

**Before the
White House Environmental Justice Advisory Council
Washington, D.C.**

In the Matter of: Executive Order 14096 on)
Environmental Justice Science, Data and) Docket ID No. EPA-HQ-OEJECR-2024-0147
Research, Environmental Justice Scorecard and)
the Justice40 Initiative)

**COMMENTS OF ADVOCATES FOR THE EMS DISABLED
OCTOBER 23, 2024**

FILING PARTIES

The parties listed below collectively constitute the “Advocates for the EMS Disabled,” have given their permission to be included here and join together to submit these Comments:

The National Call for Safe Technology, Odette Wilkens, Chair & General Counsel; Wired Broadband, Inc. (non-profit), Odette Wilkens, President & General Counsel, Forest Hills, NY; Sheila Resseger, M.A., Co-Founder, Cranston, RI; Susan Molloy, M.A., Snowflake, AZ; Coloradans for Safe Technology, Andrea Mercier (Mother of a severely disabled child who is adversely impacted various forms of non-ionizing radiation), Colorado Springs, CO; Coloradans for Safe Technology, Nancy VanDover, DVM, OMD, Dipl Acup, EMS Disabled; Deborah Shisler, EMS Disabled, CO; La Plata for Safe Technology, Ingrid Iverson, EMS Disabled, CO; Virginians for Safe Technology, Jenny DeMarco and Mary Bauer, Fredericksburg, VA; NY4Whales & NY4Wildlife Taffee Williams, President, Tuckahoe, NY; Safe Tech International, Sara Aminoff, Union City, CA; Safe Tech International, Kate Kheel, Taneytown, MD; Safe Tech International, Patricia Burke, Millis, MA; Safe Tech Westchester, Ruth F. Moss, Westchester, NY; Sharon Behn, Arden, NC; Michele Hertz, EMS Disabled, Westchester, NY; Safe Tech Hawaii, Debra Greene, PhD, Maui, Hawaii; Amy Harlib, New York, NY; Gabriela Munoz, EMS Disabled, Carmel, NY; Arlene Sanchez, MBA, PMP, EMS Disabled, Albuquerque, NM; Lisa Allen, Plainfield, NJ; EMF Safety Network, Sidnee Cox, Co-director, Windsor, CA; Rosemarie Russell, EMS Disabled, Hurricane, UT; EMF Radiation Solutions, Shari Champagne, Houma, LA; Safe Tech Tucson, Tucson, AZ; EMF Wellness, Lisa Smith, PhD, Electromagnetic Radiation Specialist, Tucson, AZ; Ghislaine Sosa, EMS Disabled, NY, NY; Grace Hilbert, EMS Disabled, Annandale, VA; Michael Hilbert, Annandale, VA; Safe Technology, MN, Leo Cashman, St. Paul, MN; Southwest Pennsylvania for Safe Technology, Susan Jennings, MPA BA, Founder, Mount Pleasant, PA; Massachusetts for Safe Technology, Cece Doucette, Ashland, MA; Floris Freshman, Artist, BFA Theatre Arts, EMS Disabled, Scottsdale, AZ; National Health Federation, Scott C. Tips, JD, President & General Counsel; Linda Cifelli, Retired Registered Nurse, Williamsburg, VA; Virginia Farver, EMS Disabled, Fort Collins, CO; 5G Free California, Julie Levine, MSW, EMS Disabled, Topanga, CA; South West Ohio for Responsible Tech (SWORT), Erin McDowell, RN, Rocky River, OH; Craig McDowell, veteran, Rocky River,

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Introduction

We applaud President Biden’s Executive Order (EO) 14096, “Revitalizing our Nation’s Commitment to Environmental Justice for All,” to protect the public by restoring and protecting a healthy environment, with access to clean air and abundant green spaces, and ensuring “just treatment” and “meaningful opportunities to participate in decisions that impact their health and environment.”¹

As an environmental justice issue, the contamination of our air with wireless radiation – also known as electro-magnetic (EM) radiation or radio frequency (RF) radiation – is an underappreciated, and often unknown, threat to the public. It is a pollutant that is endangering the public and the environment on a continuous, 24/7 basis, without reprieve, in extreme proximity to their homes, businesses, schools and parks. Wireless infrastructure deployment is being mandated by the FCC, allowing the telecommunications industry wide discretion on the irresponsible deployment of wireless infrastructure in communities without any need to show evidence of (a) a gap in service or (b) bridging the digital divide.² The FCC is **shielding industry from liability** rather than encouraging industry to compete on safety.³

Industry calls this radiation a pollutant in their cellular device protection plans.⁴ Major insurance companies refuse to cover claims for personal injury from RF radiation (referred to as “the next asbestos” and especially 5G which is called “off the leash” risk), imposing automatic policy exclusions.⁵ There is no federal agency doing research on the public hazards of RF radiation – not the EPA, FDA, FCC, CDC, etc. The public has already been injured or disabled by this radiation, without the opportunity for legal recourse or accommodation otherwise required under the Americans with Disabilities Act (ADA).

The government mandating compelled public exposure to RF radiation is the BIGGEST environmental justice issue. The resulting irresponsible wireless deployment, particularly of 5G, is being actively

¹ <https://www.federalregister.gov/documents/2023/04/26/2023-08955/revitalizing-our-nations-commitment-to-environmental-justice-for-all>.

² The FCC’s “Small Cell Order,” FCC 18-133 (83 Fed. Reg. 51867) and the FCC’s “Third Report and Order and Declaratory Ruling,” FCC 18-111.

³ If wireless were so safe and desirable, why does the federal government need to trample on local governments to force deployment? As an example of federal preemption mandating deployments, section 6409 of the 2012 Middle Class Tax Relief and Jobs Act (47 USC §1455), under which the majority of wireless facilities are deployed today, mandates that: “a State or local government may not deny, and shall approve, any eligible facilities request.”

⁴ <https://ehtrust.org/wp-content/uploads/device-protection-brochure-nationwide.pdf>.

⁵ <https://ehtrust.org/liability-and-risk-from-5g-and-cell-towers/>; <https://5gtechnologynews.com/insurance-companies-can-refuse-claims-related-to-electromagnetic-radiation-illnesses/>; <https://ehtrust.org/wp-content/uploads/Swiss-Re-SONAR-Publication-2019-excerpt-1.pdf> at 29; <https://ehtrust.org/key-issues/reports-white-papers-insurance-industry>.

promoted and protected by the FCC⁶ despite actual notice to the FCC of adverse biological outcomes even within its RF radiation limits for human exposure.⁷

“Your hands are tied” is a common refrain that telecommunications carriers tell local governments, designed to stop any community dialogue whatsoever on the wireless infrastructure deployment adversely affecting their communities. Contrary to this refrain, the Telecommunications Act of 1996 (TCA) promotes cooperative federalism between state and federal governments. Also, a federal court ruled that the FCC rules⁸ stating that telecoms do not need to show a gap in phone service for preemption to apply are not supported by the TCA.⁹ Nevertheless, the FCC is enabling this behavior by allowing telecoms to use the FCC’s rules¹⁰ as an imprimatur to enter local communities with a big club to crush any opposition, even when such opposition is based on legitimate aesthetic, fire safety, environmental and biological effects, or lack of evidence of a gap in service.¹¹ What results is a denial of fundamental due process of notice and opportunity to be heard, without even reaching the level of meaningful participation in decisions affecting them otherwise directed under EO 10496.

The FCC’s hard tactics are in complete contradiction with EO 14096, where access to clean air or safe green spaces is compromised, with no “just treatment,” and ***willful and intentional denial*** of any “meaningful opportunities to participate in decisions that impact their health and environment.”

This becomes particularly poignant when the TCA does not allow for legal recourse for personal injury from RF radiation so long as the telecoms are operating within the FCC wireless limits for human exposure,¹² while those limits no longer protect the public. The FCC’s docket contains 11,000 pages of

⁶ See the FCC’s “Small Cell Order,” FCC 18-133 (83 Fed. Reg. 51867) and the FCC’s “Third Report and Order and Declaratory Ruling,” FCC 18-111.

⁷ Appeals Court Tells FCC to Address Non-Thermal Health Impacts of Radiation from Wireless Technology on Children, the Public, and the Environment, Aug. 25, 2021, <https://ehtrust.org/appeals-court-tells-fcc-to-address-non-thermal-health-impacts-of-radiation-from-wireless-technology-on-children-the-public-and-the-environment/>; see also the 27 volumes of evidence of scientific, peer-reviewed, studies in the FCC Docket (click on “Documents Filed with the Court: The Evidence”) https://childrenshealthdefense.org/legal_justice/chd-successfully-challenges-the-fccs-outdated-wireless-radiation-exposure-guidelines/#documents.

⁸ The FCC’s “Small Cell Order,” FCC 18-133 (83 Fed. Reg. 51867) and the FCC’s “Third Report and Order and Declaratory Ruling,” FCC 18-111.

⁹ ExteNet Sys. v. Vill. of Flower Hill, No. 19-CV-5588-FB-VMS, 9-10 (E.D.N.Y. Jul. 29, 2022). The court ruled that, under the TCA, local governments have authority over the number and placement of wireless facilities, and to deny the irresponsible placement of wireless facilities. Therefore, the FCC rule that makes the deployment of 5G automatically preemptible under the TCA without showing a gap in phone service is erroneous and does not comply with the TCA.

¹⁰ The FCC’s “Small Cell Order,” FCC 18-133 (83 Fed. Reg. 51867) and the FCC’s “Third Report and Order and Declaratory Ruling,” FCC 18-111.

¹¹ New York City, NY opposition: over 25% of NYC residents (about 2 million people) oppose the 5G Towers, including historical preservation organizations, and local, state and federal legislators at <https://www.dropbox.com/scl/fi/5wx7t2v7jv2ouqu2hfma8/Position-Paper-Link5G-Cell-Towers-10-12-23.pdf?rlkey=1tkftg07nbotpoq768jy9in86&st=38jm6y4p&dl=0>; Montgomery County, MD opposition: <https://www.montgomerycountymd.gov/COUNCIL/OnDemand/testimony/20220913/item7.html>; Montgomery County resident protests, <https://www.youtube.com/watch?v=mbII8WYcOuM>.

¹² The plain text of 47 USC §332(c)(7)(B)(iv) preempts zoning decisions on the placement of cell towers on the basis of environmental effects of radiofrequency emissions within FCC regulations.

scientific, peer-reviewed, studies showing biological effects within its limits. The FCC is under a 2021 federal appellate court order to re-examine those limits, which it has not yet done. Therefore, this conundrum denies a “healthy environment” and “just treatment” – the public is left without legal recourse to defend against government-sanctioned, compelled exposure to RF radiation from wireless infrastructure in extreme proximity to their homes, businesses and schools.

Americans then find themselves between a rock and a hard place, because while the FCC fails to re-examine its limits dating back to 1996, industry continues its expansion of wireless infrastructure, shielded from liability, with Americans being increasingly injured and disabled without judicial recourse to stop the continuous assault of RF radiation near home, work and school. Facing life-threatening RF radiation, some have had to evacuate their premises, now toxic zones, in order to survive – and without compensation, an unlawful taking.

This ***parade of horrors*** also extends to over 70 federal bills that industry can also use as a club to take away all local control, cede power to the telecoms, mandate wireless deployment even over strenuous and legitimate local objections, and forever silence local communities¹³ – in effect, burying any semblance of environmental justice or the Justice40 Initiative in this area. The momentum is accelerating as telecoms are emboldened to bulldoze their way into communities who do not want or need them.

This is in conflict with EO 14096 which states:

Restoring and protecting a healthy environment—wherever people live, play, work, learn, grow, and worship— is a matter of justice and a fundamental duty that the Federal Government must uphold on behalf of all people.

Further amplifying on the EO, WHEJAC’s objectives, in relevant part, state that:

Every individual receives just treatment and has meaningful opportunities to participate in decisions that impact their health and environment. Access to clean air . . . transcends social and economic barriers . . . [A]ddressing legacy and current pollution safeguards the health of all people. Abundant and accessible public green spaces foster a restorative connection with nature.”

Our national forests which are our national treasures will also be adulterated by the deployment of wireless towers in our national parks where people go to escape into nature. Unfortunately, Americans suffering from exposure to wireless radiation are being left behind.

Therefore, in conflict with President Biden’s EO 14096 environmental justice initiatives, wireless infrastructure is being indiscriminately and irresponsibly deployed:

1. A healthy environment is not being protected

¹³ See Voting Guide to Federal Bills below the fold at “Download the National Call Federal Bill Documents” at <https://thenationalcall.org/advocacy-and-action/>.

2. The air is increasingly being polluted 24/7 by wireless radiation
3. Green spaces will diminish with the proliferation of cell towers in our national lands, including forests
4. Americans are being consistently denied any meaningful opportunity to participate in decisions that impact their health and environment; they are purposely shut out of any ability to do so, with industry overtaking local government advising them, incorrectly, that their “hands are tied” and must allow cell towers to be placed wherever the telecoms want without regard for what is best for the community.

Irresponsible deployment of wireless infrastructure is not better or healthier for the public, and is not what the public wants or needs. Moreover, if the federal telecom bills and provisions are passed, EO 14096 would be reduced simply to a wish list, with no force or effect in this area. Therefore, we will delineate below our recommendations to ensure that EO 14096 accomplishes its stated goals with vibrant and living principles.

To enshrine EO 10497 principles of environmental justice and Justice40 Initiative into the responsibilities of federal agencies, we recommend that the following should be brought into alignment:

1. The FCC’s rules¹⁴ must be repealed;
2. The FCC must comply with the 2021 federal appellate court order to examine its RF radiation limits for human exposure to bring into alignment with current, peer-reviewed science; and
3. Other federal agencies who have been shirking responsibility for providing accommodations to those injured and disabled by exposure to RF radiation must now comply with their responsibilities under the ADA.

In these comments, we will focus on the following areas where federal agencies and federal policies can better align with EO 10497 principles of environmental justice:

1. Federal Agencies’ Responsibility to Monitor RF Radiation for Public Safety
2. FCC’s Legal Obligation to Protect the Public Interest
3. Federal Agencies Creating Barriers for Accommodation from Exposure to RF Radiation and the Need for Collaboration Among Federal Agencies to Create Opportunities for Accommodation

Addendum A: Biological Effects of RF Radiation

Addendum B-1: HUD FHAP Advisory Disclaiming Jurisdiction Over EMS Issues

Addendum B-2: HUD FHEO Advisory Disclaiming Jurisdiction Over EMS Issues

Addendum C: Increased Exposure from 5G/4G “Small” Cell Antennas Located Close to People

Addendum D: In Their Own Words (from those disabled from RF radiation)

The above Addenda are attached hereto and incorporated herein by this reference.

1. Federal Agencies’ Responsibility to Monitor RF Radiation for Public Safety

¹⁴ The FCC’s “Small Cell Order,” FCC 18-133 (83 Fed. Reg. 51867) and the FCC’s “Third Report and Order and Declaratory Ruling,” FCC 18-111.

The EPA has historically been the federal agency responsible for studying the effects of RF radiation on the public. However, while researching the safety of this radiation in the 1990s, it concluded that the radiation was dangerous producing biological effects. The EPA was immediately defunded from any further research for public safety of RF radiation – to date.¹⁵ The EPA needs to be re-funded to protect the public and research the safety of these new technologies, otherwise we may witness a catastrophic health disaster.

The 1990s research effort was in response to a broadcast on Larry King Live interviewing a man whose wife died of brain cancer which he alleged was caused from the repeated use of her cell phone.¹⁶ X-rays showed that the tumor site was where she held her cell phone.¹⁷ The next day telecom stocks declined. In an effort to staunch public criticism, industry funded the research which was done under the auspices of the EPA and other federal agencies.

The research program was run by a Chief Scientist under Wireless Technology Research, LLC (WTR), an independent, non-profit entity, with \$28.5 million in funding from the wireless industry (sent into a blind trust) and with scientific oversight by both an independent Peer Review Board at the Harvard School of Public Health and a U.S. Government Interagency Working Group, chaired by the FDA, and including EPA, OSHA, NIOSH, CDC, FCC, and NIH.¹⁸ This remains the largest and most comprehensive, multi-disciplinary program looking into wireless technology health effects and risk management anywhere in the world to date.¹⁹ The results of this peer reviewed research were that wireless radiation is biologically active producing biological effects and potentially hazardous to human health.²⁰

The history in a nutshell. Prior to the Telecommunications Act of 1996 (TCA), cabinet-level regulatory agencies were responsible for the safety of those exposed to radio frequency radiation: FDA was responsible for devices including cell phones; EPA was responsible for emissions from wireless infrastructure including cell towers; OSHA was responsible for workplace exposures. In the TCA, as a means of simplifying deployment of new digital wireless phones and facilitating the first-ever spectrum auctions to the private sector, the FDA, EPA and OSHA were relegated to advisory roles and the full authority for public safety was vested in the non-regulatory agency, the politically structured FCC.²¹ The

¹⁵ Overpowered, What Science Tells Us About the Dangers of Cell Phones and Other WiFi-Age Devices, Martin Blank, PhD, 2014 at 110-112; “Dr. Martin Blank is an expert on the health-related effects of electromagnetic fields and has been studying the subject for over 30 years. He earned his first PhD from Columbia University in physical chemistry and his second from the University of Cambridge in colloid science. From 1968 to 2011, he taught as an Associate Professor at Columbia University. ... Dr. Blank has served as an invited expert regarding EMF safety for Canadian Parliament, for the House Committee on Natural Resources and Energy in Vermont, and for Brazil’s Supreme Federal Court.” (Quoted from inside book jacket)

¹⁶ Cell Phones, Invisible Hazards in the Wireless Age, Dr. George Carlo and Martin Schram, 2001 at 7; Overpowered at 112-13.

¹⁷ Overpowered at 113.

¹⁸ Wireless Phones and Health II: State of the Science 2002 Edition, edited by George L. Carlo; Wireless Phones and Health: Scientific Progress, edited by George L. Carlo.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid; see also, <https://ehtrust.org/the-regulation-of-wireless-radiation-in-the-united-states-exemplar-of-a-regulatory-gap/>.

FCC had neither the competency nor the resources to carry out the regulatory responsibilities and as such, **wireless technology remains to this date in a regulatory void** where consumers, proximal residents, and the environment are largely un-protected.²² Therefore, the EPA must reclaim its jurisdiction to continue reviewing potential health effects of wireless radiation.

Chronology of FCC's lack of oversight:

- 1996: FCC issues exposure guidelines, while ignoring input from EPA²³
- 2012: GAO report recommends FCC review its 1996 exposure limits²⁴
- 2013-19: FCC opens docket and receives 11,000 pages of scientific studies of harm²⁵
- 2019: FCC closes the docket and decides not to update its wireless limits²⁶
- 2021: US Court of Appeals DC Circuit rules that FCC's decision not to update exposure limits was "arbitrary and capricious";²⁷ FCC has not yet complied with the court order to address long-term exposure effects, including on children
- FCC responsible for exposure guidelines despite having no health or safety competency. There is no independent safety body, like NTSB for transportation.

The FDA has confirmed that they do not assess the safety of wireless infrastructure:

"Please be aware the Food and Drug Administration (FDA) does not have regulatory authority over cell phone towers and has not done an assessment on the safety of radiofrequency energy being emitted from antennas located on cell phone towers."²⁸

²² Ibid.

²³ See note **Error! Bookmark not defined.** below, at footnote 31 of Environmental Health Trust testimony, 3/27/24.

²⁴ Exposure and Testing Requirements for Mobile Phones Should Be Reassessed. US GAO, 2012

<https://www.gao.gov/products/gao-12-771>.

²⁵ <https://ehtrust.org/environmental-health-trust-et-al-v-fcc-key-documents/>.

²⁶ Resolution Of Notice Of Inquiry, Docket 13-84, 12/4/19 <https://www.fcc.gov/document/fcc-maintains-current-rf-exposure-safety-standards>.

²⁷ *Environmental Health Trust et al. v. FCC*, 2021, DC Circuit

- The D.C. Circuit Court of Appeals ruled against the FCC for its failure to provide a reasoned explanation under the Administrative Procedures Act to maintain its 1996 wireless exposure limits without addressing extensive evidence of harm. The docket contained 11,000 pages of scientific, peer-reviewed studies showing harm below the FCC limits, including accounts of injury. The court wrote that the FCC failed to respond to "record evidence that exposure to RF radiation at levels below the Commission's current limits may cause negative health effects unrelated to cancer."
- The Court ordered the FCC to address impacts on children, long-term exposure effects on health, and the environment. To date, the FCC has failed to comply with the court order. Therefore, its 1996 limits cannot be relied upon to protect the public.

[https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/\\$file/20-1025-1910111.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/$file/20-1025-1910111.pdf)

²⁸ <https://ehtrust.org/factcheck-the-fda-has-not-deemed-5g-or-cell-tower-radiation-as-safe/>.

Meanwhile, there is no one regulating safety of this radiation – not the EPA, FDA, FCC or the CDC since the mid 1990s. The National Toxicology Program recently announced that it will no longer study any public safety issue related to wireless radiation.

This regulatory void is particularly troublesome when considering that the FCC only recently disclosed in response to FOIA requests, that tests it conducted in 2019 on cellphones manufactured by four companies exceeded the agency’s radio frequency exposure limits. Those facts were not disclosed to the public or to the D.C. Circuit Court of Appeals that was ruling on the FCC emission limits in 2021. Prior to this disclosure, there has been wide public criticism of the FCC’s limits not protecting public safety. We indeed are flying blind, putting technology ahead of science that would otherwise protect the public.

Americans across the country are being exposed to the hazards of wireless technology, which are unnecessary to reap its benefits. RF radiation has caused many injuries giving rise to disabilities even within the FCC’s “safety” exposure limits. The public cannot use a wireless technology that is harming them – hence, giving rise to **digital exclusion** of those who have been injured or disabled by RF radiation, rather than inclusion.

Reducing RF radiation alone would greatly decrease the number of individuals who are disabled from RF radiation (electromagnetically sensitive disabled, or “EMS Disabled”). One way is, e.g., for the DOJ to hold the FCC to account for its failure to comply with a 2021 federal appellate court remand order to review its outdated 1996 RF radiation exposure limits for public safety. The second way is for the federal agencies to collaborate in providing access and accommodation for the EMS Disabled.

(a) Who are the EMS Disabled?

Those suffering injuries from exposure to radio frequency (RF) radiation are known as having electromagnetic sensitivity (EMS), also referred to as radiation poisoning or microwave sickness.²⁹ Hence, those with ensuing disabilities are referred to as “EMS Disabled.” Their disabilities give rise to “impairment[s] that substantially limit[] one or more major life activities” under the ADA.³⁰ The EMS Disabled require equal access to web services in a manner that does not injure them and that does not otherwise put them in harm’s way. They cannot use a technology that is injuring them.

What is emitted from wireless devices and facilities is commonly referred to as radio frequency (RF) radiation, electro-magnetic radiation (EMR), electro-magnetic fields (EMF), microwave radiation or wireless radiation. It is the **persistent pulsations** of RF radiation that cause adverse health outcomes

²⁹ Electromagnetic Sensitivity, also known as “microwave sickness,” <https://ehtrust.org/science/electromagnetic-sensitivity/>.

³⁰ 42 U.S.C. §12102(1)(A).

and ensuing disabilities.³¹ It is the pulsed high peak power emissions that, for example, increase the potential for traumatic brain injury and consequent cognitive impairments.³²

EMS disabilities encompass a constellation of symptoms which can include: sleep disturbances, chronic fatigue, chronic pain, poor short-term memory, difficulty concentrating (e.g., “brain fog”), skin problems, dizziness, loss of appetite, heart palpitations, tremors, vision problems, tinnitus, nose bleeds, asthma, reproductive problems and headaches, to name a few.³³ There are other sources showing the proliferation of such disabilities.³⁴ The symptoms are from the physiological injuries that individuals have sustained from exposure to wireless devices and facilities.³⁵ Therefore, exposure to mobile apps used on mobile devices, without an alternative means of accessing the web content, will just make matters worse for the EMS Disabled, worsening their condition and denying them equal access to web content and services from public entities or public anchor institutions otherwise made available to the general public and other disabled individuals.

2. FCC’s Legal Obligation to Protect the Public Interest

The FCC was created under the Communications Act of 1934 with the statutory “purpose of promoting safety of life and property through the use of wire and radio communications.”³⁶ The FCC has a statutory obligation to protect the public interest. However, the FCC has failed its essential purpose by promoting wireless rules and policies that jeopardize life and property by worsening energy consumption, reducing property values and creating a public safety hazard by compelling involuntary exposure to RF radiation to the public, including children.

It has been reported that the FCC is an agency influenced and “captured” by the very industry that it is charged by law to regulate. A former attorney in the FCC’s Wireless Telecommunications Bureau within the FCC’s National Environmental Policy Act (NEPA) department, recently published an article on how the FCC is a captured agency.³⁷ The Center for Ethics at Harvard also published an article that

³¹ Dr. Magda Havas: WiFi in Schools is Safe. True or False? at 7:15, <https://www.youtube.com/watch?v=6v75sKAUFdc>; see also, Brief of Children’s Health Defense, and Building Biology Institute, et al as Amici Curiae in Support of Appellees/Cross-Appellants “Customers,” Sept 14, 2021, <https://childrenshealthdefense.org/wp-content/uploads/Brief-and-Addendum-Submitted-9-14.pdf>.

³² Computational modeling investigation of pulsed high peak power microwaves and the potential for traumatic brain injury. *Sci Adv.* 2021 Oct; 7(44). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8555891/>.

³³ “Electrohypersensitivity as a Newly Identified and Characterized Neurologic Pathological Disorder” *Int’l Journal of Molecular Sciences*, <https://www.mdpi.com/1422-0067/21/6/1915>.

³⁴ Electrohypersensitivity (EHS) Is An Environmentally-Induced Disorder That Requires Immediate Attention, Dr. Magda Havas, *J. Sci Discov* (2019), <http://www.e-discoverypublication.com/wp-content/uploads/2019/03/JSD18020-final.pdf>; Presentation by Karl Maret, M.D., M.Eng., Presentation, 1-17-20, <https://www.youtube.com/watch?v=Xilsy3mcjCY>; “The Bioinitiative Report,” <https://bioinitiative.org/>.

³⁵ Letter by Dr. Beatrice Golomb, Professor of Medicine, UC San Diego School of Medicine, Aug. 22, 2017, <https://mdsafetech.org/wp-content/uploads/2017/09/golomb-sb649-5g-letter-8-22-20171.pdf>.

³⁶ 47 U.S. Code § 151 - Purposes of chapter; Federal Communications Commission created at <https://www.law.cornell.edu/uscode/text/47/151>.

³⁷ <https://doi.org/10.1080/00139157.2022.2131190>.

underscored this issue.³⁸ It has been reported that FCC employees own telecom stock in the very companies that the FCC is regulating, which is prohibited, and which does not imbue confidence that the FCC is working in the public interest.³⁹ Another article focuses on the FCC's responsibility to protect the environment which it concludes the FCC does not.⁴⁰

Recommendations:

1. Have the FCC repeal its "Small Cell Order," FCC 18-133 (83 Fed. Reg. 51867) and its "Third Report and Order and Declaratory Ruling," FCC 18-111.
2. Compel FCC compliance with the 2021 federal appellate court order to examine its RF radiation limits for human exposure against peer-reviewed science in its docket.

Climate Change. In terms of [climate change](#), 5G is an energy hog, a [battery vampire](#) (industry article term), expected to [increase consumption 61x](#) between 2020 and 2030. Ironically, it is not being considered in climate change.

People Prefer Fiber. Former FCC Chair [Tom Wheeler](#) (who came out of the wireless industry) testified that fiber is future proof with **wireless only as a last resort**. Wireless is inferior in every way compared to wired, e.g., 5G will never be as fast, reliable, secure or safe as fiber, short life span of wireless of up to 5 yrs, constant maintenance. Wired? Fiber lasts at least 25-50 yrs, little maintenance, capable of quantum broadband speeds, as well as superior cybersecurity (see Chattanooga, TN – "[Gig City Goes Quantum](#)"). The free market economy has spoken, and [2/3 prefer fiber to the premises](#). It has been an environmental injustice to foist wireless infrastructure, especially on low income communities who don't want it. It has been an environmental justice issue to get fiber to the premises, e.g., [Los Angeles](#), where a low-income community's digital divide didn't get solved until they got fiber.

Property Devaluation. Homeowners complain about the devaluation of their property when cell towers are built nearby. There are potential buyers who do not want to live near cell towers, and in some areas that have cell towers, property values have gone down by as much as 20%.⁴¹ For example, in the Town of Islip, in NY, the zoning board denied the application for the siting of a cell tower based, among other things, on the potential devaluation of their homes, corroborated by experts."⁴²

³⁸ "Captured Agency" by Norm Alster, https://ethics.harvard.edu/files/center-for-ethics/files/capturedagency_alster.pdf.

³⁹ <https://arstechnica.com/tech-policy/2023/03/fcc-let-employees-own-stock-in-comcast-and-other-top-isps-watchdog-says/?comments=1&comments-page=1>; see also, 47 USC 154.

⁴⁰ See, e.g., "The FCC is Supposed to Protect the Environment. It Doesn't." ProPublica, May 2023, <https://www.propublica.org/article/fcc-environment-cell-towers-failures?emci=9360893b-ebe8-ed11-8e8b-00224832eb73&emdi=8448fcc6-f1e8-ed11-8e8b-00224832eb73&ceid=8208674>.

⁴¹ *The Electrifying Factor Affecting Your Property's Value*, Wall Street Journal, Aug 15, 2018, <https://www.wsj.com/articles/the-electrifying-factor-affecting-your-property-s-value-1534343506>. A study spanning 1984 to 2002 found that the prices for 4,283 residential sales in 4 suburbs were reduced by about 21% (see, *Cell Towers and Our Real Estate Values*, October 4, 2014, <https://dscelltower.wordpress.com/2014/10/04/cell-towers-and-our-real-estate-values/>).

⁴² *T-Mobile Northeast LLC v. Town of Islip*, 893 F. Supp. 2d 338, 359 (E.D.N.Y. 2012), <https://casetext.com/case/tmobile-ne-llc-v-town-of-islip>.

Adverse Biological Effects. Evidence of biological harm is **clear and convincing**, for human health (cancer and noncancer), children, plants, animals, insects, and microbes.⁴³ Federal policies ignore millions of Americans disabled by wireless radiation.⁴⁴ See **Addendum A** for a fuller explanation of the biological effects, especially on children. See **Addendum C** of biological effects close to cell towers.

It is estimated that at least 30% of population is afflicted from this radiation poisoning and close to 1% is severely disabled that they can no longer work or live in areas that have this radiation.⁴⁵ The disabled didn't see it coming. Exposure gives rise to a [constellation of symptoms](#), some of which include: headaches, nausea, vomiting, tinnitus, hearing loss, heart arrhythmia, tachycardia, neurological disorders; oxidative stress; immune dysfunction; ADHD, and damage to the blood-brain barrier. Here are some highlights:

1. There has been no pre-market testing of 5G for public health or safety, as confirmed by US Sen. Blumenthal (CT) during a Feb. 2019 hearing of wireless telecom executives. The telecom executives conceded that they were not aware of any independent scientific studies on the safety of 5G. Sen. Blumenthal also criticized the FCC and the FDA for inadequate answers on questions of public health. Sen. Blumenthal concluded, "We're kind of flying blind here as far as health and safety is concerned."⁴⁶
2. Eight studies since Jan 2023 show adverse health impacts from exposure to 5G towers. Previously healthy individuals developed typical "microwave syndrome" symptoms shortly after the towers were installed: headaches, abnormal fatigue, heart arrhythmia, burning skin, trouble

⁴³ See testimony submitted by Environmental Health Trust to Senate Commerce Committee, 3/27/24, regarding spectrum policy and harms from radiofrequency radiation

<https://ehtrust.org/wp-content/uploads/EHT-Testimony-to-Senate-Commerce-Committee-on-S3909-03272024.pdf>

National Toxicology Program 2018: clear evidence of cancer (highest level of evidence)

<https://ntp.niehs.nih.gov/whatwestudy/topics/cellphones#studies>

Woman living near cell tower diagnosed with 51 strokes,

https://www.momsacrossamerica.com/woman_living_near_cell_tower

Children and teachers diagnosed with cancer after cell tower installed near elementary school

https://www.youtube.com/watch?v=-9TMTexPb_0&t=128s

⁴⁴ See Reply Comments of Advocates for the EMS Disabled, FCC Docket 22-69

<https://thenationalcall.org/wp-content/uploads/2023/09/FCC-Reply-Comments-EMS-Disabled-Docket-22-69-DEI-NPRM-4-20-23-FINAL.pdf>.

⁴⁵ The Prevalence of People with Restricted Access to Work in Manmade Electromagnetic Environments,

<https://mdsafetech.files.wordpress.com/2019/10/2018-prevalence-of-electromagnetic-sensitivity.pdf>.

⁴⁶ <https://ehtrust.org/health-effects-of-5g-wireless-technology-confirmed-at-us-senate-hearing-after-senator-blumenthal-questions-industry/>; see also, <https://mdsafetech.org/2019/02/13/no-research-on-5g-safety-senator-blumenthal-question-answered/>.

concentrating.⁴⁷ The significance of these reports is that non-ionizing radiation⁴⁸ from 5G — well below levels allowed by authorities — can cause health problems in individuals who had no prior history of electromagnetic sensitivity.⁴⁹ Dr. Lennart Hardell, lead author of the reports and a world-renowned scientist on cancer risks from radiation, affirms these reports as “groundbreaking” because they serve as the “first warning of a health hazard.”⁵⁰

3. The WHO’S International Agency for Research on Cancer (IARC) classified wireless radiation (2G and 3G) as a **possible human carcinogen** back in 2011,⁵¹ similar to lead, diesel fuel and gasoline engine exhaust.
 - a. The WHO carefully states on its website that “only a few studies have been carried out at the frequencies to be used by 5G”⁵² thereby skirting the issue of 5G safety. Indeed, a number of studies since Jan 2023 have already shown harm.⁵³
 - b. When the WHO states on its website lack of causality of harm from wireless radiation,⁵⁴ it is based on its 2011 IARC classification that wireless radiation (2G and 3G) is a **Class 2B possible carcinogen**. However, over a decade later, Dr. Miller, a former Senior Epidemiologist and Senior Scientist at the IARC has stated, “[t]here is sufficient evidence to now classify radiofrequency radiation as a human carcinogen.”⁵⁵

⁴⁷ <https://mdsafetech.org/2023/11/20/5g-health-effects-5-case-reports-of-health-symptoms-after-5g-cell-towers-placed-in-sweden/>; e.g., Jan 2023 study of 63 year old man and 62 year old woman where 5G antennas were installed on the rooftop of their home, https://www.gavinpublishers.com/assets/articles_pdf/Case-Report-The-Microwave-Syndrome-after--Installation-of-5G-Emphasizes-the-Need-for--Protection-from-Radiofrequency-Radiation.pdf and <https://childrenshealthdefense.org/defender/5g-radiation-microwave-syndrome-symptoms/>; Feb 2023 study of two previously healthy men where 5G antennas were installed on the rooftop of their business, <https://www.anncaserep.com/open-access/development-of-the-microwave-syndrome-in-two-men-shortly-after-9589.pdf>; April 2023 study of 52 year old woman whose apartment was 60 meters from a 5G base station, <https://acmcasereport.com/pdf/ACMCR-v10-1926.pdf?fbclid=IwAR2J-mE3XeBxqaXPQdFxsIf9Q23bMCer9vgUBHnCvJXBrgBv-w7YdRUDwF0>; see also, The microwave syndrome or electro-hypersensitivity: historical background <https://pubmed.ncbi.nlm.nih.gov/26556835/>.

⁴⁸ <https://childrenshealthdefense.org/emr/emf-key-terms-descriptions/>.

⁴⁹ <https://childrenshealthdefense.org/emr/emf-wireless-health-impacts/>.

⁵⁰ <https://www.stralskyddsstiftelsen.se/two-studies-show-that-5g-caused-the-microwave-syndrome-in-healthy-persons/>.

⁵¹ https://www.iarc.who.int/wp-content/uploads/2018/07/pr208_E.pdf.

⁵² <https://www.who.int/news-room/questions-and-answers/item/radiation-5g-mobile-networks-and-health>.

⁵³ <https://mdsafetech.org/2023/11/20/5g-health-effects-5-case-reports-of-health-symptoms-after-5g-cell-towers-placed-in-sweden/>; Jan 2023 study of 63 year old man and 62 year old woman where 5G antennas were installed on the rooftop of their home, https://www.gavinpublishers.com/assets/articles_pdf/Case-Report-The-Microwave-Syndrome-after--Installation-of-5G-Emphasizes-the-Need-for--Protection-from-Radiofrequency-Radiation.pdf and <https://childrenshealthdefense.org/defender/5g-radiation-microwave-syndrome-symptoms/>; Feb 2023 study of two previously healthy men where 5G antennas were installed on the rooftop of their business, <https://www.anncaserep.com/open-access/development-of-the-microwave-syndrome-in-two-men-shortly-after-9589.pdf>; April 2023 study of 52 year old woman whose apartment was 60 meters from a 5G base station, <https://acmcasereport.com/pdf/ACMCR-v10-1926.pdf?fbclid=IwAR2J-mE3XeBxqaXPQdFxsIf9Q23bMCer9vgUBHnCvJXBrgBv-w7YdRUDwF0>; see also, The microwave syndrome or electro-hypersensitivity: historical background <https://pubmed.ncbi.nlm.nih.gov/26556835/>.

⁵⁴ <https://www.who.int/news-room/questions-and-answers/item/radiation-5g-mobile-networks-and-health>.

⁵⁵ Professor Miller, MD, FRCP, FRCP (C), FFPH, FACE, is an eminent physician and expert in preventative medicine, a scientific advisor to various scientific and health authorities, and a former Senior Epidemiologist and Senior Scientist at the World Health Organization’s (WHO) International Agency for Research on Cancer (IARC), <https://phiremedical.org/2020-nir-consensus-statement-press-release/>; see Prof. Miller’s statement at 00:15:06 at <https://www.youtube.com/watch?v=S16QI6-w9I8>; see also Proceedings from a Symposium on the Impacts of

4. The National Toxicology Program of the U.S. Dept of Health and Human Services, commissioned by the Food and Drug Administration to conduct a \$30 million study, in 2018 found clear evidence of cancer: heart tumors were malignant schwannomas and brain tumors were malignant gliomas.⁵⁶ NTP is one of the most prestigious institutions in the world in toxicology. Indeed, in 1999 the FDA nominated to the NTP the study of RFR “with a high priority,” to conduct animal studies, stating that it was “not scientifically possible to guarantee that non-thermal levels of microwave radiation . . . will not cause long-term adverse health effects.”⁵⁷ Dr. Linda Birnbaum of the NIEHS – the NTP study concludes clear evidence of an association with cancer.⁵⁸
5. A study in 2000 commissioned by one of the major telecom carriers found links to cancer, leukemia, neurological disorders and cognitive impairment, with special caution for children and an acknowledgement of those already disabled from the radiation.⁵⁹
6. Telecom and cell phone manufacturers have filed patents to reduce the level of wireless exposure tied directly to health risks such as neurological disorders and cancer.⁶⁰
7. As early as 2015, over 230 scientists from over 40 countries have signed “The 5G Appeal” to halt the proliferation of 5G -- The International Scientists’ Appeal to the United Nations to Protect Humans and Wildlife from the unconstrained proliferation of wireless radiation.⁶¹ Other scientists have joined in consensus statements about their 5G concerns.⁶²
8. Thousands of scientific and medical studies show neurological disorders; increased risk of cancer and brain tumors; DNA damage; oxidative stress; immune dysfunction; cognitive processing

Wireless Technology on Health, Prof. Miller at 8, https://www.womenscollegehospital.ca/wp-content/uploads/2022/06/Symposium_Document_Final_Jan_12.pdf.

⁵⁶ <https://ntp.niehs.nih.gov/whatwestudy/topics/cellphones#studies> *Environmental Health Trust, et al v. FCC, Motion for Leave to File Brief of Amicus Curiae Joseph Sandri in Support of Petitioners Urging Reversal*, Aug. 5, 2020, <https://ehtrust.org/wp-content/uploads/20-1025-Amicus-Brief-Joe-Sandri.pdf>.

⁵⁷ Letter from the Dept of Health and Human Services to the National Toxicology Program at the National Institute for Environmental Health Studies, May 19, 1999, https://ntp.niehs.nih.gov/sites/default/files/ntp/htdocs/chem_background/exsumpdf/wireless051999_508.pdf.

⁵⁸ See Dr. Birnbaum letter and hyperlinked amicus brief <https://www.dropbox.com/scl/fi/nc7l00p8zxk8tj0l2a1yr/Dr.-Linda-Birnbaum-cell-tower-letter.pdf?rlkey=vq1i363i74umg9ybydrhmn5d&st=q9l49h88&dl=0> ; see also, <https://ehtrust.org/former-niehs-director-dr-linda-birnbaum-interviewed-about-cell-phone-radiation/>, and https://www.niehs.nih.gov/sites/default/files/news/newsroom/releases/2018/november1/11012018transcript_508.pdf and <https://www.saferemr.com/search?q=ntp> and

⁵⁹ T-Mobile Deutsche Telekom commissioned study by the Ecolog-Institute, April 2000, “Mobile Telecommunications and Health Review of the Current Scientific Research in View of Precautionary Health Protection,” <https://ehtrust.org/wp-content/uploads/ecolog2000.pdf>.

⁶⁰ Swisscom patent, 2004 at <https://www.dropbox.com/scl/fi/nwdfklq7r7j2wwsipv7ws/SwissCom-Patent-application-2003-2004-WO2004075583A1-1-1.pdf?rlkey=liuy6175hamj24lbuszpe7vux&st=5p2oy0ji&dl=0>; see also, “Manufacturers Own Patents to Cut Radiation,” RCR Wireless, June 4, 2001 at <https://www.dropbox.com/scl/fi/Orfwys743dgeqpifwu3ua/Manufacturers-own-patents-to-cut-radiation-RCR-Wireless-News.pdf?rlkey=e5hm46nyp9an6ugu4y005ldm3&st=xr7ocreh&dl=0>.

⁶¹ <http://www.5gappeal.eu/the-5g-appeal/>; see also, Dr. Martin Blank, PhD, Dept of Physiology and Cellular Biophysics, Columbia University, announcing the appeal early on and warning on wireless radiation, <https://www.youtube.com/watch?v=HgECRrabuZQ>; see also, <https://childrenshealthdefense.org/defender/5g-rollout-harm-regulation-profit/>.

⁶² <https://phiremedical.org/wp-content/uploads/2020/11/2020-Non-Ionising-Radiation-Consensus-Statement.pdf>.

effects; altered brain development, sleep and memory disturbances, ADHD, abnormal behavior, sperm dysfunction, and damage to the blood-brain barrier.⁶³

9. New Hampshire Commission that studied the health impacts of wireless radiation found that levels below the FCC emission limits can be harmful.⁶⁴
10. A comprehensive overview of the adverse biological effects on people and the environment is provided at https://ehtrust.org/wp-content/uploads/EHT-5G-Health-and-Environment-Open-Letter-3_2021-3.pdf.
11. Near Duluth, MN, a woman suffered 51 strokes after a nearby cell tower was “upgraded,” in addition to experiencing nausea, blind spots in her vision, orientation and balance difficulties.⁶⁵
12. There have been clusters of sickness around cell towers. For example:
 - a. The Board of Health of Pittsfield, MA issued an emergency order to turn off a 4G cell tower that injured 17 residents most of whom evacuated their homes.⁶⁶ Children were found vomiting in their beds, pets were vomiting and residents were becoming ill.⁶⁷ Because Verizon threatened to sue, the Board of Health was compelled to rescind the order, and the residents are filing suit against the city.
 - b. In Rippon, CA when a cell tower was placed near an elementary school, 4 children (ages 10-11) got cancer (brain, liver, kidney) and 4 teachers got breast cancer. One child with brain cancer (glioblastoma) died in Aug 2024.⁶⁸ Since the tower was removed, it was reported that there were no more instances of cancer at the school.⁶⁹
 - c. In an Idaho town after 5G cell towers were installed, it was reported that a cluster of residents developed atrial fibrillation (a-fib). One of those residents who had undergone surgery for a-fib is a plaintiff in a lawsuit against the telecom carrier which refuses to provide accommodation under the Americans with Disabilities Act.⁷⁰
13. With respect to cell phone use, increases of brain cancer in the U.S. have been reported, with scientists attributing a high probability on RF radiation from cell phone use.⁷¹

⁶³ A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation, 2022, <https://bioinitiative.org/conclusions/>; see also, Adverse health effects of 5G mobile networking technology under real-life conditions, May 1, 2020, <https://pubmed.ncbi.nlm.nih.gov/31991167/>; Wireless Radiation (RFR) – Is U.S. Government Ignoring Its Own Evidence for Risk? March, 28, 2019, <https://electromagnetichealth.org/electromagnetic-health-blog/u-s-gov-ignoring-own-evidence/>; Oxidative Mechanisms of Biological Activity of Low-Intensity Radiofrequency Radiation, *Electromagnetic Biology and Medicine*, 35(2), 186-202, Yakymenko, I., Tsybulin, O., Sidorik, E., Henshel, D., Kyrlyenko, O., & Kyrlyenko, S. (2016), <https://pubmed.ncbi.nlm.nih.gov/26151230/>.

⁶⁴ <http://www.gencourt.state.nh.us/statstudcomm/committees/1474/reports/5G%20final%20report.pdf>.

⁶⁵ <https://childrenshealthdefense.org/defender/marcia-haller-cell-tower-rf-radiation-sickness/>.

⁶⁶ <https://ehtrust.org/cease-and-desist-order-against-verizon-cell-tower-by-board-of-health-pittsfield-ma/>.

⁶⁷ <https://ehtrust.org/family-injured-by-cell-tower-radiation-in-pittsfield-massachusetts/>.

⁶⁸ See the lists of treatments and surgeries that this child endured before he died,

<https://www.gofundme.com/f/support-the-ferrulli-family-in-memory-of-mason>.

⁶⁹ See beginning of video at https://www.youtube.com/watch?v=-9TMTexPb_0&t=128s.

⁷⁰ <https://childrenshealthdefense.org/press-release/chd-files-in-series-of-lawsuits-seeking-disability-accommodation-for-people-injured-by-rf-radiation-from-cell-towers/> and <https://childrenshealthdefense.org/defender/henry-hank-allen-chd-verizon-lawsuit-radiofrequency-radiation-cell-towers/>.

⁷¹ See, e.g., [Brain Tumor Rates Are Rising in the US: The Role of Cellphone & Cordless Phone Use; The Incidence of Meningioma, a Non-Malignant Brain Tumor, is Increasing in the U.S.; New review study finds that heavier cell phone use increases tumor risk; Expert report by former U.S. govt. official: High probability RF radiation causes brain tumors; and Cell phone and cordless phone use causes brain cancer: New review.](#)

FCC Rules Allowing Broad Preemption Do Not Align with Environmental Justice, rather they:

1. **Subvert the free market** by imposing federal government mandates that override the free market and force experimental technology on Americans⁷²
2. **Shield industry from liability** rather than encouraging industry to compete on safety
3. **Trample states' rights and local government on cell tower zoning and placement** -- federal preemption is a regulatory and physical taking of private property and public property in rights-of-way, and drops property values without compensation^{73,74}
 - a. Commerce clause overreach: while one can choose to abstain from a regulated activity,⁷⁵ federal policy essentially commands that all Americans suffer involuntary exposure and property devaluation.
4. **Increase fire and wildfire risks** from cell towers, which are electrical installations and have already caused disasters, including damage of \$6 billion in one fire⁷⁶
5. **Increase cybersecurity risks** as they are far greater with wireless networks, 5G being the least secure, as former FCC Chairman Tom Wheeler refers to "The 5G Cyber Paradox."⁷⁷

Solutions:

- Restore liability for manufacturers and telecom to allow the free market to operate
- Restore cooperative federalism under the TCA and recognize states' and local rights to make decisions about their infrastructure
- Create safety limits and oversight to protect the public
- Ensure taxpayer broadband funding is spent only on futureproof wired broadband

FCC's priority on wireless interferes with broadband policy goals:

1. Waste of public funds:

⁷² If wireless were so safe and desirable, why does the federal government need to trample on local governments to force deployment? As an example of federal preemption mandating deployments, section 6409 of the 2012 Middle Class Tax Relief and Jobs Act (47 USC §1455), under which the majority of wireless facilities are deployed today, mandates that: "a State or local government may not deny, and shall approve, any eligible facilities request."

⁷³ Cell towers inflict wireless pollution on private property, reducing the habitability of that property, without just compensation. See memorandum on constitutional considerations, section 1.c, for a discussion of Fifth Amendment case law

<https://docs.google.com/document/d/1DBTtngzDuZ9Ibmze58gBXsJs1jXzU5dQZx0ycFQumUk/edit#heading=h.6cyydt7korzI>

Cell towers decrease property values: Wireless Towers and Home Values: An Alternative Valuation Approach Using a Spatial Econometric Analysis, 2017, <https://link.springer.com/article/10.1007/s11146-017-9600-9>.

⁷⁴ <https://www.emfanalysis.com/property-values-declining-cell-towers/?iframe=1&iframe=1&iframe=1>

⁷⁵ *Nat'l Fed'n of Indep. Bus. v. Sebelius*, 567 U.S. 519, 553-54, 573-74 (2012).

⁷⁶ E.g., Woolsey Fire in CA 2018 caused \$6 billion in damages, destroyed 100,000 acres, 295,000 people evacuated, [three deaths]

<https://ehtrust.org/wp-content/uploads/wildfire-cell-tower-fact-sheet-EHT-2-11-24.pdf>

⁷⁷ 5G, as a [software based system](#), is easily hacked.

<https://www.cyber.forum.yale.edu/blog/2021/7/20/cybersecurity-risk-in-5g?iframe=1>

Tom Wheeler noted that the structure of 5G networks to provide for additional capability "also introduce[s] new security vulnerabilities." <https://www.brookings.edu/articles/the-digital-future-requires-making-5g-secure/>.

- Fiber infrastructure’s lifespan is fifty years (or more); wireless infrastructure’s lifespan is only 5 years making it a poor use of taxpayer subsidies.⁷⁸
 - Billions of dollars in subsidies to wireless have not provided the promised ubiquitous service.⁷⁹
 - Wireless and wired are not functionally equivalent technologies and therefore are not “technology neutral.”⁸⁰ wireless suffers from line-of-sight obstructions, slower speed, inclement weather, and lack of scalability, whereas fiber is sustainable, renewable and futureproof.⁸¹
2. **Wireless will perpetuate the digital divide,⁸² not solve it.⁸³** To generate future revenue, tech companies plan for, and build in, obsolescence,⁸⁴ including for wireless services, such as 5G, to compel consumers to buy new and more expensive devices and services.⁸⁵ This denies consumers freedom of choice. 5G is creating the digital divide because in order to use 5G you need a 5G phone, which is expensive and out of reach of the low-income and

⁷⁸ Tom Wheeler, former FCC chair and former CEO of CTIA, testified in 2021 that fiber is future proof with **wireless only as a last resort**, https://democrats-energycommerce.house.gov/sites/evo-subsites/democrats-energycommerce.house.gov/files/documents/Witness%20Testimony_Wheeler_FC_2021.03.22.pdf. Fixed Wireless Technologies and Their Suitability for Broadband Delivery, June 2022 <https://www.benton.org/publications/FixedWireless>.

⁷⁹ In testimony to the House Energy and Commerce Committee, 3/ 2021, former FCC Chair and former CTIA CEO Tom Wheeler spoke disappointingly that despite approximately \$40 billion of government subsidies “over the last decade,” those subsidies “have failed to deliver the goal of universal access to high-speed broadband ... because it failed to insist on futureproof technology, ... and focused more on the companies being subsidized than the technology being used or the people who were supposed to be served.” https://democrats-energycommerce.house.gov/sites/evo-subsites/democrats-energycommerce.house.gov/files/documents/Witness%20Testimony_Wheeler_FC_2021.03.22.pdf.

⁸⁰ A principle of the Telecom Act of 1996 is nondiscrimination among functionally equivalent services. Correlatively, treating as the same services that are not functionally equivalent is discriminatory against services with superior service characteristics – in this case, discriminatory against wired broadband. For example, see 47 USC §160, §224(e)(1), §253(c), §332(c)(7)(B)(i)(I).

⁸¹ <https://www.benton.org/blog/how-fixed-wireless-technologies-compare-fiber>.

⁸² The US Government Accountability Office (GAO) stated that 5G deployment is likely to exacerbate disparities in accessing telecommunications services. GAO 2020 Report “FCC Needs Comprehensive Strategic Planning to Guide Its Efforts,” <https://www.gao.gov/products/gao-20-468> (p.3). Full report <https://www.gao.gov/assets/gao-20-468.pdf> (p.14). The GAO is the highest audit institution of the federal government.

⁸³ House Energy & Commerce Committee, 1/29/20 testimony <https://docs.house.gov/meetings/IF/IF16/20200129/110416/HHRG-116-IF16-Wstate-SieferA-20200129.pdf> “House Energy & Commerce Committee, 9/21/23 witness, “Fiber is the most scalable, reliable, long-term, future proof strategy we have.” https://www.youtube.com/watch?v=ptQJ_wbtHYc&t=6029s

⁸⁴ <https://cellularnews.com/mobile-phone/planned-obsolescence/>.

⁸⁵ E.g., telecom has already sunsetted 3G which is for voice service so your 3G phone doesn’t work anymore. That means you need to buy a 4G or 5G phone, even if you’re only interested in voice.

unserved communities it purports to serve.⁸⁶ E.g. telecom has already sunsetted 3G⁸⁷ which is for voice only, eliminating consumer choice especially if they cannot afford the next generation of wireless services/devices. Wireless perpetuates the cycle of obsolescence.

3. **This is denying Americans broadband freedom of choice.**
4. **Wired connectivity such as fiber will solve the digital divide.**⁸⁸

3. Federal Agencies Creating Barriers for Accommodation from Exposure to RF Radiation and the Need for Collaboration Among Federal Agencies to Create Opportunities for Accommodation

Our recommendations for accommodations for the EMS Disabled are set forth in the submission to the U.S. Department of Justice (DOJ) in connection with “Public Comment on the U.S. Department of Justice’s Environmental Justice Strategic Plan” filed on July 22, 2024 filed under Wired Broadband, Inc. (et al).

While federal agencies state that they are striving to achieve President Biden’s Justice40 Initiative under environmental scorecards – HUD (“eliminate risks caused by environmental injustices”),⁸⁹ HHS (reduce pollution in marginalized communities, and assistance for children and families),⁹⁰ EPA (ensure clean water and clean air)⁹¹ – they have failed to protect those injured and disabled by RF radiation. Other agencies not even listed as participating in the Justice40 Initiative and which have also failed to protect those injured and disabled by RF radiation are the DOJ which is responsible for working with all federal agencies and ensuring compliance, and the FCC which is responsible for setting RF radiation limits for human exposure.

⁸⁶ Testimony of Clayton Banks, CEO of Silicon Harlem at NYC Council Hearing, June 2023, <https://www.youtube.com/shorts/iPIG9yfeaeM>.

The National Digital Inclusion Alliance (NDIA) testified in Congress that “5G will not solve the digital divide” and 5G service will require 5G capable cell phones, which the underserved, low income households, will likely not be able to afford. Testimony of Angela Siefer, NDIA Executive Director, before the U.S. House of Representatives, Subcommittee on Communications and Technology, Committee on Energy and Commerce, Jan 29, 2020, <https://www.congress.gov/116/meeting/house/110416/witnesses/HHRG-116-IF16-Wstate-SieferA-20200129.pdf>; video of testimony at https://givingcompass.org/nonprofit/national-digital-inclusion-alliance?gclid=CjwKCAjw67ajBhAVEiwA2g_jEMPJ3ET3xWZhbcb8IBCH9_FluP4nXRASue_6oPyMDyvxO9uysvJfELRoC5XgQAvD_BwE at 2:27 and 2:50.

⁸⁷ <https://www.fcc.gov/consumers/guides/plan-ahead-phase-out-3g-cellular-networks-and-service>.

⁸⁸ House Energy & Commerce Committee, 1/29/20 testimony <https://docs.house.gov/meetings/IF/IF16/20200129/110416/HHRG-116-IF16-Wstate-SieferA-20200129.pdf> “House Energy & Commerce Committee, 9/21/23 witness, “**Fiber is the most scalable, reliable, long-term, future proof strategy we have.**” https://www.youtube.com/watch?v=ptQJ_wbtHYc&t=6029s

⁸⁹ See HUD at https://www.hud.gov/climate/environmental_justice#openModal.

⁹⁰ See HHS at <https://www.hhs.gov/about/news/2022/06/24/hhs-announces-programs-to-join-president-bidens-justice40-initiative.html>.

⁹¹ See EPA at <https://www.epa.gov/environmentaljustice/justice40-epa>.

Many federal agencies have already recognized EMS disability, and some even prescribed methods for accommodation, but several only pay lip service to the disability and set forth policy that refuse claims for accommodation or unilaterally disclaim jurisdiction for RF radiation injuries.

There has been federal agency non-compliance with federal law and a court order regarding exposure to RF radiation and EMS disabilities. Several federal agencies have disclaimed or ignored jurisdiction over EMS issues – the Federal Communications Commission (FCC), the U.S. Department of Housing and Urban Development (HUD), the U.S. Department of Health and Human Services (HHS), and the U.S. Access Board (Access Board) and even the DOJ – thereby denying access and relief to the EMS Disabled.

These federal agencies should rectify their policies regarding EMS disabilities and eliminate the barriers that each agency has erected against providing access and accommodation to the EMS Disabled.

This is an environmental justice issue, because **RF radiation being an environmental pollutant, has created EMS disability** due to the FCC's outdated 1996 exposure limits and policies which have allowed the unabated proliferation of RF radiation, and which are no longer protective of public health; hence, this has created the **collateral damage** known as EMS disability. Federal agency policies have been turning a blind eye on the EMS Disabled who have no other recourse or remedy.

That people are plainly suffering injury, repeatedly, from **compelled, involuntary** exposure to RF radiation, intruding into their homes, schools and workplaces without their consent or knowledge, and as seen in this section, without recourse -- denied accommodation and dismissed -- **should shock the conscience of every federal agency official charged with protecting public health and welfare.** Federal agencies need to place the entire weight of their authority to protect public health and welfare for Americans, including the EMS Disabled.

(a) DOJ is Creating a Barrier for Relief and Accommodation for the EMS Disabled

The DOJ initially recognized "Environmental Illness" at about 1992,⁹² but in 2017 disclaimed jurisdiction on EMS disability issues, referenced by HUD's Director for Fair Housing Assistance Program, Joseph Pelletier, in 2017 who was following suit with the DOJ not to recognize EMS disability complaints:

⁹² March 5, 1992 legal memorandum from Carole Wilson, Associate General Counsel for Equal Opportunity and Administrative Law to Frank Keating, General Counsel of HUD on the subject of "Multiple Chemical Sensitivity Disorder [MCS] and Environmental Illness [EI] as Handicaps."

In recognizing EI as a handicap, Wilson [for HUD] states: [W]e conclude that MCS and EI can constitute handicaps under the Act. Our conclusion is consistent with the weight of both federal and state judicial authority construing the [Fair Housing] Act and comparable legislation, the Act's legislative history, as well as the interpretation of other Federal agencies, such as the Social Security Administration and the Department of Education, construing legislation within their respective domains. The Civil Rights Division of the Department of Justice has also informed us that it believes MCS and EI can be handicaps under the Act. In addition, HUD has consistently articulated this position, and FHEO [Fair Housing/Equal Opportunity] agrees with our conclusion. [Emphasis added.]

The Department of Energy and **Department of Justice** have also received numerous complaints dealing with these issues and have informed HUD that they will not open investigations under Section 504 based on these allegations.⁹³

(See full text in **Addendum B-1.**)

The DOJ's responsibility is clear, that it must ensure that government services are accessible, whether online or otherwise. Quoting from its new rule effective April 24, 2024:

Title II of the ADA requires state and local governments to make sure that their services, programs, and activities **are accessible to people with disabilities**. Title II applies to **all** services, programs, or activities of state and local governments, from adoption services to zoning regulation. This includes the services, programs, and activities that state and local governments offer **online and through mobile apps**.

Unfortunately, the DOJ has disclaimed jurisdiction on EMS issues in this new rule, when the DOJ was asked to:

address concerns about how the increased use of web and mobile app technologies may affect **individuals with electromagnetic sensitivity**. While the Department recognizes that these are important accessibility issues to people with disabilities across the country, they are outside of the scope of subpart H of this part, which focuses on web and mobile app accessibility under title II.

What the DOJ failed to address is that web accessibility is also done by wired connections.

Also, EMS disabilities are not outside the scope of the rule-making. The DOJ stated in its NPRM that it was **doing away with such a staffed telephone information line**,⁹⁴ **that means that the DOJ put in play non-mobile access and could not eliminate it as outside the scope of the rule-making**. Indeed, this may be the only access that many of the EMS Disabled will have to government services. Web-based services will never replace the need for an EMS disabled person to speak to a live person to obtain necessary governmental services. **Cutting off this access would cut off the life-line of the EMS Disabled who are in dire need of government services. HUD is Creating a Barrier for Relief and Accommodation for the EMS Disabled**

(b) HUD is Creating a Barrier for Relief and Accommodation for the EMS Disabled

⁹³ Letter addressed to "Fair Housing Enforcement Partners" by Joseph A. Pelletier, Director, Fair Housing Assistance Program, U.S. Dept. of Housing and Urban Development; obtained from Maine Human Rights Commission, 2017.

⁹⁴ <https://www.federalregister.gov/d/2023-15823/p-66>

HUD has historically denied jurisdiction for any claims for accommodation related to EMS despite having recognized Environmental Illness since 1992.⁹⁵ At about 2017, Joseph Pelletier, HUD's Director, Fair Housing Assistance Program, issued guidance not to recognize any EMS claims:

"The Department of Energy and Department of Justice have also received numerous complaints dealing with these issues and have informed HUD that they will not open investigations under Section 504 based on these allegations. Based on advice from HUD's Office of General Counsel, **FHEO will not accept as jurisdictional allegations** dealing with Smart Meters, RF and/or EMF issues, and any complaints already accepted **will be closed...** HUD reimburses only for cases that are jurisdictional under the federal Fair Housing Act. **Where such complaints are accepted by a FHAP, they will not be accepted by HUD for payment.**"⁹⁶ (See full text in **Addendum B-1**, attached hereto and incorporated herein by this reference.)

Similarly, Timothy M. Smyth, HUD's Deputy Assistant Secretary for Enforcement and Programs, sent an email on March 31, 2017 concerning complaints regarding "Smart Meters, Radio Frequency and Electromagnetic Frequency," stating:

After consultation with OGC-Fair Housing, it has been decided that, at this time, **FHEO will not accept, as jurisdictional, allegations dealing with Smart Meters, RF and/or EMF issues.** Should circumstances change in the future with respect to medical or legal opinions relating to these types of cases, the Department may reevaluate this position; but for now, FHEO Intake should not accept these types of allegations and any complaints already accepted should be closed accordingly. As we always do when declining to accept allegations as jurisdictional, we must counsel front line staff to speak cautiously when asserting limitations of the Fair Housing Act's jurisdiction.⁹⁷ (See full text in **Addendum B-2**, attached hereto and incorporated herein by this reference.)

⁹⁵ March 5, 1992 legal memorandum from Carole Wilson, Associate General Counsel for Equal Opportunity and Administrative Law to Frank Keating, General Counsel of HUD on the subject of "Multiple Chemical Sensitivity Disorder [MCS] and Environmental Illness [EI] as Handicaps."

In recognizing EI as a handicap, Wilson [for HUD] states: [W]e conclude that MCS and EI can constitute handicaps under the Act. Our conclusion is consistent with the weight of both federal and state judicial authority construing the [Fair Housing] Act and comparable legislation, the Act's legislative history, as well as the interpretation of other Federal agencies, such as the Social Security Administration and the Department of Education, construing legislation within their respective domains. The Civil Rights Division of the Department of Justice has also informed us that it believes MCS and EI can be handicaps under the Act. In addition, HUD has consistently articulated this position, and FHEO [Fair Housing/Equal Opportunity] agrees with our conclusion. [Emphasis added.]

⁹⁶ Letter addressed to "Fair Housing Enforcement Partners" by Joseph A. Pelletier, Director, Fair Housing Assistance Program, U.S. Dept. of Housing and Urban Development; obtained from Maine Human Rights Commission, 2017.

⁹⁷ <https://ehtrust.org/wp-content/uploads/HUD-FHEO-Memo-Singles-Out-the-Electrically-Disabled-for-Discrimination-.pdf>.

Remarkably, there is also a form letter to deny any request for accommodation based on these guidelines.⁹⁸

This determination is, quite plainly, stated and explicit discrimination against the EMS Disabled, in reckless disregard of the daily suffering they are forced to endure due to involuntary and non-consensual exposure to RF radiation. (See **Addendum D** to read accounts of suffering by the EMS Disabled “In Their Own Words,” attached hereto and incorporated herein by this reference.)

In its recent rulemaking, HUD recognized the disability arising from exposure to electro-magnetic radiation in the definition of disability,⁹⁹ however, there needs to be a retraction of the 2017 Smyth email.

(c) The U.S. Access Board is Creating a Barrier for Relief and Accommodation of the EMS Disabled

The U.S. Access Board affirmed its mission “to promote accessibility for people with disabilities” as far back as 2000,¹⁰⁰ recognized EMS in 2002,¹⁰¹ and in a new rule in 2017 reaffirmed its obligation to “ensure access for people with physical, sensory, or cognitive disabilities;”¹⁰² however, in its 2017 rule,

⁹⁸ <https://ehtrust.org/wp-content/uploads/HUD-FHEO-Form-Letter-Denies-Assistance-to-People-Inquiring-About-Accommodation-Regarding-Wireless-Smart-Meters.pdf>.

⁹⁹ <https://www.govinfo.gov/content/pkg/FR-2024-05-09/pdf/2024-09237.pdf> (see bottom of first column and top of second column): Comments: Although expressing support for the Department’s expansion of its definition of disability, a number of commenters suggested adding specific conditions to the text of §84.4(b). These commenters suggested specifically including in the regulatory text a number of conditions as ddruheller on DSK120RN23PROD with RULES4 impairments, including, for example: obesity, hepatitis B, hepatitis C, endometriosis, developmental disabilities, intersex variations, and chemical and electromagnetic hypersensitivities (including allergies to fragrances). One commenter noted that “autism” was not included in the list of impairments, but that Autism Spectrum Disorder was included in §84.4(d)(2)(iii)(E). The comments included descriptions of the discrimination faced by persons with these conditions and how inclusion in the Department’s section 504 regulation would provide a vehicle for their active participation in programs and activities funded by the Department. Response: The Department notes that the list of disorders and conditions in §84.4(b) is non-exhaustive and illustrative. The preamble to the DOJ’s title II ADA regulation explains why there was no attempt to set forth a comprehensive list of physical and mental impairments. That preamble states “[i]t is not possible to include a list of all the specific conditions, contagious and noncontagious diseases, or infections that would constitute physical or mental impairments because of the difficulty of ensuring the comprehensiveness of such a list, particularly in light of the fact that other conditions or disorders may be identified in the future.”⁸ The Department shares this view. Failure to include any specific disorder or condition does not mean that that condition is not a physical or mental impairment under section 504 or the rule. No negative implications should be drawn from the omission of any specific impairment in the list of impairments in §84.4(b). In fact, the Department notes that its rule of construction for the definition of disability is that the definition of disability is to be construed broadly in favor of expansive coverage to the maximum extent permitted by the terms of section 504.

¹⁰⁰ Letter of October 26, 2000 by James Raggio, General Counsel of the U.S. Access Board to White Mountain Catholic Charities at <https://ehtrust.org/wp-content/uploads/General-Council-Architectural-and-Transportation-Barriers-Compliance-Board-Need-for-Housing-Electromagnetic-Sensitive-Disabled.pdf> .

¹⁰¹ U.S. Access Board, [Advancing Full Access & Inclusion for All](https://www.access-board.gov/research/building/indoor-environmental-quality/), “Indoor Environmental Quality Project,” <https://www.access-board.gov/research/building/indoor-environmental-quality/>.

¹⁰² <https://www.access-board.gov/ict/> .

the Access Board declined to fulfill its obligation to provide access guidelines for the EMS Disabled and unilaterally disclaimed jurisdiction to do so. In 2017, the Access Board promulgated a new rule updating its accessibility standards under Section 508 of the [Rehabilitation Act](#) and Section 255 of the Communications Act. The rule would “address access to information and communication technology (ICT) used by federal agencies under Sec. 508 (e.g., computers, telecommunications equipment, websites, software, information kiosks) and under Sec. 225 (e.g., telephones, cell phones, routers, computers with modems and software integral to the operation of telecommunications function of such equipment).

The Board acknowledges the challenges faced by individuals with electromagnetic sensitivities, and notes that electromagnetic sensitivities may be considered a disability under the ADA ...However, **most of the accommodations requested . . . are beyond the scope of this rulemaking or our statutory jurisdiction.** Moreover, none of our prior rulemaking notices (i.e., 2010 ANPRM, 2011 ANPRM, and NPRM) proposed technical specifications relating to electromagnetic sensitivities. Thus, were the Board to address electromagnetic sensitivity issues . . . this complex area would require thorough research and notice-and-comment rulemaking before being addressed through rulemaking.¹⁰³

Despite the fact that the Access Board has historically recognized electromagnetic sensitivities as far back as 2002, its outright refusal to promulgate guidelines for access for the EMS Disabled 15 years later in 2017 despite a clear federal mandate to do so for disabled individuals, shows that the **Access Board is abdicating its obligations under federal law.** Sections 508 and 225 are agnostic as to the type of disability to be accommodated, yet the Access Board singling out the EMS Disabled as undeserving of accommodation for access, **is discriminatory and unsupported by any federal statute.**

(d) HHS Limiting Disability to “Relevant Disabilities” is Creating a Barrier for Relief and Accommodation for the EMS Disabled

Federal agencies have recently issued requests for public comment on disability issues but limiting them to “relevant disabilities,” which means that other disabilities are discounted. For instance, the U.S. Dept of Health and Human Services (HHS) recently issued a Notice of Proposed Rule Making (NPRM) seeking to update its disability access rules with respect to “vision, hearing, cognitive and manual dexterity.”¹⁰⁴ This list is too limiting, and other disabilities are necessarily excluded which are actually relevant for the

¹⁰³ <https://www.access-board.gov/files/ict/ict-final-rule.pdf> at 5795-96.

¹⁰⁴ <https://www.federalregister.gov/d/2023-19149/p-509>.

EMS Disabled.¹⁰⁵ Comments have been submitted to HHS on the limiting nature of these “relevant disabilities.”¹⁰⁶

To provide some context, the NPRM addressed providing web content through mobile applications. The HHS assumption has been that by providing web content through mobile applications, HHS can provide a one-size-fits-all solution to all of the disabled. That is an incorrect assumption as it does not apply to, or benefit, the EMS Disabled, as this class of disabled individuals and children cannot be near any source of RF radiation being emitted including from cell towers, antennas, Wi-Fi routers, computers, smartphones, iPads, etc., because the RF radiation may be life-threatening. It is critical that, e.g., medical programs and services be readily accessible to all people with all disabilities, not only to the four categories that HHS designates as “relevant.”

The National Council on Disability (NCD) has recommended regulatory action on the issues being addressed in the NPRM, particularly “**that voluntary compliance with . . . accessibility guidelines has not resulted in equal access for people with disabilities.**”¹⁰⁷ Notably, the NCD has recognized EMS disability without placing any limitation on what disabilities are “relevant.” Although HHS may not be intending to do so, the NPRM has given the appearance of bias towards “relevant disabilities,” hence exclusionary and in conflict with the ADA to provide persons with disabilities with equal access as the rest of the general public.

(e) The FCC Fails to Recognize the EMS Disabilities that its Allowable Exposure Limits and Policies are Creating

The FCC’s policies and outdated limits are failing public health and have created the **collateral damage** known as EMS disability. **RF radiation being an environmental pollutant, has created EMS disability** along with the FCC’s outdated 1996 exposure limits and policies which have allowed the unabated proliferation of RF radiation, and which are no longer protective of public health.

It should be of concern to the DOJ that the FCC has failed to comply with a 2021 federal appellate court remand order to review its wireless radiation exposure limits for public safety. We are certain that the DOJ would agree that it is important for the FCC to comply with a federal appellate court order and not to thumb its nose at the court, and at public safety, which it has now done for 3 years. The FCC’s failure

¹⁰⁵ EMS includes a constellation of symptoms and disabilities, e.g.: sleep disturbances, chronic fatigue, chronic pain including migraine headaches, poor short-term memory, difficulty concentrating (e.g. “brain fog”), mood disorders like depression or anxiety, skin problems, dizziness, loss of appetite, excessive thirst or dehydration, tremor or movement difficulties, vision problems, tinnitus, heart palpitations, difficulty regulating blood sugar levels, nose bleeds, asthma. <https://www.electrosensitivesociety.com/how-hospitals-can-accommodate-patients-who-have-ehs/>

¹⁰⁶ <https://thenationalcall.org/resources/> below the fold at “National Call Federal Submissions” No. 17.

¹⁰⁷ <https://www.federalregister.gov/d/2023-15823/p-124>

to comply with the court order for 3 years should raise the DOJ's hackles, and the DOJ needs to ensure that the FCC complies.

Wireless radiation is an underappreciated, and often unknown, threat to the public. The 2021 landmark ruling found that the FCC failed "to provide a reasoned explanation" for its decision not to update its 1996 guidelines for human exposure to RF radiation. In *Environmental Health Trust, et al. v. FCC*,¹⁰⁸ the U.S. Court of Appeals for the DC Circuit ruled that the FCC's decision was "arbitrary and capricious" under the Administrative Procedures Act (APA) and remanded the case back to the FCC to review the record evidence in its docket of harm below its guidelines, which were set in 1996.

To date, the FCC has failed to comply with the 2021 court remand order.

The significance of this failure is that Americans across the nation, and in particular children, are suffering right now with severe adverse health effects from having cell towers whose wireless emissions have not been tested for public safety, placed outside of their homes, children's classrooms, in parks, etc. The increase in suffering and disabilities are the **collateral damage** caused by the FCC's failure to update its limits.

The winning [plaintiffs' petition](#) in the 2021 decision encapsulates the adverse biological effects, especially on children's neurological development. The [affidavit of a pediatrician](#) provides multiple examples of his clinical experience showing immense injury to children. And this is just the tip of the iceberg. **The avalanche of injury will just continue in the U.S. unless the FCC is held to account for its failure to comply with the court remand order.**

The court underscored that the **FCC has a statutory duty to regulate wireless exposure to protect public health**.¹⁰⁹ The FCC has failed to ensure that its wireless radiation exposure guidelines are safe for the public, and in particular, children – leaving Americans exposed and involuntarily irradiated, while the FCC continues to preempt states' rights when it comes to the placement of wireless facilities.

That the FCC has failed to comply with a court order for 3 years is placing Americans' public health and safety at risk, as cell towers whose RF radiation has not been tested for public safety, are placed outside of homes, children's classrooms, in parks, and other areas where residents are present. The Court admonished the FCC for its failure to examine the evidence in its docket relating to impacts of wireless exposure on children, the developing brain, reproduction, long-term exposure, and impacts on wildlife and the human environment.

¹⁰⁸ This was a consolidation of separate petitions for review of the FCC's decision filed by Environmental Health Trust (EHT) and Children's Health Defense (CHD) alleging that the FCC order (34 FCC Rcd. at 11692–97) by declining to update its 1996 exposure rules violated the Administrative Procedures Act (APA) and National Environmental Policy Act (NEPA) The appeals court decision is reported at 9 F.4th 893.

¹⁰⁹ "It is the Commission's responsibility to regulate radio communications, 47 U.S.C. § 301, and devices that emit RF radiation and interfere with radio communications, *id.* § 302a(a), **and to do so in the public interest, including in regard to public health**, *Banzhaf v. FCC*, 405 F.2d 1082, 1096 (D.C. Cir. 1968). Even the Commission itself recognizes this. *See* 2019 Order, 34 FCC Rcd. at 11,689 ("The Commission has the responsibility to set standards for RF emissions") ... " 9 F.4th at 906 [Emphasis Added].

The court called into question the FCC’s assertion, which has never been backed by evidence, that RF radiation is not harmful as it does not heat human tissue, i.e., does not produce “thermal” effects. However, the evidence of personal accounts of injury and 11,000 pages of scientific peer-reviewed studies submitted into the FCC’s docket show harm via non-thermal pathways. The court made clear that the FCC may not simply ignore evidence of non-thermal biological effects when “[t]he factual premise – the non-existence of non-thermal biological effects -- underlying the current RF guidelines **may no longer be accurate** . . .”¹¹⁰ [Emphasis added]

The Court rejected the FCC’s reliance on the following as insufficient:

1. FDA statements of no adverse effects from RF radiation – which were conclusory since the FDA did not articulate the factual basis for its statements,¹¹¹ and
2. The silence of other federal agencies on any evidence of harm from RF radiation -- which “does not constitute a reasoned explanation . . .”¹¹²

The initial basis for this court case began in 2012 when the U.S. Government Accountability Office recommended that the FCC should review its exposure guidelines.¹¹³ In 2013, the FCC issued a notice of inquiry on the adequacy of its 1996 guidelines due to the “changes in the ubiquity of wireless devices and in scientific standards and research since 1996” and opened a docket for comments. On Dec. 4, 2019 the FCC published its decision declining to update its 1996 guidelines, ignoring the evidence in its docket.¹¹⁴

Consequently, the court ordered the FCC to:

- “[P]rovide a reasoned explanation for its decision to retain its testing procedures for determining whether cell phones and other portable electronic devices comply with its guidelines,”
- “[A]ddress the impacts of RF radiation on children, health implications of long-term exposure to RF radiation, the ubiquity of wireless devices, and other technological

¹¹⁰ 9 F.4th at 905.

¹¹¹ 9 F.4th at 904-905.

¹¹² 9 F.4th at 906.

¹¹³ Exposure and Testing Requirements for Mobile Phones Should Be Reassessed. US GAO, 2012 <https://www.gao.gov/products/gao-12-771>.

¹¹⁴ Resolution of Notice of Inquiry, Docket 13-84, 12/4/19 <https://www.fcc.gov/document/fcc-maintains-current-rf-exposure-safety-standards>.

[FCC had previously failed to reach a conclusion in this notice of inquiry for six years. In 2018, after issuing sweeping regulations \(in connection with the Small Cell Order\) preempting state and local zoning authority over the placement of wireless facilities, local governments brought a lawsuit against the FCC, arguing that it could not force these deployments on the public until FCC had determined that such deployments were safe. See City of Portland et al. v. FCC \(Ninth Circuit, 19-7014\), Petitioner Local Governments' Joint Opening Brief, section II.C, page 24 <https://ehtrust.org/wp-content/uploads/Montgomery-County-Brief-on-Merits-filed-6-10-2019.pdf>.](https://www.fcc.gov/document/fcc-maintains-current-rf-exposure-safety-standards)

[In the face of this lawsuit, the FCC abruptly closed the notice of inquiry, a decision the DC Circuit later found to be arbitrary and capricious.](https://ehtrust.org/wp-content/uploads/Montgomery-County-Brief-on-Merits-filed-6-10-2019.pdf)

developments that have occurred since the Commission last updated its guidelines” (1996); and

- “[A]ddress the impacts of RF radiation on the environment.”¹¹⁵

The FCC’s failure to comply with the court’s order has allowed the industry to run rampant rather than compete on safety.

Therefore, the FCC should be held to account for the following:

- What is the status of FCC complying with a court order issued by the US Court of Appeals DC Circuit in 2021¹¹⁶ to provide a reasoned explanation for retaining its 1996 limits for human exposure to radiofrequency (cell tower radiation)? When does FCC expect to complete its compliance with the court order?
- Will the FCC complete a new rulemaking to update its radiofrequency guidelines for human exposure? Such a rulemaking would help assure the public that when the FCC uses federal preemption to force deployments on local governments, that the FCC has determined safety for children and families. Current wireless exposure standards are based largely on 40-60 minute exposures of a small number of monkeys and rats (not more than a dozen each), over 40 years ago.¹¹⁷ GAO first recommended that the FCC revisit these limits back in 2012 and the FCC has not yet done so.¹¹⁸

(f) Other Federal Agencies that Recognize EMS Disabilities

Other federal agencies and groups have recognized EMS disabilities.

- The **Social Security Administration** in 2003 made a determination of severe impairment regarding EMS disabilities.¹¹⁹
- The **Department of Defense** in 2021 set forth guidelines that recognize injuries that may occur to its personnel from RF radiation.¹²⁰
- The **National Council on Disabilities (NCD)** in 2022 issued a Framework for health equity, recognized EMS and recommended mandatory industry guidance and training to address the needs of those disabled by “electromagnetic and other environmental exposures,” “wireless

¹¹⁵ 9 F.4th at 914.

¹¹⁶ [https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/\\$file/20-1025-1910111.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/$file/20-1025-1910111.pdf)

¹¹⁷ See page 5 and footnote 8, Environmental Health Trust testimony submitted March 27, Senate Commerce Committee <https://ehtrust.org/wp-content/uploads/EHT-Testimony-to-Senate-Commerce-Committee-on-S3909-03272024.pdf>

¹¹⁸ Exposure and Testing Requirements for Mobile Phones Should Be Reassessed, GAO-12-771, Jul 24, 2012 <https://www.gao.gov/products/gao-12-771>

¹¹⁹ <https://ehtrust.org/wp-content/uploads/Electromagnetic-Sensitivity-Found-to-be-a-Severe-Impairment-by-the-Social-Security-Administration-2003-and-2020-.pdf>.

¹²⁰ DoD Instruction 6055.11, “Protecting Personnel from Electromagnetic Fields,” <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/605511p.pdf>.

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. (Requires administrative action through HHS Office of Civil Rights, and further research concerning this matter should be conducted by the FDA, NIH, HHS, and HUD.)”¹²¹ A presentation on EMS disability was made to NCD on May 12, 2022 which includes information on the need to provide access and accommodation for the EMS Disabled.¹²²

- The **Job Accommodations Network (JAN)** funded by the U.S. Department of Labor’s Office of Disability Employment Policy (DOL/DEP) has issued a list of guidelines that recognize EMS and requires accommodation (see listing for “Electrical Sensitivity & Hypersensitivity,” and “Electromagnetic Fields and Public Health”).¹²³
- The **Center for Disease Control (CDC)**, in its International Classification of Diseases, recognizes a medical diagnosis for MW/EMF/RF injuries:¹²⁴
ICD-10-CM “diagnosis code” for radiation sickness is “T66.”
ICD-10-CM “injury” code for “Exposure to radio frequency” and “Exposure to other non-ionizing radiation” is “W90.

(g) Eliminate the Disparate Impact of Federal Agency Policies on the EMS Disabled

The refusal by federal agencies to promulgate guidelines to provide access and relief for the EMS Disabled contributes to the disparate impact on the EMS Disabled. For instance, HHS would limit the benefits to accrue only to disabled individuals with the four enumerated disabilities: vision, hearing, cognitive, and manual dexterity.¹²⁵ This will stratify disabled people between those with “relevant disabilities” and those who do not have them but who have just as relevant disabilities. The disparate impact of this stratification will lead to a continuous process of unacknowledged disabilities otherwise deserving of protection under the ADA. It’s HHS’s responsibility to uphold the standard set forth by the ADA, that the term “disabilities” includes all disabilities.

There is no question that the EMS Disabled qualify and fit comfortably under the ADA, and that EMS has been recognized by many federal agencies as set forth above. The ADA defines a disability as “a physical or mental impairment which substantially limits one or more of such person's major life activities.”¹²⁶ There is the need for continued access, e.g., to traditional technologies (wired connections, e.g., copper, cable or fiber optics), landline phones, human agents and paper communications, by which many of the EMS Disabled are only able to access essential medical programs and services, including emergency care.

¹²¹ https://www.ncd.gov/assets/uploads/reports/2022/ncd_health_equity_framework.pdf at Page 10, Sub-Component 6.

¹²² <https://www.electrosensitivesociety.com/national-council-on-disability-ncd-ehs-mcs-presentation-may-12-2022/> (includes transcripts, slide deck and historical timeline of MWEMF/RF exposure).

¹²³ <https://askjan.org/disabilities/Electrical-Sensitivity.cfm#otherinfo>.

¹²⁴ <https://icd10cmtool.cdc.gov/?fy=FY2023&query=radiation>.

¹²⁵ NPRM, Paragraph D. Summary of Costs and Benefits; Executive Summary; Federal Register, page 51940

¹²⁶ Fair Housing Act (Title VIII of the Civil Rights Act), <https://www.corada.com/documents/fhaa/sec-802-h-42-u-s-c-3602-h-handicap>.

By not addressing wired connections, the agencies have demonstrated a bias against the EMS Disabled which is prohibited under federal civil rights law and the ADA. This is **digital exclusion** for the EMS Disabled, not digital inclusion, and therefore, a serious environmental justice issue.

With respect to the DOJ, while we applaud the DOJ's efforts "to ensure 'equality of opportunity, full participation, independent living, and economic self-sufficiency' for disabled individuals, under the ADA,¹²⁷ the Notice of Proposed Rule Making (NPRM) leading to the new Title II rule failed to take into consideration that the EMS Disabled, a growing population in the U.S., will not be able to use mobile applications because of the health hazards associated with use of such apps. The EMS Disabled do not need mobile apps, they need safe access to the web content, services, programs and activities on an equal basis as the general public.

While the use of mobile apps to gain access to web content from public entities for services may be beneficial for some or even many of those who are disabled, there is a growing portion of the population which cannot use or be near mobile devices, which can be life threatening.

The DOJ in its NPRM for the new Title II rule incorrectly stated that "accessibly designed web content and mobile apps **are easier for everyone to use.**" [Emphasis added.] The EMS Disabled cannot use a technology that is harming them and are being discounted by that statement. If wireless mobile apps are the only way for the EMS Disabled to obtain government services that may be life threatening means that mobile apps can be hazardous for a growing part of the population.

Federal agencies need to get this right. The DOJ is designated as the lead agency in coordinating consistent interpretations of the ADA and under Executive Order 12250, "including the application to websites and mobile apps, across the Federal Government."¹²⁸ It's DOJ's responsibility to uphold the standard set forth by the ADA, that the term "disabilities" includes all disabilities.

However, the rulemaking has been based on an NPRM which expressly limited the benefits of the rulemaking to accrue to disabled individuals with 4 enumerated disabilities: vision, hearing, cognitive, and manual dexterity.¹²⁹ This will stratify disabled people between those with "relevant disabilities" and those who do not have them but who have just as relevant disabilities for purposes of the ADA. The disparate impact of this stratification will lead to a continuous process of unacknowledged disabilities otherwise deserving of protection under the ADA.

The focus on web-based apps as a portal to essential services will make them readily available to people with "relevant" disabilities but will keep them out of reach for those with disabilities that are not "relevant."

(h) Barriers to Inclusion

¹²⁷ <https://www.govinfo.gov/content/pkg/USCODE-2021-title42/pdf/USCODE-2021-title42-chap126-sec12101.pdf>

¹²⁸ NPRM, Executive Summary. Federal Register, page 51940, Paragraph B. of *Legal Authority*

¹²⁹ NPRM, Paragraph D. Summary of Costs and Benefits; Executive Summary; Federal Register, page 51940

When an individual is EMS Disabled, it may be exceedingly difficult, and even impossible for them to advocate for themselves because of their impairments, which can include neurological brain injury, or fill out administrative forms for which they will need personal assistance. For example, the many ADA and HHS regulations that apply to the disabled may not be able to be easily accessed by the EMS Disabled if they are online. There needs to be an easy-to-read guide (also on paper), and video, on what regulations apply and how to easily navigate through a request for accommodation that is not online.

More access barriers to services need to be removed, not erected, so an EMS Disabled person can have their legally protected access. Improving, not reducing, phone and mail communications is needed by more and more people disabled by EMS.

The National Institute for Science, Law and Public Policy published a report of hard-wiring which would be of tremendous benefit for making accommodation for the EMS Disabled.¹³⁰

The DOJ should ensure that, e.g., by providing mobile apps and promoting their use on mobile devices does not impair the EMS Disabled from accessing those same services by more traditional means, i.e., wired connections (copper, cable and fiber), as well as by landline phone and paper communications via the U.S. Postal Service for those EMS Disabled who cannot even use a computer.

In the DOJ's NPRM it stated that "the web and mobile app accessibility requirements would not require any public entity to take actions that would result in a fundamental alteration in the nature of a service, program, or activity."¹³¹ In that regard, public entities should continue to make their services available through traditional means of wired connectivity, landline phones and paper communications, that would be necessary for the EMS Disabled.

The purpose of the ADA is to protect the rights of the disabled "in important areas of everyday life, such as in employment, access to State and local government entities' services, places of public accommodation ..."¹³² The ADA requires that

- any public entity facilities that are newly designed, constructed or altered "be readily accessible to and usable by individuals with disabilities."¹³³
- "ensuring that individuals with disabilities are not, by reason of such disability, excluded from participation in or denied the benefits of the services, programs, and activities offered by State and local government entities, including those offered via the web ..."¹³⁴

Public entities provide many crucial services to which the disabled are entitled, and from which the EMS Disabled should not be excluded. Such services include, among others, registration renewals for

¹³⁰ "Reinventing Wires: The Future of Landlines and Networks," at 73, National Institute for Science, Law and Public Policy, authored by Timothy Schoechle, PhD; <https://electromagnetichealth.org/wp-content/uploads/2018/02/ReInventing-Wires-1-25-18.pdf>.

¹³¹ <https://www.federalregister.gov/d/2023-15823/p-249>

¹³² <https://www.federalregister.gov/d/2023-15823/p-52>; 42 U.S.C. 12101 *et seq.*

¹³³ *Ibid.*

¹³⁴ <https://www.federalregister.gov/d/2023-15823/p-57>

vehicles or drivers' licenses, voter registration, unemployment benefits, food stamps, health and emergency services.¹³⁵ Since "inaccessible web content can exclude people with a range of disabilities from accessing government services,"¹³⁶ so it is also with the EMS Disabled where the web content is inaccessible if it requires wireless mobile devices to access them. By increasing the availability of mobile applications and devices, the DOJ should ensure that there are not decreasing opportunities for the EMS Disabled to go for services on the premises of public entities.

Therefore, the emphasis on accessibility through wireless mobile devices should not impair the EMS Disabled from **equal access** to those same services otherwise available to other disabled groups and the general public.

(i) The EMS Disabled's Digital Divide

The digital divide is no less relevant for the EMS Disabled who are not able to use RF-radiation-enabled web-based services and who cannot use mobile devices. **For the EMS Disabled, being required, e.g., to use mobile services and devices to access necessary medical programs and services would only guarantee the digital divide for the EMS Disabled.** Federal agencies must promulgate rules to ensure that access to such necessary services does not require wireless connectivity on mobile devices.

The best access is through wired connections. For instance, the National Telecommunications Information Administration (NTIA) has prioritized fiber to the premises for the nation in order to bridge the digital divide, not mobile.¹³⁷ For the EMS Disabled, mobile access will not bridge the digital divide. So, to digress a moment on the benefits of wired connections for the EMS Disabled. Underscoring the importance of, e.g., fiber to the premises over wireless, former FCC Chairman, Tom Wheeler, in his March 2021 Congressional testimony, described fiber as "future proof," and prioritized a "fiber first" policy for the nation.¹³⁸ Wheeler's statements point to the fact that wireless and fiber **are not equivalent broadband media**,¹³⁹ and that wireless should be used **only as a last resort**. "Fiber is unmatched in its speed, performance [and] reliability ..."¹⁴⁰ and safety, far exceeding the promise of any generation of wireless technology.

Wired connections, such as fiber, cable and copper wires, to the premises provide the best capacity for remote learning for children and students, particularly those who are already EMS Disabled, and more

¹³⁵ <https://www.federalregister.gov/d/2023-15823/p-77>

¹³⁶ <https://www.federalregister.gov/d/2023-15823/>

¹³⁷ *NTIA Official Acknowledges Clear Preference for Fiber in Infrastructure Deployment Program*, June 13, 2022, <https://broadbandbreakfast.com/2022/06/ntia-official-acknowledges-clear-preference-for-fiber-in-infrastructure-deployment-program/>.

¹³⁸ Tom Wheeler's Testimony to Congress, https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Witness%20Testimony_Wheeler_FC_2021.03.22.pdf.

¹³⁹ "Reinventing Wires: The Future of Landlines and Networks," National Institute for Science, Law and Public Policy, authored by Timothy Schoechle, PhD; <https://electromagnetichealth.org/wp-content/uploads/2018/02/ReInventing-Wires-1-25-18.pdf>.

¹⁴⁰ *Ibid.*

reliable access to medical and other services for the elderly and disabled during emergencies or severe weather when wireless service is more likely to be interrupted. When the cellular network or electricity goes down there would be no way for the disabled to access medical services or 911 without copper wired landlines, which function independently from cellular equipment or electricity. In February of this year, [70,000 residents in CA](#) were stranded without the ability to make a 911 call because their copper lines have been cut off. What would happen if there was a [cyberattack](#) with even more extensive cellular failures? Landlines are the most essential and resilient for access to emergency services by the disabled. Wired connections will also prevent the exclusion of the EMS Disabled who cannot be near RF radiation from mobile devices and equipment.

The DOJ expressly stated as its over-arching goal in the NPRM for the new Title II rule that, “[b]y allowing people with disabilities to engage more fully with their governments, accessible web content and mobile apps also promote the equal enjoyment of fundamental constitutional rights, such as the rights to freedom of speech, assembly, association, petitioning, and due process of law.” However, if the EMS Disabled do not have access to wired connections (e.g., copper, cable or fiber optics) to communicate, or individuals whom they can call on a landline, they cannot participate in any of the foregoing or benefit from public entity services, programs or activities.

The DOJ stated in its NPRM that no individual by virtue of their disability “be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity,” or be subjected to discrimination by any such entity, and that this nondiscrimination provision applies to *all* services, programs, and activities of public entities, including those provided via the web.”¹⁴¹ Access to web content and services may be accessed wirelessly or by wired connections. But in coupling access to web content and services with mobile apps and devices, the NPRM does not address the necessity of such access also by means of wired connections or by paper. To be clear, access to web content and services is not synonymous with a wireless connection via mobile applications and devices, but would engage any technology which would provide access to a disabled individual so as to participate in society on an equal basis. Requiring access to wired technology, such as copper wires, cable or fiber optics, as well as providing paper alternatives, would help ensure that parity.

The ADA does not provide for preferential treatment of one disabled group over another, nor does it contemplate that by accommodating one disabled group it would lead to the exclusion of another disabled group from the same services. The disparate impact of the proposed rule would create the very situation that the ADA and the proposed rule seek to avoid.

To that end, we also recommend that the DOJ maintain and update its 2003 guidance to public entities, that requires an agency with an inaccessible website provide alternative accessibility “such as a staffed telephone information line,”¹⁴² For those EMS Disabled who are so disabled that they cannot even

¹⁴¹ 42 USC 12132; <https://www.govinfo.gov/content/pkg/USCODE-2021-title42/pdf/USCODE-2021-title42-chap126-subchapII-partA-sec12132.pdf>

¹⁴² <https://www.federalregister.gov/d/2023-15823/p-66>

touch a computer to retrieve services via the web, it is essential that there be access to a staffed telephone information line. Therefore, an update to the 2003 guidance would require such a staffed line even if the website is accessible. In effect, the agency's website becomes inaccessible to the extent that the EMS Disabled cannot even touch a computer or electronic device to access the website. The DOJ stated in its NPRM **doing away with such a staffed telephone information line**,¹⁴³ but this may be the only access that many of the EMS Disabled will have to government services. Web-based services will never replace the need for an EMS disabled person to speak to a live person to obtain necessary governmental services. **Cutting off this access would cut off the life-line of the EMS Disabled who are in dire need of government services.**

The best access for the EMS Disabled, and for the general public, is through wired connections. For instance, the National Telecommunications Information Administration (NTIA) has prioritized fiber to the premises for the nation in order to bridge the digital divide, not mobile.¹⁴⁴ Lest the DOJ believes that mobile access will bridge the digital divide, it will not. So, to digress a moment on the benefits of fiber to the premises ... Underscoring the importance of fiber over wireless, former FCC Chairman, Tom Wheeler, in his March 2021 Congressional testimony, described fiber as "future proof," and prioritized a "fiber first" policy for the nation.¹⁴⁵ Wheeler's statements point to the fact that wireless and fiber **are not equivalent broadband media**,¹⁴⁶ and that wireless should be used **only as a last resort**. "Fiber is unmatched in its speed, performance [and] reliability ... "¹⁴⁷ far exceeding the promise of any generation of wireless technology.

Wired connections, such as fiber to the premises will provide the best capacity for remote learning for children and students, particularly those who are already EMS Disabled, and more reliable access to medical and other services for the elderly and disabled during emergencies or severe weather when wireless service is more likely to be interrupted. Wired connections will also prevent the exclusion of the EMS Disabled who cannot be near RF radiation emitted from mobile devices and equipment.

Conclusion

We look forward to working with federal agencies to bring to fruition EO 14096 principles of environmental justice, to protect the public by restoring and protecting a healthy environment, with

¹⁴³ <https://www.federalregister.gov/d/2023-15823/p-66>

¹⁴⁴ *NTIA Official Acknowledges Clear Preference for Fiber in Infrastructure Deployment Program*, June 13, 2022, <https://broadbandbreakfast.com/2022/06/ntia-official-acknowledges-clear-preference-for-fiber-in-infrastructure-deployment-program/>.

¹⁴⁵ Tom Wheeler's Testimony to Congress, https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Witness%20Testimony_Wheeler_FC_2021.03.22.pdf.

¹⁴⁶ "Reinventing Wires: The Future of Landlines and Networks," National Institute for Science, Law and Public Policy, authored by Timothy Schoechle, PhD; <https://electromagnetichealth.org/wp-content/uploads/2018/02/ReInventing-Wires-1-25-18.pdf>.

¹⁴⁷ *Ibid.*

access to clean air and abundant green spaces, and ensuring “just treatment” and “meaningful opportunities to participate in decisions that impact [the public’s] health and environment.”¹⁴⁸

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¹⁴⁸ <https://www.federalregister.gov/documents/2023/04/26/2023-08955/revitalizing-our-nations-commitment-to-environmental-justice-for-all>.

ADDENDUM A

BIOLOGICAL EFFECTS OF RF RADIATION

A 2019 Bevington study analyzed the prevalence of EMS within any given population.¹⁴⁹ Based on a population of 332.4 million people in the U.S.,¹⁵⁰ the numbers are staggering:

Prevalence of EMS Percentages	Number of EMS in U.S.
Can't work – 0.65%	2.16 million
Severe symptoms – 1.5%	4.99 million
Moderate symptoms – 5%	16.6 million
Mild symptoms – 30%	99.7 million

That means that based on those who can't work or who have severe symptoms, **over 7 million are EMS Disabled in the U.S.**

The correlation to proximity to RF-emitting sources is an important factor considering the following study correlating neurological symptoms near cell towers. The following chart shows a worsening of symptoms when closer to a cell tower but a lessening of symptoms when farther away from a cell tower.

¹⁵¹

Neurobehavioral Symptoms Near Cell Towers¹⁵²

¹⁴⁹ "The Prevalence of People with Restricted Access to Work in Manmade Electromagnetic Environments," Journal of Environment and Health Science, <https://mdsafetech.files.wordpress.com/2019/10/2018-prevalence-of-electromagnetic-sensitivity.pdf>.

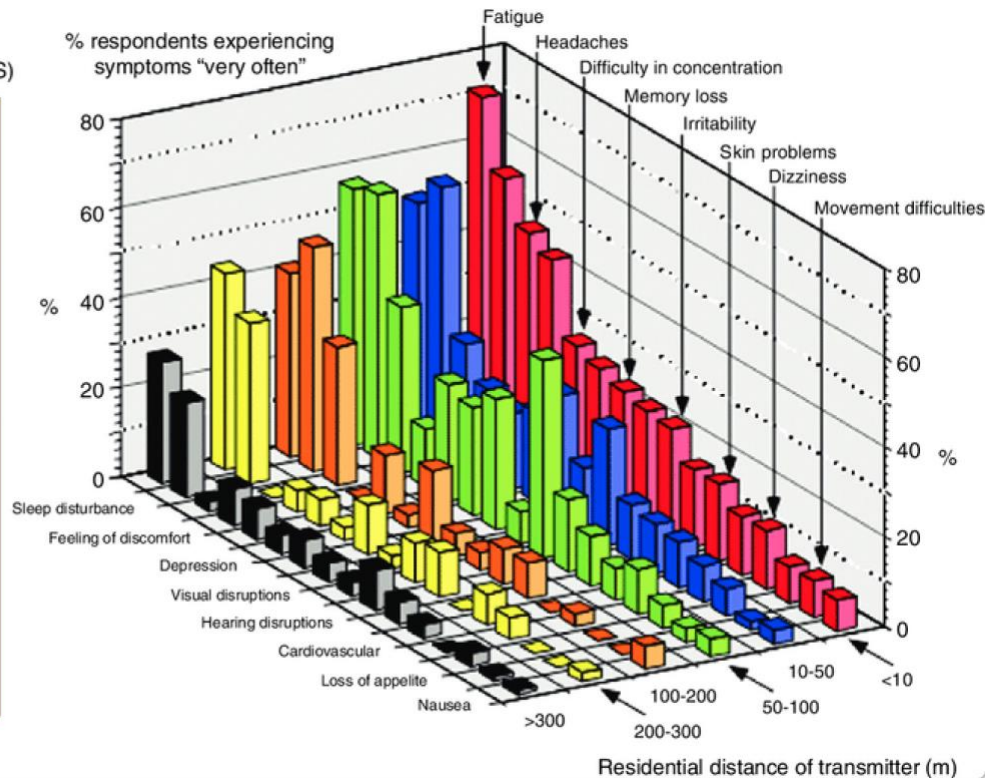
¹⁵⁰ <https://www.commerce.gov/news/blog/2022/01/us-population-estimated-332403650-jan-1-2022#:~:text=As%20our%20nation%20prepares%20to,since%20New%20Year's%20Day%202021>.

¹⁵¹ *Cell Tower Health Effects*, Physicians for Safe Technology, <https://mdsafetech.org/cell-tower-health-effects/>.

¹⁵² *Cell Tower Health Effects*, Physicians for Safe Technology, <https://mdsafetech.org/cell-tower-health-effects/>.

Rapid aging syndrome (RAS)
Electro-Hyper-Sensitivity (EHS)

1. Fatigue
2. Sleep disturbance
3. Headaches
4. Feeling of discomfort
5. Difficulty concentrating
6. Depression
7. Memory loss
8. Visual disruptions
9. Irritability
10. Hearing disruptions
11. Skin problems
12. Cardiovascular
13. Dizziness
14. Loss of appetite
15. Movement difficulties
16. Nausea



Symptoms experienced by people near cellular phone base stations; RF radiation affects the blood, heart and autonomic nervous system.¹⁵³ Source: Santini, et al (France): Pathol Biol. 2002;50:S369-73. Chart compiled by Dr. Magda Havas.

There have been numerous reports of adverse health effects from RF radiation and cell towers that have been placed in close proximity to people, either at their residences, businesses or other areas which they frequent.¹⁵⁴

(iv) EMS Disabilities are Agnostic

Those who are EMS disabled cut across age and socio-economic strata, ranging from professionals and social workers to children. They include formerly high-functioning engineers, doctors and lawyers, a number of whom have become homeless from their RF radiation injuries and disabilities.¹⁵⁵ A renowned doctor in this field, Dr. Golomb¹⁵⁶ observed that, although prior to their exposure they had no problem navigating in the world, after exposure their condition cost them up to 2 million dollars, many lost their homes and their access to basic services such as hospital care, post offices and libraries

¹⁵³ Dr. Magda Havas, https://www.researchgate.net/figure/Symptoms-experienced-by-people-near-cellular-phone-base-stations-based-on-the-work-of_fig2_258313941.

¹⁵⁴ Cell Tower Health Effects <https://www.saferemr.com/2015/04/cell-tower-health-effects.html>, Center for Family and Community Health, School of Public Health, University of California, Berkeley.

¹⁵⁵ Letter by Dr. Beatrice Golomb, Professor of Medicine, UC San Diego School of Medicine, Aug. 22, 2017, <https://mdsafetech.org/wp-content/uploads/2017/09/golomb-sb649-5g-letter-8-22-20171.pdf>.

¹⁵⁶ Dr. Beatrice Golomb's Curriculum Vitae, <https://www.golombresearchgroup.org/pagecv>.

became restricted.¹⁵⁷ She states the common refrain is that people were either not aware of, did not hear about, or gave no credence to any possible health hazards connected to wireless infrastructure, until they themselves were injured.¹⁵⁸ She states that:

The best and the brightest are among those whose lives – and ability to contribute to society –will be destroyed. High profile individuals with acknowledged electrohypersensitivity include, for instance, ***Gro Harlem Brundtland*** – the former 3-time Prime Minister of Norway and former Director General of the World Health Organization; [and] ***Matti Niemela***, former Nokia Technology chief ...¹⁵⁹ [Emphasis added]

Dr. Golomb further explains the plight of those unwittingly injured by RF radiation, that:

[T]heir problems arose ***due to actions of others, against which they were given no control*** – and can be reversed, in most cases, if the assault on them is rolled back.¹⁶⁰

In the case of a 59 year old social worker in the United Kingdom, she was found by her medical practitioner to be permanently disabled from exposure to RF radiation:

Mrs. Burns has a medical condition that renders her permanently incapable of undertaking any gainful work. There currently are no treatments available for her condition; avoidance of emissions is the only way to significantly reduce her symptoms.¹⁶¹ [Emphasis added.]

Unfortunately, because this condition is not commonly understood, Mrs. Burns commented on the unrelenting discrimination that she has been exposed to:

I have worked in Health and Social Care for 35 years, supporting some of the most disabled and vulnerable members of our society and advocating to ensure their rights have been upheld. ***To have been on the receiving end of societal prejudice,***

¹⁵⁷ Letter by Dr. Beatrice Golomb, Professor of Medicine, UC San Diego School of Medicine, Aug. 22, 2017, <https://midsafetech.org/wp-content/uploads/2017/09/golomb-sb649-5g-letter-8-22-20171.pdf>.

¹⁵⁸ Letter by Dr. Beatrice Golomb, Professor of Medicine, UC San Diego School of Medicine, Aug. 22, 2017, <https://midsafetech.org/wp-content/uploads/2017/09/golomb-sb649-5g-letter-8-22-20171.pdf>.

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

¹⁶¹ “59 year old social workers wins ‘early ill health retirement’ for disabling ‘Electromagnetic Hypersensitivity (EHS)’,” Physicians’ Health Initiative for Radiation and Environment Press release June 15, 2022, <https://phiremedical.org/wp-content/uploads/2022/06/Press-Release-EHS-Social-Worker-granted-long-term-ill-health-pension-UK-Named.pdf>.

discrimination, ignorance and misunderstanding, has been devastating.¹⁶²

[Emphasis added.]

That people are not being informed of the health hazards of RF radiation, having it be forced upon them and their children without recourse, intruding into their homes, and then be discriminated against for the injuries they sustain as a result, ***should shock the conscience of any public official who took an oath to protect public health and welfare.***

Ultimately, Mrs. Burns “won her appeal for early ill-health retirement and will now receive full pension due to disabling Electromagnetic Hypersensitivity (EHS),”¹⁶³ as it is referred to in the U.K. She recounts the damage that exposure has done to her career:

My career has been important to me and I’m disappointed to be having to retire early instead of working beyond retirement age as I’d planned;¹⁶⁴

. . . and to her life:

When exposed [to non-ionizing radiation, such as Wi-Fi and mobile phone emissions] she experiences dizziness, headaches, palpitations, sleep disturbance, vibrating sensations and sensitivity to noise and light. She feels pain in body areas which are nearest to the radiation sources, such as heat and pain at the ear from mobile phone use and abdominal pain from computer use.¹⁶⁵

In another ground-breaking decision in the U.K. (and probably the world), a child was recognized as having EHS (referring to electro-hypersensitivity, as it is known in the U.K.) and was awarded accommodation, meaning that the school was mandated to make accommodation for the child’s condition¹⁶⁶. This was decided in 2022 by the Upper Tribunal of the Administrative Appeals Chamber, which is to say that the decision is precedent setting in the U.K. In the child’s own words:

I am a 13-year-old girl with EHS. I have headaches, insomnia and other symptoms sometimes when exposed to WiFi or other kinds of EMF . . . These can become very severe . . . I can feel things and sense things most people can’t. This has protected my health . . . I have previously been unable to go to school, as the school I went to put in WiFi . . . If you have EHS and are struggling to stay in good health, or can’t go to school, or work, don’t give up . . . People are becoming more

¹⁶² Ibid.

¹⁶³ <https://ehtrust.org/major-uk-decision-awards-to-social-worker-on-the-basis-of-electromagnetic-hypersensitivity-ehs/>.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

¹⁶⁶ <https://ehtrust.org/education-health-care-plan-ehcp-awarded-aug-2022-for-uk-child-on-the-basis-of-electromagnetic-hypersensitivity-ehs/>.

aware of this condition, and even if right now it seems like nothing will ever change, it already is.¹⁶⁷

However, in 2015, seven years prior to this decision, a 15-year old girl in the U.K. who had developed headaches and bladder problems attributed to her exposure to Wi-Fi routers in her school did not experience a positive outcome.¹⁶⁸ The school not only failed to acknowledge her severe condition but punished the girl for leaving class rooms containing routers that were causing her condition. In an apparent cry for help, the girl then either accidentally or intentionally, hanged herself, as her mother describes she was driven to despair.

The Massachusetts Medical Association and California Medical Association have adopted resolutions for further studies on health outcomes from RF radiation, calling for safety limits to protect human health.¹⁶⁹

When the best and the most fit among us, such as firefighters, become injured from RF radiation, then we know we have a big problem for the rest of the population. Firefighters in California were injured after a cell tower was installed on their station house property. They experienced headaches, and memory, sleeping and neurological disorders. SPECT brain scans found abnormalities associated with wireless radiation. Testing results showed delay in reaction time and difficulty in mental focus.¹⁷⁰ During actual emergency calls, they would sometimes become disoriented and could not respond to emergencies with the speed, cognition and orientation required to perform their duties at optimal capacity.

“Firefighters have reported getting lost on 911 calls in the same community they grew up in, and one veteran medic forgot where he was in the midst of basic CPR on a cardiac victim and couldn’t recall how to start the procedure over again...Prior to the installation of the tower on his station, this medic had not made a single mistake in 20 years.”¹⁷¹

Consequently, the International Association of Firefighters passed a resolution opposing, and calling for a moratorium, on the placement of cell towers near fire stations in the U.S. and Canada.

(v) Descriptions of Injuries Suffered by Individuals and Children

¹⁶⁷ Ibid.

¹⁶⁸ <https://www.pressreader.com/uk/daily-mail/20151201/281904477099139>

¹⁶⁹ *Massachusetts Medical Association Adopts Resolution on Wireless Safety Standards Reevaluation*, <https://ehtrust.org/massachusetts-medical-association-adopts-resolution-on-wireless-safety-standards-reevaluation/>.

¹⁷⁰ <https://www.iaff.org/cell-tower-radiation/>; International Association of Firefighters (IAFF) Votes To Study Health Effects of Cell Towers on Fire Stations, Call for Moratorium on New Cell Towers on Fire Stations Until Health Effects Can Be Studied, https://ehtrust.org/wp-content/uploads/pr_iaff_vote-1.pdf.

¹⁷¹ Letter by Dr. Beatrice Golomb, Professor of Medicine, UC San Diego School of Medicine, Aug. 22, 2017, <https://mdsafetech.org/wp-content/uploads/2017/09/golomb-sb649-5g-letter-8-22-20171.pdf>.

Individuals and children who have suffered from exposure to RF radiation describe their stories in Appendix C, incorporated herein by reference. In some instances, pseudonyms or the heading of “Anonymous” have been used to protect the privacy of these individuals. With each new “generation” of wireless technology, including 5G on their mobile devices, people are being further exposed to RF radiation which they cannot avoid.¹⁷² These emerging technologies require new policies to address the increasing number of EMS Disabled, especially among the children.

(A) More Adverse Impacts on Children

Children are particularly vulnerable and are adversely affected by RF radiation in their environment, homes and schools.¹⁷³ A special risk factor has been identified for children “due to their smaller body mass and rapid physical development, both of which magnify their vulnerability to known carcinogens, including radiation.”¹⁷⁴ The American Academy of Pediatrics has pointed out that children are disproportionately affected by cell phone radiation due to their lower bone density and amount of fluid in the brain allowing for absorption of greater quantities of RF radiation than in adults.¹⁷⁵

Children absorb more RF radiation than adults, and fetuses are at even greater risk.¹⁷⁶ Children’s “brain tissues are more absorbent, their skulls are thinner and their relative size is smaller.”¹⁷⁷ RF radiation penetrates more deeply into the skulls of children compared to adults,¹⁷⁸ as shown below in cell phone usage.¹⁷⁹

¹⁷² Letter by Dr. Beatrice Golomb, Professor of Medicine, UC San Diego School of Medicine, Aug. 22, 2017, <https://mdsafetech.org/wp-content/uploads/2017/09/golomb-sb649-5g-letter-8-22-20171.pdf>.

¹⁷³ *Children and Wireless Radiation*, <https://ehtrust.org/educate-yourself/children-and-wireless-faqs/>.

¹⁷⁴ *Key Scientific Evidence and Public Health Policy Recommendations*, Supplement 2012, at 21, David O. Carpenter, MD, Director, Institute for Health and the Environment University at Albany, Cindy Sage, MA, Sage Associates, https://bioinitiative.org/wp-content/uploads/pdfs/sec24_2012_Key_Scientific_Studies.pdf.<https://bioinitiative.org/>.

¹⁷⁵ *Key Scientific Evidence and Public Health Policy Recommendations*, Supplement 2012, at 21, David O. Carpenter, MD, Director, Institute for Health and the Environment University at Albany, Cindy Sage, MA, Sage Associates, https://bioinitiative.org/wp-content/uploads/pdfs/sec24_2012_Key_Scientific_Studies.pdf.<https://bioinitiative.org/>.

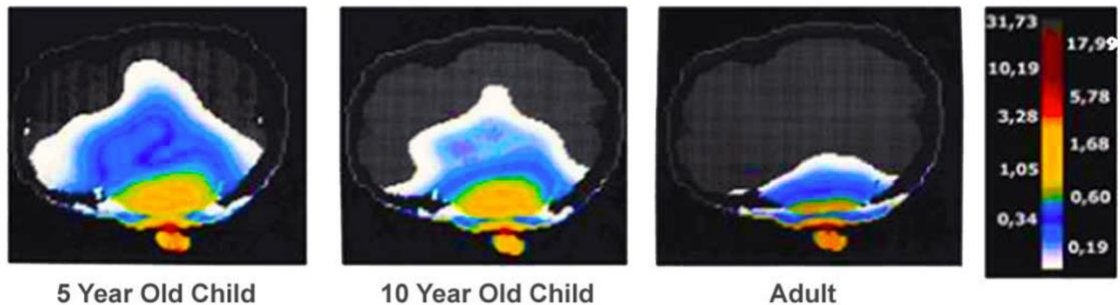
¹⁷⁶ *Why children absorb more microwave radiation than adults: The consequences*, Morgan, Kesar and Davis, *Journal of Microscopy and Ultrastructure*, Vol. 2, Issue 4, December 2014, 197-204, <https://www.sciencedirect.com/science/article/pii/S2213879X14000583>.

¹⁷⁷ *Ibid.*

¹⁷⁸ See, Dr. Melnick, London 5G Conference at 39:00, https://www.youtube.com/watch?v=zSx_yDzxvM8&t=2295s; <https://ehtrust.org/research-on-childrens-vulnerability-to-cell-phone-radio-frequency-radiation/> and <https://ehtrust.org/science/scientific-imaging-cell-phone-wi-fi-radiation-exposures-human-body/>.

¹⁷⁹ *Exposure limits: the underestimation of absorbed cell phone radiation, especially in children*, Gandhi, Morgan, Augusto de Salles, Han, Heberman, Davis, October 14, 2011, <https://pubmed.ncbi.nlm.nih.gov/21999884/>.

Children are more vulnerable to RF microwave radiation.



Depth of absorption of cell phone radiation in a 5-year old child, a 10-year old child, and in an adult from GSM cell phone radiation at 900 MHz. Color scale on right shows the SAR in Watts per kilogram. Source: [Exposure limits: the underestimation of absorbed cell phone radiation, especially in children](#)

Source: Exposure limits: the underestimation of absorbed cell phone radiation, especially in children, Gandhi, Morgan, Augusto de Salles, Han, Heberman, Davis, October 14, 2011.¹⁸⁰

Exposure to RF radiation “can result in degeneration of the protective myelin sheath that surrounds brain neurons” and “[d]igital dementia has been reported in school age children.”¹⁸¹ It also increases the risk of childhood leukemia.¹⁸²

There are also neurological implications to RF radiation exposure for children.¹⁸³ Cell towers near schools and Wi-Fi in schools are potentially hazardous to children.¹⁸⁴

- Elementary school children who were exposed to high levels of RF radiation generated from mobile phone base stations 200 meters from their schools “had a significantly higher risk of type 2 diabetes mellitus” than those exposed to lower RF radiation.¹⁸⁵

¹⁸⁰ Ibid.

¹⁸¹ *Why children absorb more microwave radiation than adults: The consequences*, Morgan, Kesar and Davis, *Journal of Microscopy and Ultrastructure*, Vol. 2, Issue 4, December 2014, 197-204, <https://www.sciencedirect.com/science/article/pii/S2213879X14000583>.

¹⁸² *Key Scientific Evidence and Public Health Policy Recommendations*, 2007, at 19, David O. Carpenter, MD, Director, Institute for Health and the Environment University at Albany, Cindy Sage, MA, Sage Associates, https://bioinitiative.org/wp-content/uploads/pdfs/sec24_2007_Key_Scientific_Studies.pdf.

¹⁸³ See generally, <https://ehtrust.org/research-on-childrens-vulnerability-to-cell-phone-radio-frequency-radiation/>; see also, <https://ehtrust.org/cell-towers-and-cell-antennae/compilation-of-research-studies-on-cell-tower-radiation-and-health/>.

¹⁸⁴ Dr. Magda Havas: WiFi in Schools is Safe. True or False?, <https://www.youtube.com/watch?v=6v75sKAUFdc>.

¹⁸⁵ *Association of Exposure to Radio-Frequency Electromagnetic Field Radiation (RF-EMFR) Generated by Mobile Phone Base Stations (MPBS) with Glycated Hemoglobin (HbA1c) and Risk of Type 2 Diabetes Mellitus*, Sultan Ayoub

- Adolescent school children who were exposed to high levels of RF radiation generated from mobile phone base stations within 200 meters from their schools had “delayed fine and gross motor skills, spatial working memory and attention” than those exposed to lower RF radiation.¹⁸⁶
- A ten-year old child testified of his cardiac condition being caused by exposure to RF radiation in a library where he was being tutored.¹⁸⁷

RF radiation “... has toxic effects in pregnancy, to the fetus and subsequent offspring ... and is tied to developmental problems in later life, including attention deficit and hyperactivity.”¹⁸⁸

Children born of mothers who used cell phones during pregnancy developed more behavioral problems by school age than those whose mothers did not use cell phones during pregnancy, with the following results: “25% more emotional problems, 35% more hyperactivity 49% more conduct problems and 34% more peer problems.”¹⁸⁹ A study involving 24,499 children found a 23% increase of emotional and behavioral difficulties.¹⁹⁰

Therefore, RF radiation can produce adverse health outcomes in vulnerable populations such as children, pregnant women and the elderly, and for the unsuspecting public who have not been informed of potential health hazards of RF radiation.

Overview of Studies Showing Injury and Bio-Effects from RF Radiation Exposure

Industry: As early as April 2000, the ECOLOG Institute, which was commissioned by T-Mobil in Germany (parent company to T-Mobile in the U.S.), issued a report on its study of the risks of electromagnetic fields (EMFs) because of the rapidly expanding mobile telecommunications industry. The results were twofold: (1) findings of adverse health impacts associated with exposure to EMFs and (2) strong precautions and warnings to significantly lower the power of the EMFs to which the public would be

Meo et al, International Journal of Environmental Research and Public Health, 2015;
https://www.researchgate.net/publication/283726472_Association_of_Exposure_to_Radio-Frequency_Electromagnetic_Field_Radiation_RF-EMFR_Generated_by_Mobile_Phone_Base_Stations_with_Glycated_Hemoglobin_HbA1c_and_Risk_of_Type_2_Diabetes_Mellitus.

¹⁸⁶ Meo, S. A., Almahmoud, M., Alsultan, Q., Alotaibi, N., Alnajashi, I., & Hajjar, W. M. (2018). *Mobile Phone Base Station Tower Settings Adjacent to School Buildings: Impact on Students’ Cognitive Health*, American Journal of Men’s Health; <https://pubmed.ncbi.nlm.nih.gov/30526242/>.

¹⁸⁷ Child With Heart Problems From Wireless: 5G Health Risks California SB 649 Hearing, https://www.youtube.com/watch?v=OgNLR9fQOX4&list=PLT6DbkXhTGoDakSqp1i_7milpwGx4xMFq.

¹⁸⁸ Letter by Dr. Beatrice Golomb, Professor of Medicine, UC San Diego School of Medicine, Aug. 22, 2017, <https://mdsafetech.org/wp-content/uploads/2017/09/golomb-sb649-5g-letter-8-22-20171.pdf>.

¹⁸⁹ *Key Scientific Evidence and Public Health Policy Recommendations*, Supplement 2012, at 8, David O. Carpenter, MD, Director, Institute for Health and the Environment University at Albany, Cindy Sage, MA, Sage Associates, https://bioinitiative.org/wp-content/uploads/pdfs/sec24_2012_Key_Scientific_Studies.pdf.

¹⁹⁰ Miller AB, Sears ME, Morgan LL, Davis DL, Hardell L, Oremus M, Soskolne CL. Risks to Health and Well-Being From Radio-Frequency Radiation Emitted by Cell Phones and Other Wireless Devices. *Front Public Health*. 2019 Aug 13;7:223. doi: 10.3389/fpubh.2019.00223. PMID: 31457001; PMCID: PMC6701402, also available at <https://www.frontiersin.org/articles/10.3389/fpubh.2019.00223/full#B42>.

exposed.¹⁹¹ The findings included risks of cancer (of the central nervous system and testicular cancer), leukemia, damage to the immune system and cognitive impairments. It found that for all stages of cancer development, power flux densities of less than 1 W/m² were sufficient. “For some stages of cancer development, intensities of 0.1 W/m² or even less may suffice to trigger effects.”¹⁹²

The ECOLOG Institute also addressed the issue of electrosensitivity. It emphasized the importance of developing *“a strategy for the research of the electrosensitivity phenomenon and its incidence, which would acknowledge the failure of traditional scientific methods to address the problem and allow the inclusion of the data available from the self-help groups and associations of the affected.”* [Emphasis added]

The Institute also provided precautions for vulnerable populations in “residential areas, schools, nurseries, playgrounds, hospitals and all other places at which humans are present for longer than 4 hours.”¹⁹³

In an article, “Why Tech Leaders Don't Let Their Kids Use Tech,”¹⁹⁴ it's reported that technology executives restrict or forbid their children's use of the very technology that they are providing to the public, including “the makers of smartphones and tablets, of social media channels and game boxes.” Technology “titans” such as former Apple's Steve Jobs and Bill and Melinda Gates have admitted to placing restrictions on their children's use of technology. Chris Anderson, former Wired magazine editor and CEO of 3D Robotics, said that his kids “accuse me and my wife of being fascists and overly concerned about tech, and they say that none of their friends have the same rules. That's because we have seen the dangers of technology firsthand. I've seen it in myself, I don't want to see that happen to my kids.”¹⁹⁵

Federal Communications Commission (FCC): The FCC admitted in 2019 that at least some types of RF radiation can cause instantaneous non-thermal adverse effects with RF radiation frequencies ranging between 3 KHz and 10 MHz.¹⁹⁶ Typically, the FCC averages exposure levels over 30 minutes, which completely obscures the effects of the pulsating nature of RF radiation and does not account for 24/7 exposure by the population or the constant pulsations of RF radiation. To obtain a more accurate reading of RF emissions, the maximum power density and peak power density levels per millisecond

¹⁹¹ Mobile Telecommunications and Health/Review of the current scientific research, ECOLOG Institut, Hannover, April 2000, available at <https://docs.google.com/document/d/1Rd2c900GURf9YYQY-L2MHAFDYGIeT2R1tyMZYQhZTEA/edit>; ECOLOG is a research organization founded in 1991 by scientists from the [University of Hannover](#).

¹⁹² Ibid.

¹⁹³ Ibid.

¹⁹⁴ “Why Tech Leaders Don't Let Their Kids Use Tech,” <https://kidzu.co/health-wellbeing/why-tech-leaders-dont-let-their-kids-use-tech/>.

¹⁹⁵ Ibid.

¹⁹⁶ Proposed Changes in the Commission's Rule Regarding Human Exposure to Radiofrequency Electromagnetic Fields, 34 FCC Rcd 11687, 11743-11745, ¶¶122- 124 & nn. 322-335 (2019).

should be recorded, because adverse health effects arise from the peaking and pulsating nature of RF emissions.¹⁹⁷

Food and Drug Administration (FDA):

In connection with studies conducted on 2G and 3G used in cellular communications, Linda Birnbaum, Ph.D., former Director of the U.S. NIEHS and former Director of the National Toxicology Program (NTP) spanning across the Department of Health and Human Services organizations which involves NIH, FDA and CDC, has stated:

- *“The phase I [NTP] studies established that non-thermal levels (<10C or no detectible change in temperature) of RFR exposure had toxicological implications in biological systems.” (pg. 9).*
- *“The NTP found and published evidence of DNA damage after only 90 days of exposure.” (pg. 9).*
- *“Overall, the NTP findings demonstrate the potential for RFR to cause cancer in humans. The independent peer review of the entire proceedings carried out by toxicologists, pathologists and statisticians independent of the NTP staff conducted March 26-28, 2018, concluded that there*

¹⁹⁷ Human-made electromagnetic fields: Ion forced-oscillation and voltage-gated ion channel dysfunction, oxidative stress and DNA damage (Review) (2021) Pangopolous DJ, et al. International Journal of Oncology. August 23, 2021. <https://pubmed.ncbi.nlm.nih.gov/34617575/>.

Computational modeling investigation of pulsed high peak power microwaves and the potential for traumatic brain injury. Sci Adv. 2021 Oct; 7(44). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8555891/>. "These studies reveal that the MAE threshold depends on the energy in a single pulse (not the average power density) for sufficiently short pulses [e.g., 32 μs in (46)], and peak power densities of 102 to 105 mW/cm² have been known to cause auditory effects in human participants (45)."

“Diplomats' Mystery Illness and Pulsed Radiofrequency/Microwave Radiation,” Dr. Beatrice Golomb. Neural Comput. 2018 Nov; 30(11):2882-2985. <https://pubmed.ncbi.nlm.nih.gov/30183509/>; “Reported facts appear consistent with pulsed RF/MW as the source of injury in affected diplomats.”

“5G: Great risk for EU, U.S. and International Health! Compelling Evidence for Eight Distinct Types of Great Harm Caused by Electromagnetic Field (EMF) Exposures and the Mechanism that Causes Them,” Martin L. Pall, PhD, <https://peaceinspace.blogspot.com/files/5g-emf-hazards--dr-martin-l.-pall--eu-emf2018-6-11us3.pdf>.

Belyaev, I., Dean, A., Eger, H. et al. "EUROPAEM EMF Guideline 2016 for the prevention, diagnosis, and treatment of EMF-related health problems and illnesses." Rev environ Health. 2016;31(3):363-397. Doi:10.1515/reveh-2016-0011.

B. W. G. (2012). "Bioinitiative Report 2012: A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation."

was ‘clear evidence of cancer,’...exposure to RFR is associated with an increase in DNA damage.” (pg. 11).

Since completion of the \$30 million NTP study (originally sponsored by the FDA to research possible biological effects of RFR), the results have been replicated by the Ramazzini Institute in another study using exposures below the FCC thermal thresholds (simulating emissions from cellular base stations and wireless transmitters).¹⁹⁸

Facts and Statements by U.S. Preeminent Scientists and Experts In the Area of MW/EMF/RF Radiation Research

As shown by the following facts and statements by the United States’ preeminent scientists and experts in the area of wireless RFR research, it has become well established that wireless radiation exposure produces or has the recognized potential of producing biological effects.

- 1 In 2011, the World Health Organization’s (WHO) International Agency for Research on Cancer (IARC) classified wireless radiation as a Group 2B possible carcinogen.¹⁹⁹ This conclusion was based upon an increased risk of malignant brain cancer (glioma) identified in those who used cell phones for over 10 years for an average of 30 minutes per day.

Anthony B. Miller, M.D., Senior Epidemiologist, IARC, states in a 2018 updated assessment to the 2011 IARC classification of wireless radiofrequency radiation (RFR), ***“When considered with recent animal experimental evidence, the recent epidemiological studies strengthen and support the conclusion that RFR should be categorized as carcinogenic to humans (IARC Group 1).”***²⁰⁰

- 2 “Since 2011, the scientific evidence linking wireless to cancer has significantly increased and today several published reviews conclude that the current body of evidence indicates cell phone radiation is proven Group 1 human carcinogen (Miller et al 2018, Peleg et al 2018 Carlberg and Hardell 2017, Belpomme et al 2018).”²⁰¹
- 3 Christopher J. Portier, Ph.D., former director of the National Center for Environmental Health at the Centers for Disease Control and Prevention (CDC) and a scientific advisor for the WHO, reviewed the most recent body of scientific research and literature to look at the feasibility of RFR causing specific brain tumors in humans and concluded in March, 2021:

¹⁹⁸ <https://www.saferemr.com/2018/03/RI-study-on-cell-phone.html>; see also, https://www.niehs.nih.gov/sites/default/files/news/newsroom/releases/2018/november1/11012018transcript_508.pdf.

¹⁹⁹ https://www.iarc.who.int/wp-content/uploads/2018/07/pr208_E.pdf.

²⁰⁰ <https://www.sciencedirect.com/science/article/abs/pii/S0013935118303475>.

²⁰¹ <https://ehtrust.org/science/whoiar-position-on-wireless-and-health/>.

- ***"Given the human, animal and experimental evidence, I assert that, to a reasonable degree of scientific certainty, the probability that RF exposure causes gliomas and neuromas is high."***²⁰²

4 Ronald Melnick, Ph.D., retired NIEHS senior toxicologist who won the American Public Health Association's 2007 David P. Rall Award for public health advocacy states:

"I strongly feel health and regulatory agencies should promote policies that reduce cell phone radiation exposure, especially for children and pregnant women. The agencies in the U.S. say, "if you are concerned" rather than "we are concerned." Agencies should be clear and straightforward educating the public on "here is what you should do."

"The risk can be greater for children than adults due to the increased penetration of the radiation within brains of children and the fact that the developing nervous system is more susceptible to tissue damaging agents."²⁰³

5 The American Academy of Pediatrics, a non-profit professional organization of 60,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists, stated in a letter to the FCC on July 12, 2012:

"Children ... are not little adults and are disproportionately impacted by all environmental exposures, including cell phone radiation. In fact, according to IARC, when used by children, the average RF energy deposition is two times higher in the brain and 10 times higher in the bone marrow of the skull, compared with mobile phone use by adults."²⁰⁴

6 New Hampshire formed a State Commission to examine whether wireless radiation is harmful to human health. The majority of that New Hampshire State Commission came to the conclusion that exposure to wireless radiation is harmful to human health and the environment. The commission was convened through bipartisan legislation²⁰⁵ that was signed by the governor. Commission membership included unbiased experts in fields relating to health and radiation exposure, and they issued their Final Report in November 2020.²⁰⁶

7 Scientific Evidence Invalidates Health Assumptions Underlying the FCC Exposure Limit Determinations for Radiofrequency Radiation²⁰⁷

The International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF) published a paper which reviewed the studies and assumptions made in determining the current FCC limits,

²⁰² <https://www.saferemr.com/2021/03/expert-report-by-former-us-government.html?m=1>.

²⁰³ https://www.youtube.com/watch?v=zSx_yDzxvM8&t=2295s

²⁰⁴ <https://ehtrust.org/wp-content/uploads/American-Academy-of-Pediatrics-letter-to-the-FCC-July-12-2012.pdf>

²⁰⁵ <https://legiscan.com/NH/text/HB522/2019>.

²⁰⁶ <http://www.gencourt.state.nh.us/statstudcomm/committees/1474/reports/5G%20final%20report.pdf>.

²⁰⁷ https://icbe-emf.org/wp-content/uploads/2022/10/ICBE-EMF-paper-12940_2022_900_OnlinePDF_Patched-1.pdf.

established 27 years ago in 1996, and found that those assumptions were incorrect and cannot form the basis currently to protect the public.

In the late 1990s, the FCC adopted RF radiation exposure limits to protect the public and workers from adverse effects. However, they:

. . . were based on results from behavioral studies conducted **in the 1980s involving 40–60-minute exposures in 5 monkeys and 8 rats**, and then applying arbitrary safety factors to an apparent threshold specific absorption rate (SAR) of 4 W/kg. The limits were also based on two major assumptions: any biological effects were due to excessive tissue heating and no effects would occur below the putative threshold SAR . . .

The paper concludes that extensive research on RF radiation during the intervening 25 years shows that the assumptions are invalid and “continue to present a public health harm” with no adequate protections for the general population for short -term and long-term exposures, including children and those acutely affected by exposure.²⁰⁸

Adverse effects observed at exposures **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 . . .**

The paper makes an urgent appeal for much needed “health protective exposure limits for humans and the environment.”²⁰⁹

Public exposure to RF radiation is chronic – 24/7, 365 days a year. Therefore, there is an entire spectrum of conditions produced ranging from neurological and immunological disorders to DNA damage (a precursor to cancer).

²⁰⁸ Ibid.

²⁰⁹ Ibid.

ADDENDUM B-1

HUD FHAP Advisory Disclaiming Jurisdiction Over EMS Issues

From Maine Human Rights Commission, April 25, 2017:

Fair Housing Enforcement Partners:

HUD has recently seen several cases around the country dealing with smart meters, radio frequency (RF) or electromagnetic frequency (EMF) issues. These cases typically concern persons who allege to have a disabling sensitivity to RF or EMF fields. Often a complainant requests, as a reasonable accommodation, that electrical utility companies not place smart meters on a residence or on residences within a certain distance from a subject property usually not within 500 or 600 feet of a subject property. We have also seen, as accommodation requests, that an opt out fee not be charged for declining to have a smart meter installed at their property.

The Department of Energy and Department of Justice have also received numerous complaints dealing with these issues and have informed HUD that they will not open investigations under Section 504 based on these allegations.

Based on advice from HUD's Office of General Counsel, FHEO will not accept as jurisdictional allegations dealing with Smart Meters, RF and/or EMF issues, and any complaints already accepted will be closed. Should circumstances change in the future with respect to medical or legal opinions relating to these types of cases, the Department may reevaluate this position; if so, FHAP agencies will be informed of any change in HUD's position.

*** FHAP agencies must make their own determination whether to accept such complaints under their respective substantially equivalent State or local fair housing laws. Note, however, that under the Cooperative Agreements between HUD and FHAP participants, HUD reimburses only for cases that are jurisdictional under the federal Fair Housing Act. Where such complaints are accepted by a FHAP, they will not be accepted by HUD for payment. FHAP agencies that decline to accept such complaints should advise individuals of their right to file a civil action on their own under either the substantially equivalent State or local law, the federal Fair Housing Act, or both.

Thank you.

Joseph A. Pelletier

Director, Fair Housing Assistance Program

U.S. Dept. of Housing and Urban Development
(202) 402-2126

ADDENDUM B-2

HUD FHEO Advisory Disclaiming Jurisdiction Over EMS Issues

From: Lehman, Barbara L <Barbara.L.Lehman@hud.gov>

Sent: Friday, March 31, 2017 7:14 AM

To: Asantewa, Ife <ife.asantewa@hud.gov>; Marte, Yvonne L <yvonne.l.marte@hud.gov>; Tarver, Andrew <andrew.tarver@hud.gov>; Asunsolo, Rudolph <Rudolph.Asunsolo@hud.gov>

Cc: Fandel, Mona <Mona.Fandel@hud.gov>; Riggs, Jo Ann <jo.ann.riggs@hud.gov>

Subject: FW: Smart Meter, Radio Frequency, and Electromagnetic Frequency

From: Smyth, Timothy M

Sent: Friday, March 31, 2017 6:23 AM

To: Frisk, Amy M <Amy.M.Frisk@hud.gov>; Quesada, Anne <Anne.Quesada@hud.gov>; Lehman, Barbara L <Barbara.L.Lehman@hud.gov>; Bottiger, Betty <Betty.Bottiger@hud.gov>; Osegueda, Carlos <Carlos.Osegueda@hud.gov>; Sweeney, Garry L <Garry.L.Sweeney@hud.gov>; Golden, Jay <jay.golden@hud.gov>; McGough, Maurice J <Maurice.J.McGough@hud.gov>; Taylor, Melody C <Melody.C.Taylor@hud.gov>; Forward, Susan M <susan.m.forward@hud.gov>; Nevels, Kimberly L <Kimberly.L.Nevels@hud.gov>; Grosso, Lynn M <Lynn.M.Grosso@hud.gov>; Patterson, Gordon F <Gordon.F.Patterson@hud.gov>; Pelletier, Joseph A <Joseph.A.Pelletier@hud.gov>

Subject: Smart Meter, Radio Frequency, and Electromagnetic Frequency

Hi Team,

The Department has seen several cases around the country dealing with smart meters, radio frequency (RF) or electromagnetic frequency (EMF) issues. Cases typically concern persons who allege to have a disabling sensitivity to RF or EMF fields. Often, a complainant requests, as a reasonable accommodation, that electrical utility companies not place “smart meters” on a residence or on residences within a certain distance from a subject property – usually not within 500 or 600 feet of a subject property. We have also seen putative complainants asking, as an accommodation, that an opt out fee not be charged to complainant for not having a smart meter installed at their property. The Department of Energy and Department of Justice have also received numerous complaints dealing with these issues and have informed FHEO that they will not open investigations under Section 504 based on these allegations.

After consultation with OGC-Fair Housing, it has been decided that, at this time, FHEO will not accept, as jurisdictional, allegations dealing with Smart Meters, RF and/or EMF issues. Should circumstances change in the future with respect to medical or legal opinions relating to these types of cases, the Department may reevaluate this position; but for now, FHEO Intake should not accept these types of allegations and any complaints already accepted should be closed accordingly. As we always do when declining to accept allegations as jurisdictional, we must counsel front line staff to speak cautiously when asserting limitations of the Fair Housing Act’s jurisdiction. Accordingly, the attached letters are

short and straightforward. At this time, consistent with our federal partners, we will not open these cases. As the attached sample letters set forth, parties retain their right to timely file in court.

In addition, this information should be shared with FHAP agencies since we would not pay them to investigate complaints we deem to be non-jurisdictional.

Attached please find two sample documents:

1.Closure of Inquiry concerning Smart Meters 2.Closure of Complaint concerning Smart Meters

Have a good Friday,

Timothy M. Smyth, Deputy Assistant Secretary for Enforcement and Programs U.S. Department of Housing and Urban Development
Division of Fair Housing and Equal Opportunity
451 7th St. SW, Ste 5204

Washington, DC 20410 Tel: (202) 402-2439 Cell: (202) 412-5913

ADDENDUM C

INCREASED EXPOSURE FROM 5G/4G "SMALL" CELL ANTENNAS LOCATED CLOSE TO PEOPLE

A study entitled "[Very high radiofrequency radiation at Skeppsbron in Stockholm, Sweden from mobile phone base station antennas positioned close to pedestrians' heads](#)" published in *Environmental Research* by Koppel et al. (2022) created an RF heat map of RF measurements, finding that the highest RF measurements were in areas of close proximity to the base station antennas. The researchers concluded with recommendations to reduce close proximity placements such as positioning antennas "as far as possible from the general public" like in high-elevation locations or more remote areas.

A study entitled "[Measurements of radiofrequency electromagnetic fields, including 5G, in the city of Columbia, South Carolina, USA](#)" published in the *World Academy of Sciences Journal* found the highest RF levels in areas where the cell phone base station antennas were placed on top of utility poles, street lamps, traffic lights or other posts near to the street. The scientists compared their **2022 findings** to an earlier **2019 published review** on the mean outdoor exposure level of European cities and they found the South Carolina measurements to be higher.

The researchers concluded that the highest exposure areas were due to two reasons: cell phone base antennas on top of high-rise buildings provide "good cell coverage reaching far away, but creating elevated exposure to the radiofrequency electromagnetic fields at the immediate vicinity; and cell phone base station antennas installed on top of utility poles have placed the radiation source closer to humans walking on street level."

Source: Environmental Health Trust



Figure 7. Gervais Street: Cell phone base station antenna placed close to street level and causing high exposure to pedestrians and nearby café visitors (exposure scenario illustration). The antenna appears camouflaged and seemingly part of a utility pole. The measurer only discovered the antenna due to the high radiofrequency levels in the vicinity.

Source: Environmental Health Trust

ADDENDUM D

THE EMS DISABLED – IN THEIR OWN WORDS

Note: Some names have been truncated, changed or anonymized to protect individuals' privacy.

October 3, 2023

To Whom It May Concern,

In 2009 my husband bought me an iPad for Christmas. I loved it and was on it a few hours every day. Within a few weeks, however, I noticed that I would be nauseous after using it. I set it aside and have not picked it up since.

Soon afterward, I became aware that I was sensitive when texting on my Blackberry which gave me the feeling of sharp metal shards in my fingertips. It was affecting my manual dexterity. I now use a corded landline phone and mail for most all my communication. I cannot use wireless devices without adverse health effects. Myself, and others like me, need to have alternate ways to communicate (landlines, hardwired devices, mail) because wireless negatively impacts our health.

D.S.

EMS Disabled, Colorado

~*~

Department of Justice, Civil Rights Division

28 CFR Part 35, CRT Docket No. 144, AG Order No. 5729-2023, RIN 1190-AA79

Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities

Notice of Proposed Rulemaking

October 1, 2023

Department of Justice:

Thank you for this opportunity to share my response to the NPRM with you.

I have been disabled by environmental exposures since 1981. For the first years the electromagnetic hypersensitivities were especially painful and disorienting, but I learned to adapt to the dystonic symptoms (falling, clenched muscles, losing my ability to speak) by taking certain measures. For example:

- a.) I avoided sidewalks with overhead power distribution lines;
- b.) never crossed Market or Mission Streets over the Bay Area Rapid Transit train lines;
- c.) never approached S.F. General Hospital from the front, to avoid power generators under the street;
- d.) I avoided being anywhere that was line-of-sight from Sutro tower;
- e.) walked/rolled along the outer edge of the sidewalk, as far as possible from neon signs in shop windows;
- f.) other measures, many others.

It took several years but I learned to use my wheelchair, attendant, driver, and oxygen to go out. My neurology was severely damaged but sometimes I just risked the hit.

These and numerous other adaptations I learned by experiment. I'd never heard of anyone whose disability was "triggered" like mine was. For years, in no way could I explain the invisible barriers and constraints that held me back, except that they coincided with electromagnetic and radiofrequency exposures.

Eventually I found a support group for people with environmental illnesses, and began answering the "warm line" I&R calls from dozens of other people who'd been traumatized and isolated by environmental factors. I was learning some valuable principles from the S.F. Bay Area disabled community, too.

In more recent years, friends helped me move to the remote high desert in Arizona. I have a small, safe enough house, with a landline-wired phone and computer, and a long driveway where numerous electrically and chemically sensitive guests have camped or parked after they've become hypersensitive, unhoused, and without work or family for the first time.

There's a lot to get used to, primarily the estrangement from everything we loved and thought we knew. Despite the numerous promises of the A.D.A., people with environmental illnesses have no access to "public" programs and facilities like hotels, housing, homeless shelters, vocational and occupational rehab, hospital and medical care, the bank, taking classes, most shopping or chores, the sidewalks.

I can get around a lot of the time now, and think relatively well enough to take care of the daily needs. I have a hard-wired lap-top computer, shielded in metals, and can now do Word, e-mail, and print.

The old-fashioned electronics that first disabled me posed terrifying barriers but in retrospect they seem simpler, once I learned that they were “only” extremely painful, debilitating, and alienating. I could lessen their damage, to some degree, by isolating myself.

But now?

Now there doesn't seem to be a way to defend myself from the new communications technologies like cell phones, and I expect this will be made worse by 5-G. It took hard work to opt out of having a “smart” meter installed on my own house. There is hardly a single place to go, certainly none in public, to get far enough away to avoid aggravating the neurological problems. I don't know where else to live.

People who are ignorant about our situation invariably suggest that we “just” (like it is simple) get cell phones, use computers to work from home, for medical or legal appointments, and to order our food and other necessities. It is suggested that we could expand our social interaction through Facebook or similar.

This assumption that we can “hop on” computers or cell phones for daily tasks is dead wrong. It reflects extreme naivete to assume that we can be in a room with a computer for more than a few minutes if at all, or use cell phones, for example, to call for help when there is a fire, injury, assault, or a vehicle wreck. Only phones with real wiring are safe and don't hurt to use, same with computers.

Activities that are inaccessible now, due to wifi, include going to parks, campgrounds, and the library. I can't enter Lowe's, Home Depot, Ace, or most other stores without being overcome by their wifi.

I used to use an outdoor ATM machine, but now it hurts, and the flashing pictures and movement on the screen make it all but unusable. Managing inside the bank, by myself, is out of the question.

There is one public pay phone where a person can call out with coins in my town. It is in front of Circle K, surrounded by fluorescent lights and gas fumes, and a person should never go there after dark.

I get terribly disoriented using the computer to send for things, so my landline phone is the only option. I'm very concerned that the phone company where I live might switch to cellular only. That would mean no phone, no computer. Some of us are increasingly isolated by this true and actual “digital divide”.

A lot of the roads out where I live are slick mud when the washes run, during monsoon. Last time I called Triple AAA Premier, they wouldn't help me because there was no cell phone I could use.

Same when I needed to reset my computer after it got hacked. The Communications Company wouldn't help because I didn't have a cell phone they could call.

The NPRM says it aims to improve the lives of people with the four relevant disabilities, but thousands of the rest of us have disabilities that we actually do find extremely relevant. It is wrong to allow the technology that means life or death to us (wired phones for example) to be made even less available than it already is.

Susan Molloy

Snowflake, Arizona 85937

~*~

Department of Justice, Civil Rights Division

28 CFR Part 35

CRT Docket No. 144, AG Order No. 5729-2023

RIN 1190-AA79

Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities

Notice of Proposed Rulemaking

September 29, 2023

Dear Department of Justice,

I am a disabled individual writing to express the devastation that I currently suffer due to wireless technology and electronics. It will become even more life-threatening, just impossible to endure, with any and all expansion of wireless technology.

I am elderly and frail, and have severe mobility impairments which are made much worse with exposure to electronics, any electrical devices that are “smart” – those marketed (falsely) as “saving energy”.

The energy-saving features are advertised to promote sales but the reality is that they create electromagnetic fields and radio frequencies that travel on every wire inside a dwelling.

There is a growing body of evidence showing harm to humans. The sources of harm, among many others, include appliances, new “energy saving” light bulbs, heart monitors and certain other medical devices, and the so-called “information technologies” like routers and modems

I fall easily. I have severe osteoporosis. A conventional “Life Alert”-type personal wireless necklace would pose an enormous medical threat to me.

I am concerned about losing my copper landline phone. It is the only form of communications that I can tolerate in my house due to my disability.

Without my copper landline phone connection, which is known as “POTS” (short for “plain old telephone service”), ***I will have no way to access emergency services such as the ambulance, my doctor, EMTs, or personal care workers.***

My landline is my lifeline.

It is my only connection to the outside world. It is medically necessary that I am able to keep it.

I reside in an older home that my parents built. My inheritance is a life estate here. I have been fighting for nine years to keep my old analog electric meter. I am not able to tolerate “smart” meters. This home is my one and only refuge.

No elder-care facility or nursing home is safely accessible to me.

Accessibility for people with disabilities does not include only mobility, sight, hearing, cognitive, and manual dexterity impairments. It includes access for all disabled individuals.

We need accessibility not just publicly but within our own private residences. We should not have our lives snuffed out by 5-G antennas beaming into our private residences.

We need electricity and appliances that are safe, not monitored with “smart” meters. We desperately need our copper landlines so we have communications without RF Radio Frequency and harmful harmonics injuring our brains.

My physician has written over and over that if my sensitivities/disabilities are not accommodated, I cannot survive.

Please step out and help me have accessibility accommodations so I can have a chance to survive.

I urge you to consider this letter a plea for my very life.

Thank you for your assistance in this life and death situation.

Sincerely,

D.D. - Pennsylvania

~*~

Department of Justice Seeks Public Comment on Proposed Rule to Strengthen Web and Mobile App Access for People with Disabilities, Oct 3, 2023

Personal Statement

Nancy Van Dover, DVM, OMD, Dipl Acup

As a person with EMS (electromagnetically sensitive) disability, I would like you to understand how critically important safe communications are for our large, and very “relevant”, disabled class. We need to be able to communicate through the mail, corded landline phones and for those who physically can – internet on wired computers. Public access has not been possible for me for four years due to ubiquitous wireless radiation. For me, this RF radiation exposure is life threatening. So,

I cannot go to offices to do business or get information. I do not even have safe in-person medical care although I pay for Medicare.

Telemedicine on my wired computer, and Home Health--- with accommodations to have no wireless brought into my EMS-safe home---are my only options.

QUESTION: I need to know if your proposed rule will reduce or eliminate my ability to receive safe Home Health or Paramedic accommodations where paper records are used instead of a laptop, tablet or cell phone by the third party coming to my house?

My life was threatened, when my previously safe home was put in the path of new cellular emissions. It is in direct line of sight to my home. On January 23, 2020, presumably the date on which cellular antennas were altered or activated, I started to feel many of the symptoms I would get when I had tried to go into areas with wireless technologies. I was experiencing brain (cognitive) and heart symptoms, in particular. Although already suffering from EMS disability to a degree, I had never experienced symptoms of the magnitude I experienced beginning on January 23, 2020.

I got my radiofrequency (RF) meter out to check the levels in my house. It was too high for me and steadily increased over a two-week period forcing me to purchase RF shielding for my house. That two-week overexposure made me sicker than I had ever been with EMS, so I tried to reach out for some type of medical assistance. None could be found to come to my house, there was no safe place for me to be taken so Paramedics were called to check on me. I told them by phone, I would only permit them if they followed my EMS-safe protocol; as few people and vehicles as possible, no wireless devices allowed.

Three Paramedics and five deputies (including the one I had given detailed instructions to) came but did not follow my protocol, were totally ignorant of this condition and injured me even more with radiation they had on their belts. I had a hard time even getting them to back away. When the Paramedics tried "airplane mode" for their phones, they still emitted 200x's more radiation than what was safe for me. After their "visit" the EMS heart arrhythmia worsened and

my BP remained very high for weeks, insomnia became severe, chronic migraine developed again, my immune system was depressed. I did not think I would make it through the night.

It is apparent that First Responders, medical practitioners, and others, need to become aware of this disability and taught about EMS-safe protocol---to understand what a medical alert bracelet related to this disability means. My own medical instructions include not to put me in an ambulance or to take me to a medical facility that is not EMS-safe.

QUESTION: Will this proposed Rulemaking make it even more difficult for people with EMS disability to get EMS-safe medical care? Will this force medical professionals to only use wireless in record keeping and communications, for instance? Will it make it impossible for law enforcement to remove their wireless devices when coming onto the property of an EMS disabled person?

The medical “Standard of Care” cannot be based on wireless equipment and record keeping. Law enforcement and First Responders also need to be free to make accommodations by removing wireless devices.

Accommodations for people with EMS disability must be encouraged and enabled by the DOJ. Title I, II and III entities need to be instructed to do this with EMS-safe protocol and adequate Building Guidelines to wire record keeping, as well as security and internet systems so at least part of the building can be safe for this portion of the population.

Just as you are trying to assist four disabled classes in this rulemaking, the EMS disabled class must be considered “relevant” for communications that are safe and efficient, especially considering there is usually no option to go in person. Many people, including myself, when exposed to EMF’s (electromagnetic fields) develop blurry vision, severe tinnitus, cognitive impairment, and some complain of manual dexterity problems, like numbness and prickling sensations in their fingers.

More access barriers to services need to be removed, not erected, so an EMS disabled person can have their legally protected access. Improving, not reducing, phone and mail communications is needed by more and more people disabled by EMS.

Thank you for reconsidering during your rulemaking, making this disabled class relevant and our communication requirements as important as all other citizens.

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**Anonymous**

I have cognitive and manual dexterity disabilities. I have a brain injury that causes cognitive and neurological problems. When I’m close to wireless devices, or near wireless devices for a length of time, I have intolerable pain in my head, I become incoherent in my conversation, my voice becomes slurred, I cannot walk straight, my limbs curl inward, it becomes difficult to use my arms and legs, and I experience excruciating pain. These symptoms occur, or get worse, when I’m near wireless internet and apps, and when I move away from these the symptoms either go away or significantly diminish.

I had a mental health crisis and called my county's crisis management line. I told them I could not be near wireless devices, and I needed ADA accommodation. Though they concluded that I needed crisis help, they said they would not meet me without their staff using their wireless internet and apps. I was prevented from getting services in a crisis because of wireless apps and internet.

A couple years previous to this, I asked to meet with my county representative, and as a reasonable accommodation, I asked to meet in a room where there wasn't wireless technology because of my symptoms in which I can't function. They said they could put me in a room without wireless technology; however they couldn't control the rooms adjacent, which had wireless internet. When I met with him, my symptoms that flared, as mentioned previously, were on the edge of getting intolerable, and I mustered through the meeting. At the meeting, the representative said a few times that he could not get me information as he would need to get on wireless communications in order to get me the information. After the meeting, I was so ill that I was incapacitated for a few weeks with symptoms including: pain in my head that so severe that I couldn't function, my head swelled, I couldn't communicate my thoughts, I was dizzy and couldn't take showers, I stumbled when I walked, my memory and concentration were diminished. Though I wanted to follow up with my representative, I couldn't follow up, as it required me to get on emf emitting technologies to get back in touch with the representative. My representative asked that I follow up with him with information; however I was unable to even call him because I could no longer get near any emf emitting device.

For a couple years when I could not use touch pads at grocery stores, as getting near them would create severe pain, and the debilitating symptoms I mentioned above. They would make me feel dizzy, nauseous, my thoughts began to feel extremely confused, and I had to get away from them as fast as I could, as these symptoms were debilitating. I also couldn't go in and out of many grocery stores,(as well as other stores,) as being near the wireless internet and apps that the grocery store uses made my disability worse with the symptoms I've described. The excruciating pain, the dizziness, and cognitive and dexterity impairments became severe. Many times, I stopped going to many grocery stores altogether as the symptoms were too severe to tolerate. I had to get someone else to get me groceries. I have a friend who had the same problem, however she would faint, and also had to stop going into the grocery store, as well as other stores.

I made an appointment with an orthopedist's office as I fractured my foot. The doctor's office, though a very large business, would not accommodate me because they said they would not use any protections for me on any of their wired apps and web-based services. I was prevented from having medical help to get my foot properly x-rayed and treated, and never saw an orthopedist. Instead I had to heal my foot at home without any foot doctor.

I have this same issue with a dentists' using wireless apps and internet, and would not offer me any ADA accommodation, and I have not been able to see a dentist in 3 years.

S.B. – North Carolina

~\*~

Below is a letter from “Helen” sent to several City and County officials in Colorado, seeking help with housing. She did not receive any help even though they are building new senior, low-income housing using federal money. This disabled class cannot be ignored any longer. Lives are at stake and our federal government has a duty to protect their citizen’s rights, to make sure that at least a safe home can be found.

February 2, 2021

To Whom It May Concern,

I’m a 66 year old single woman who became EMS (electromagnetically sensitive) from exposure to EMF’s at several of my jobs.

The job where I had the most long-term exposure was when I was a professional Optician in a medical center in Boulder, CO. I operated a large machine that cut eyeglass lenses. Over time I got too ill to work. I lost my livelihood, my condo, my retirement savings, my partner, my well-being.

I don’t have much of a life because avoiding EMF’s is very time consuming and limiting. The EMF’s adversely affect my brain and my sleep making me EMS Disabled.

I got ill 18 years ago and it has left me in poverty, isolation, and I have a big loss of freedom, feeling safe, and feeling well. I have no family that can help me. I need help and protection from EMF’s as I find it impossible to feel better living in housing that isn’t EMF safe.

In my subsidized apartment I get bombarded from high levels of RF’s coming from my neighbor’s wireless devices; It’s like being forced to breathe second-hand smoke. And, I also have high levels of magnetic EMF’s surging randomly from my circuit breaker in a 14 foot radius. Then much of my apartment is not usable, the kitchen, living room, and bathroom. I need to live in a low-income house where I can avoid neighbor’s EMF’s and where I can have more control over reducing EMF’s.

I want to move back to Colorado, and desperately need an EMF safe place to live, walk, and hopefully a road that doesn’t have strong cell tower signals on my way to the grocery store.

Thank you.

~\*~

**Lauren, Upper West Side, Manhattan**

My name is Lauren and I live on the West side of midtown Manhattan where I have lived for many years.

On Feb. 21, 2020, nine “5G” cell towers began operating across the street from my apartment on the roof of 325 W. 37<sup>th</sup> St., approximately 40-90 feet from my apartment windows. I had a safe place to live before cell towers were installed, changing my life overnight.



During the two weeks following the start of their operation, I experienced severe symptoms, which my doctor confirmed:

- Constant tinnitus
- Shortness of breath
- Increased pain in eyes, limiting visual function
- Insomnia
- Severe migraines
- Burning skin
- Palpitations
- Vertical disturbances through cranium and occipital region simultaneous with horizontal intercranial disturbances extending through the ear canal and sharp stabbing pains extending into all 4 extremities

When I entered my apartment, within minutes my symptoms would increase, with severe damage and pain to my central nervous system. My apartment was no longer safe. I would awaken in the night, gasping for breath.

On March 11, 2020, within a month of the initial occurrence, I secured temporary housing.

Since I've left that apartment, my sleep has been restored. Unfortunately, the injuries I sustained have remained. I'm physically weaker, collapsing every day, a sensation of being neurologically sliced and burned. Migraines are more easily triggered, with nausea and heightened sensitivity to light.

Passing by a set of rooftop cell towers is painful. My ear canal intensifies with the sharp energy moving through my head. My heart races, and feels pushed in, creating a sense of suffocation. It feels like a brush of thin metal bristles pressing into my skin.

I am not alone in being injured.

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THE GILARDI FAMILY, PITTSFIELD MASSACHUSETTS

The children of the Gilardi family experienced severe symptoms when exposed to RF radiation from a cell tower that had been installed in their neighborhood, Amelia then 13 years old and her younger sister. This story shows just how vulnerable children are to radiation. Courtney Gilardi, the mother, describes the situation:

“My little one had headaches, dizziness, and felt like her head was ‘buzzy.’ She also suffered from the sensation that her skin was crawling and was itchy when she was in her room, which was on the side of the house closest to the cell tower. She complained of stomach aches and a once voracious eater and a like-clockwork sleeper could do neither. Since the tower was activated, she has lost her appetite

for food and complained she couldn't fall asleep. Those were never issues in the past. She also suffered with horrible nightmares. She would toss and turn and scream out. I only realized how often she did this after we moved to the cottage [in a different town away from the cottage] and she slept peacefully through the night.”

The cottage Courtney is referring to is the unheated cottage they have rented so they can escape their home which they hope and pray they can return to, but much of that depends on a federal judge’s decision. The cottage does not have hot water so Courtney and her family return to their “tower home” for a hot shower, but it is a place they can sleep through the night.

“When we would spend too much time at home, my little one would ask to leave and go to the cottage,” explains Courtney, describing how they would return to the house to get clothes, take a hot shower, and be with their toys and amenities they enjoyed and never contemplated leaving until Verizon became their

unwelcome neighbor. “She would say, ‘I’m ready now’ and we knew despite mentally wanting to stay in her own room with her toys, ‘lovies’, fort, books and the only home she had ever known, that physically she knew her body felt better spending time in a rundown cottage where the only thing she had was a mattress on the floor and many mice for company.”

“At our home by the tower, she would lay down on the kitchen bench with her legs curled up to her stomach with red, puffy eyes, looking miserable, sleep deprived and not feeling herself. She would be so nauseous that she missed school, which led to her losing confidence as she felt she was falling behind in her studies,” describes the mom of two. “Despite being one of the top students in the class, she felt like she had missed so much and felt ill so often and felt that reflected in her work, that she chose to not take the 5th grade MCAS testing.”

“One day, within 10 minutes of going to school, she vomited into her face mask. It wasn't the first time it would happen. She would sleep with a bucket besides her bed and both her dad and I would take turns holding her hair back.”

Amelia testified at a town meeting with her mother showing the various medications Amelia now takes, and the pan she would keep at the side of her bed when the waves of nausea were intense and sudden.

“Amelia would get dizzy. She is my ice skater and gymnast with great balance, and I would watch her walk into walls,” describes Courtney. “Sometimes she would vomit in the middle of the night and I'd hear her little voice besides me in the dark by my bedside saying, ‘Mama, I'm sick. I just threw up in the sink.’

“Sometimes she would get headaches. She would be dizzy.”

It was Earth Day, 2021. Based on the children's classic *Alexander and the Terrible, Horrible, No Good, Very Bad Day*, Amelia Gilardi rewrote and retitled, for purposes of Earth Day, the story based on a challenge faced by her family and her community in which the environment plays a central role. "5G Earth Day Countdown: Children — Amelia's Terrible, Horrible, No Good, Very Bad Cell Tower Days" was an ode to her community and in so many ways, it spoke to a much broader audience.

My name is Amelia and I am 13 years old.

A Verizon cell tower blindsided my Pittsfield, Massachusetts neighborhood and made us sick. This is my story ...

The really bad, worst, no good bad part –

We learned that we were not the only ones harmed by cell towers. We were put in touch with Noah Davidson's family in Sacramento California. Both their girls, like us, got sick when a 5G tower was placed outside their bedroom window. No one listened to them either.

*Mom learned about a boy, my age in Canada, also harmed by wireless radiation since he was 5 years old. They made a movie about him and others who were harmed, called *Prisoners without Walls*. We talked and I learned he liked the same book series. He loved playing video games. He spoke French and liked making videos.*

We started meeting families from all over with everyday kids, like us, who had been harmed from wireless radiation either from cell towers or mobile devices. Why, if so many people were being hurt from this, was no one helping them?

So the truly bad, no good part is that the science is here but our legislators simply are not responding fast enough. Dr. Paul Heroux, Dr. Martha Herbert, Dr. Magda Havas, Dr. Cindy Russell, Dr. Sharon Goldberg, Theodora Scarato, Cecelia Doucette and many others have tried to educate Pittsfield about these issues. They have been silenced at meetings, and any letters from them or offers to present information or assist with an investigation have fallen on deaf ears.

My mom would ground me if I was told not to do something and I kept doing it over and over. I've heard my grandma say, "When we know better, we do better."

Big people, we know better. Please, do something. We never thought this could happen to us so please, don't wait until it happens to you.

*I'm asking everyone who is reading this to **advocate for cell tower setbacks away from schools and homes**. I'm asking everyone to require the FCC standards that fail to protect us from biological harm to be updated. I'm asking you restore my neighborhood to the safe, residential place it was before the tower, and I am asking for each and every person to care about the wireless safety issue.*

Our people, our pollinators and our planet depend on you.

Amelia

~*~

Department of Justice, Civil Rights Division

28 CFR Part 35

CRT Docket No. 144, AG Order No. 5729-2023

RIN 1190-AA79

Notice of Proposed Rulemaking: Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities

September 29, 2023

To the Department of Justice:

In 2006, I was diagnosed and treated for the Environmental Illnesses of chemical and electromagnetic hypersensitivities. I was declared 100% disabled at that time. Until then, I had worked full-time for six years as a medical social worker, in Bowdle, South Dakota.

In 2016 my husband and I purchased the rural acreage where we now reside, in the High Desert.

My health improved the longer we lived here.

Then Arizona Public Service, our electricity provider, installed a smart meter on our property on May, 14, 2018.

My health did a 180 downward spiral

I now live with excruciating pain 24/7, rapid blood pressure drop, weakness, and tremors to name a few symptoms that occur daily. I am unable to live a normal life. My disability worsens as the neighbors all receive smart meters, and more cell towers, antennas, and smart phones enter our living space.

Arizona Public Services' policy is that anything that is not a residence is a "business" and will have a smart meter installed on it as part of APS' equipment enhancement/improvement program.

Due to my reactions to the electromagnetic and chemical exposures, I am unable to enter businesses, the doctor's or dentist's offices, the hospital, stores, or my church and cannot visit friends or my family.

For brief periods, I can use a modified lap-top computer, wrapped in a fabric that somewhat lessens emissions. My husband may be able to build a metal container to keep the modem in.

Going to the bank, for example, is no longer possible .because I get sick from the wifi and computers. Passing by the ATM machine in the lobby, or going into the drive-through, lowers my heart rate then I feel what my doctor describes as "ice pick" pain all over my body. In addition I lose track of what I'm doing.

I haven't been able to drive since 2018 when the smart meter was installed. Until last week, once a month my husband drove me into town so I could go to the grocery store, and that was the only time I'd ever get out of the house.

There are two grocery stores in our town. One is a huge chain store I never even tried to go into.

The other one, however, I could manage and I enjoyed it enormously. Once in a while I'd run into someone I knew at the store and if they would turn off their cell phone, we could visit.

Last week I felt terribly sick immediately walking toward then into the store. Something felt very different there.

I did what I could to shop, but by the time I reached the check-out line I was sick. I asked the check-out clerk if she was wearing a smart watch. She said no. I asked if she had a smart phone and she said yes, in her drawer. I asked her to shut it off please, which she did. I asked her what was different in the store, because I was in so much pain, becoming seriously symptomatic, and lost my balance.

She said that management had just upgraded all their computer equipment throughout the store. The self-checkout computer equipment is upgraded too, and so is the customer service desk. This monthly excursion has come to an end.

What I miss the most is that since 2018 I've been unable to go outside my house into the pasture (51 acres) for weeks at a time to brush my horse, due to the smart meters on the neighbors' houses. Now I visit her through the window.

Our smart meter was disabled when lightning struck the power pole. We strongly asked again for an analog meter to replace the smart meter but we were denied.

What was called a "non-emitting meter" was then put in place, and it caused me the same symptoms as the smart meter. It was placed on our well house, 3 football fields from our residence. Our residence, according to APS, has an "analog" meter. We do not believe this to be true as I have the same symptoms.

We had to put specialized filters on our home wiring that extends to the electric box on the pole outside. This is the only measure that has allowed me to remain in our home at present.

Chemical and Electromagnetic illness are both very disabling. Usual outcomes for recovery are very slim. It can be deadly.

My worst nightmare is yet to come, as 5-G will soon be in our area. My symptoms are worsening over time.

Sharon Casjens

Snowflake, AZ

