for indoor high-data applications, especially in schools and healthcare settings.

I also ask HHS to place its completed assessment and recommendations into FCC ET Docket 13-84 so the FCC's response to the 2021 court remand is informed by a transparent health-agency record. Uncertainty should lead to better research and lower avoidable exposure, not permanent reliance on a 1996 framework.