

America's Awaiting Pandemic of Radiation Diseases

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As the new Trump administration prepares to take possession of the White House in January, it will be facing a flurry of aggressive bills to expand 5G and wireless technologies. The media blackout about these policies and their long-term impact upon the average American's lives and their physical and mental health remains largely unbeknownst to the vast majority of Americans. Currently, Congress is considering over 60 bills that would fast-track deployment of wireless infrastructure thereby bypassing crucial safety, environmental, and public health safeguards and federal oversight. These efforts, championed under the guise of "closing the digital divide," raise serious concerns about the government's accountability and its susceptibility to industry lobbying. These bills demonstrate a clear prioritization of private industry's interests and profits over public and environmental health.

A significant number of these proposed bills would strip states and local governments of their authority to regulate the placement of antennas and cell towers. Key legislation, such as the American Broadband Deployment Act (HR 3557) and the Broadband for Americans through Responsible Streamlining Act (HR 4141), exempts wireless installations from compliance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA). This will allow cell towers to be erected indiscriminately, even in very fragile areas such as national parks and residential neighborhoods. Moreover, measures like the Satellite and Telecommunications Streamlining Act mandate the Federal Communications Commission (FCC) to expedite approvals for an unprecedented volume of satellite deployments, further saturating the environment with wireless radiation. The single corporation that is best positioned to profit from this bill is Elon Musk's SpaceX. As a potential member of Trump's cabinet and a hardened advocate for

wireless technologies, it is difficult to anticipate how much leverage and success our federal health agencies, if led by Robert Kennedy, Jr. will have over agencies outside of the Department of Health and Human Services mandated to regulate wireless radiation frequencies and the new technologies that rely upon them.

Compounding the problem is the lack of federal oversight concerning the health and environmental effects of radiofrequency (RF) emissions. The FCC's exposure limits have remained unchanged since 1996. Almost three decades since, these limits fail to reflect mounting scientific evidence indicating increased adverse biological effects at levels far below current thresholds. Studies have linked RF exposure to a range of health concerns, including developmental risks to children, long-term non-cancer effects, and harm to pollinators and wildlife. Despite a 2021 ruling by the US Court of Appeals for the DC Circuit that found the FCC's RF regulations "arbitrary and capricious," the agency has yet to address these concerns or update its guidelines. No federal agency with relevant expertise has been tasked with assessing the cumulative effects of this widespread RF proliferation.

These bills also promote wireless deployment in agricultural areas where already environmentally threatened pollinators crucial to crop yields, such as honeybees, are especially vulnerable to RF radiation. Additionally, proposals such as the LAST ACRE Act aim to fund wireless networks on farms while ignoring evidence of wireless radiation's detrimental impact on agricultural productivity. Legislation like the FOREST Act exempts wireless infrastructure in national forests from environmental review; the volumes of scientific publications have shown with little question of doubt this would further erode the protections already in place to preserve natural ecosystems.

The government's efforts reflect a broader pattern of regulatory capture by the telecommunications industry and the degree it has deeply embedded itself in policymaking. Bills like the NTIA Reauthorization Act (HR 4510) will exempt 5G technology from critical security studies. This further compromises the integrity of federal oversight.

While these bills' government and corporate proponents argue that this legislature will bridge the digital divide, critics contend that our nation's over-reliance on wireless networks, rather than safer, high-speed wired broadband, exacerbates inequities and disregards safer technological alternatives. Wired broadband offers a more secure and environmentally sustainable solution without the serious health risks, especially for children who increasingly use wireless technology. However, all alternatives to wireless technology are categorically absent from the current legislative agenda. More egregious, the debate regarding wireless technologies' health risks is being ignored entirely.

A great deal of the potential constructive change in the nation's federal health agencies and policies now rides on the appointment of RFK Jr to head the HHS. To safeguard public health and the environment, Congress must be pressured to prioritize accountability and transparency in deployment of wireless 5G technology. This will require funding independent groups or organizations not beholden to Silicon Valley and the telecom regime to conduct rigorous assessments of RF exposure impacts. Updated safety regulations based upon rigorous scientific evaluation will need to be enforced and the FCC will need to be held accountable for its non-compliance with court orders. At least with the government's stated goals, the expansion of high-speed wired broadband, rather than unregulated wireless proliferation, can present a perfectly viable path to bridge the digital divide without compromising safety or ecological integrity.

However, in its current trajectory, the government's unbridled push for wireless technologies starkly disregards scientific warnings and public health considerations. This agenda not only risks endangering human

health, particularly that of vulnerable populations like children, but also directly threatens ecosystems essential to environmental balance. By prioritizing industry profits over comprehensive safety reviews and local autonomy, the government is now complicit in advancing an agenda that could have lasting detrimental effects on both people and the nation at enormous cost that is unwarranted.

The FDA plays a critical role in assessing and managing public safety and health risks related to 5G wireless devices, including mobile phones and other sources of EMF radiation. The agency is mandated to evaluate scientific evidence to determine whether RF exposure from these devices poses health risks and assists with setting safety standards in collaboration with other agencies such as the FCC. The FDA also monitors emerging research and is supposed to assure it follows gold standard methodology. While the FDA adamantly asserts that current RF exposure levels are within safety limits, independent scientists and heath advocates in a wide range of disciplines — electronic engineering, biophysics, toxicology, epidemiology, environmental sciences, etc. — repeatedly argue that the agency has failed to conduct rigorous evaluation of the studies supporting their claim, intentionally dismiss the volumes of contrary research refuting and ignore EMF's long-term and cumulative health effects.

And another important criticism is that the FDA is calculatedly involved in a misinformation campaign regarding wireless safety. In 2022, the Environmental Health Trust, founded by Dr. Devra Davis – an expert in environmental and electromagnetic field toxicology – submitted a report accusing the FDA's willful dismissal of smart phones' carcinogenic risks based upon an extremely flawed FDA analysis of a decade's worth of published studies about cell phone safety and children. The experts signing a retraction of the FDA study noted it was rife with scientific inaccuracies and even failed to meet the basic standards of credible

scientific analysis. They cite the study's contradictions with well-documented evidence of 5G technologies' and RF's health risks.

Central to the criticism is the FDA's disregard for the findings of the National Toxicology Program (NTP), a landmark \$30 million study commissioned by the FDA itself. This study, which underwent rigorous peer review, provided "clear evidence" of carcinogenic activity linked to RF radiation. Dr. Ronald Melnick, who led the design of the NTP study, called the FDA's decision "shocking" and a "dangerous precedent" for public health as it disregards compelling scientific evidence.

Dr. Anthony Miller, Professor Emeritus at the University of Toronto asserted that "radiofrequency is an established carcinogen." He specifically highlighted the elevated risks of glioblastoma, a deadly form of brain cancer, for individuals who regularly hold cell phones close to their heads. Based on his comprehensive research, Miller has called for RF radiation to be reclassified as a Group 1 carcinogen, the highest risk category.

Dr. Devra Davis lambasted the FDA's report for ignoring critical studies supported by the American Cancer Society that link cell phone use to thyroid cancer. She pointed out that the report also ignores the unique vulnerabilities of children, pregnant women, and young adults, despite repeated calls from the American Academy of Pediatrics recommendation for stricter safety standards. Prof. Tom Butler of University College Cork in Ireland labeled the report "an astonishing failure," stating, "The FDA seems unaware of, or is simply ignoring, the overwhelming body of scientific evidence on non-thermal effects." Similarly, Prof. Suleyman Dasdag of Istanbul Medeniyet University noted that his own research has shown RF radiation can damage brain cells and increase cancer risks even more after 5G.

As stated above, the issue of regulatory capture by private industry looms large throughout the 5G wireless debate. The FDA and FCC

consistently favor the telecommunications sector. Dr. Marc Arazi, founder of the Phonegate Association, described the current situation as a "giant experiment" on humanity without proper protocols or safeguards.

The stakes are high, as the unchecked expansion of 5G technology continues to outpace scientific understanding and regulatory action. The FDA's dismissal of evidence, coupled with the FCC's outdated guidelines, exemplifies the dangers of industry influence over our public agencies. By ignoring the overwhelming independent scientific evidence and expert warnings, the FDA and FCC are not just failing in their regulatory duties – they are compromising public trust and endangering human health and the environment.

We can now be certain that 5G is a permanent fixture across the nation and it's only a matter of completing its coverage in rural areas where it doesn't have signals. There is barely a chance to prevent it. The thousands of medical and environmental studies confirming high EMF's dangers and the petitions signed by thousands of international scientists to halt its deployment are unequivocally ignored or worse ostracized and canceled. It is estimated that there are over 10,000 peer-reviewed clinical studies mentioning serious molecular biological injury and defects to organs, neurons, cells and cellular function, and DNA damage to plants, animals and humans alike.

During the Covid-19 pandemic's high points, and despite lockdowns and social distancing, aggressive 5G installation was unhindered.

Progress to connect every American into its spider's web. As of 2023, about 95% of the US population has access to 5G networks, with roughly 1.8 million square miles covered by T-Mobile's Extended Range 5G, reaching 320 million people. In comparison, AT&T has expanded its 5G network to cover 2.91 million square miles, connecting over 290 million people. The current bills pending in Congress will bring 5G's

coverage to 100% of the territorial United States. The 5G roll out is also crucial for international globalists who are determined to usher in the Fourth Industrial Revolution. The World Economic Forum's presentation, "Why is 5G Important for the Fourth Industrial Revolution," outlines the multi-trillion dollar impact advanced connectivity will have on manufacturing, wholesale and resale, smart cities and homes, public services, transportation, real time banking, finance and insurance, agriculture and forestry, microchip surveillance, real estate, education, mining, health and medicine.

During the 2020 and 2024 presidential campaigns, the telecommunications industry and wireless sectors were significant backers donating millions. During the 2020 election, the Biden campaign received \$97 million from the Communications/Tech sector versus Trump's \$18 million. Moreover, leading think tanks in both political parties, such as the conservative Hoover Institute and Heritage Foundation, and the liberal Progressive Policy Institute and Brookings Institution, are strong advocates for the expansion of 5G and the "Internet of Things," often emphasizing their transformative potential for economies and societies. All of these think tanks align with broader calls for making the US the single global leader in wireless technology. This further explains why 5G and future wireless generations are ubiquitous.

Despite several decades of independent studies and analyses, research continues to build on the mounting evidence of serious health risks associated with prolonged exposure to EMF radiation from wireless technologies, including 5G. Just within the past four years, new findings not only corroborate decades of prior studies but also highlight new concerns related to both thermal and non-thermal effects of EMF exposure. The implications for public health are profound, demanding

greater transparency and accountability from federal agencies in addressing these risks.

Thermal and non-thermal effects of EMFs remain a major area of concern. A 2022 study by Kharchenko et al. examined the impact of 5G RF signals, revealing cellular stress, oxidative stress, and DNA damage. Particularly alarming was the observation of non-thermal effects such as disruptions to cellular signaling pathways, which could lead to cancer over time. "Damage to cellular DNA," the researchers concluded, "poses grave risks, particularly in urban settings where exposure is continuous."

Chronic exposure to radiofrequency (RF) radiation from cell towers has also been linked to cardiovascular irregularities and neurological disturbances. A 2024 review by Hassan and Khalil documented symptoms including fatigue, insomnia, and headaches in individuals living near cell towers. Long-term oxidative stress and cardiovascular risks were noted as particularly troubling outcomes. The authors warned of "irreversible health deterioration for those unable to avoid chronic RF exposure."

With their developing biological systems, children face heightened risks from 5G exposure. Tyrakis (2023) found that children's thinner skulls allow for increased absorption of EMF radiation leading to brain overheating and heightened neural stress. Cognitive impairments, particularly in learning and memory, were identified as critical risks.

The potential for genotoxic effects is another critical finding. Research by Jagetia (2022) demonstrated that mobile phone radiation causes DNA strand breaks and mutagenesis, particularly in lymphocytes. This damage, coupled with chromosomal instability, significantly raises cancer risks. The reproductive system was found to be particularly vulnerable, with cumulative exposure over decades posing threats of infertility and other systemic health issues. These findings highlight a

glaring gap in regulatory oversight, as long-term studies remain insufficient to establish safety thresholds.

Beyond physical health, cognitive effects of 5G exposure have also been further documented. Sofri et al. (2021) investigated cognitive functions in individuals living near 5G base stations. The scientists found consistent impairments in divided and sustained attention. Mental fatigue and reduced focus were prevalent. "The cognitive deficits observed," the study noted, "pose significant implications for both children in school settings and adults in demanding work environments."

Tissue overheating, a key thermal effect of EMF exposure, has also been further linked to chronic health impacts. Bonato et al. (2022) found that EMF exposure can suppress immune system functions and disrupt endocrine processes, particularly thyroid function. These physiological disturbances increase vulnerability to infections and chronic diseases. The study underscored the potential for "immune suppression across populations exposed to high-density mobile network antennas." The cumulative effects of overlapping wireless technologies – 5G, Wi-Fi, and Bluetooth – were shown to amplify these risks. Guizani (2023) highlighted how simultaneous exposure to multiple RF sources creates a pattern of chronic symptoms, including fatigue, depression, and unexplained inflammation. Urban areas, with their dense 5G network infrastructure, were identified as hotspots for compounded health effects.

It will be crucial for the new White House administration, if it keeps to its Make America Healthy Again promise, to reappraise Congressional bills' unchecked expansion of wireless infrastructure without thorough long-term safety evaluations that risk significant public health crises. Studies already warn that the rapid rollout of 5G networks is occurring in the absence of robust regulatory testing, leaving potential carcinogenic risks underexplored.

Collectively, these recent studies reinforce the urgency ahead and a greater than ever demand for more robust science-based regulations on EMF radiation exposure. The growing body of evidence demonstrates that both thermal and non-thermal effects of EMFs pose serious risks to public health, particularly for vulnerable populations such as children. The stakes are too high for complacency, as continued inaction will inevitably lead to long-term consequences that could have been mitigated through responsible regulatory oversight.

In addition to the above recent studies, there is the much larger body of research about EMF's adverse effects collated over the past 20 years by international experts such as Drs. Devra Davis and Martin Pall. Below is an outline presented earlier by Dr. Martin Pall, a Professor Emeritus of Biochemistry and Medical Sciences at Washington State University to the National Institutes of Health. Dr. Pall is recognized worldwide as an expert in EMF and 5G's detrimental effects on biological systems and the diseases associated with wireless technologies.

- Lower Fertility: Alters the structure of the testes and ovaries, lowers sperm count and the number of egg follicles, increases spontaneous abortion and lowers the levels of three sex hormones.
- Neurological and Neuropsychiatric Effects: There has been a dramatic increase in the following conditions since the advent of mobile phones, the internet, and wireless technologies: insomnia, fatigue, depression, headaches and cognitive dysfunction, anxiety, and loss of memory. Animal studies have shown that EMFs produce major changes in brain structure, which is likely happening to everyone who has extensive daily exposure to EMFs
- Cellular DNA Damage: There are three types of DNA damage observed in EMF exposure: single and double DNA breaks and

oxidized DNA bases. These can cause cancer and mutations in the sexual germ lines.

- Apoptosis: EMFs contribute to programmed cell death that in turn leads to reproductive and neurodegenerative disorders.
- Oxidative Stress: Free radical damage that has been associated with numerous health conditions including cancer, diabetes, rheumatoid arthritis, myocardial infarction, stroke, chronic inflammation, Parkinson's, multiple sclerosis, cellular death, and aging
- Endocrine Effects: According to Dr. Pall, every hormonal system in the body is adversely affected by EMF exposure.
- Excessive Intracellular Calcium: Ca2+ is critical for cellular activity
- Cancer: There are 35 separate scientific reviews of the body of peer-reviewed literature providing evidence that EMFs increase carcinogenesis, promote and progress tumor development and contribute to metastasis. There are also other medical conditions that have been shown to be associated likely with EMF exposure:
- Cardiac Effects. EMFs interfere with the electrical control of the heart that can produce tachycardia, bradycardia, arrhythmia, and abnormal heart palpitations.
- Early Onset of Alzheimer's and Dementia: In recent years and in parallel with increased EMF exposure, signs of symptoms associated with Alzheimer's are being observed in people age 30 and younger. Dr. Pall has called this "digital dementias."
- ADHD and Autism: The epidemic in ADHD and autism witnessed in each younger generation may be caused by late prenatal and early post-natal EMF exposure. Each of these neurological conditions is

associated with the increase of calcium over-penetrating cell linings due to EMF pulsations and disrupting synapse formations.

Everyone will be affected by 5G's radiation. But it will not require three decades to observe its injurious effects. Unlike cigarettes and ultraprocessed foods, nobody has a choice whether you wish to be exposed to 5G or not. 5G's EMF radiation is all-pervasive. There is a growing consensus within the scientific and medical community that 5G may in time usher an epidemic of disease never before witnessed in human history. It is too difficult to make forecasts. Nevertheless, if the past and current research on EMF's adverse effects on health and the environment during the past 50 years are any indication, we are entering a new epoch of disease and neurological disorders that humanity is completely unprepared to handle.

This is a consequence of what happens when an entire nation is trapped into carelessly trusting elected presidents and legislators whose campaigns are bankrolled by the Telecom giants and Silicon Valley, and a media empire ruled by serial misinformants and disinformation campaigns for private corporate interests. This is vulture capitalism at its worst.

As scientific research increasingly links EMF exposure to a variety of health problems — including cancer, neurological degeneration, and infertility — our healthcare systems will face a looming financial crisis. The projected healthcare costs to treat diseases linked to EMF exposure, especially those that manifest over decades, are astronomical and will place an unbearable strain on taxpayers. This burden will likely escalate into an insurmountable financial challenge as more people develop chronic illnesses due to continuous EMF exposure. These costs will be compounded by reduced workforce productivity as cognitive impairments, sleep disorders, and other health issues rob employees of their ability to work effectively. Worse still, EMF

exposure's potential to damage DNA could create intergenerational health debt, passing on genetic harm to future generations, with increased healthcare needs and a diminished quality of life.

As noted above, the regulatory bodies in charge of public health, like the FDA and FCC, have been intentionally reluctant to implement the necessary safeguards. Moreover, existing safety guidelines focus primarily on thermal effects (the heating of tissue from EMF exposure), ignoring the non-thermal biological effects (associated with oxidative stress, abnormal cell signaling and weakened immune response) that research has now proven to be equally damaging. This failure to address both thermal and non-thermal effects leaves the public vulnerable to the long-term health consequences of EMF exposure.

The current trajectory, if left unchecked, could lead to a catastrophic trifecta of societal collapse. First, there could be a massive health epidemic, with rising rates of cancers, neurological diseases, and chronic illnesses driven by EMF exposure. Second, the economic burden placed on healthcare systems could result in financial collapse, as governments struggle to cover the immense cost of treating these preventable diseases. Third, the unchecked proliferation of EMF technologies will have devastating ecological consequences, further disrupting the delicate balance of the natural world upon which human survival depends. As smart cities, autonomous vehicles, and the Internet of Things devices proliferate, our reliance on EMF-emitting technologies will only continue to increase, dramatically amplifying exposure levels and compounding the risk to both human health and the environment.

The demand for urgent action to lessen this impending crisis may ultimately fall on RFK Jr's shoulders if approved to head the HHS. This will require immediately allocating funding for independent, long-term research into the effects of EMF exposure, free from industry influence.

For far too long, the lack of comprehensive, unbiased studies has enabled the federal agencies overseeing wireless devices to act with impunity. In addition, stricter regulations are needed to address both thermal and non-thermal effects of EMF radiation, with a focus on precautionary principles that prioritize public health over the telecom industry's financial interests. Finally, the HHS can develop national public awareness campaigns to educate citizens on the risks of EMF exposure in order to promote safer practices. Finally, the telecommunications industry must be held accountable for the health risks associated with their products and services. This includes ensuring transparency in lobbying efforts and requiring companies to take responsibility for the potential harm their technologies cause.

As the potential secretary of HHS, RFK Jr. will wield significant authority over the FDA and have the influence to guide the agency's policies and priorities within the broader health mandate to serve the public good. While the FDA operates with some autonomy and is expected to follow science-based decision-making, RFK Jr. would have senior oversight and could even help shape the FDA's budget proposals. Despite this relationship, the FDA has long been criticized for kowtowing to private industry's demands. For this reason, the FDA's record to fulfill its mission to prioritize public health has been dismal. Aside from his lifelong legal career in holding private corporations and federal agencies accountable for crimes against human health and the environment, RFK Jr. is also renowned for being free from similar corporate influence. Therefore, he can have enormous sway to redirect the FDA toward serving the public good. By leveraging his authority to reform FDA policies and practices, an overhauled and uncompromised HHS could transform the agency's pervasive negative public opinion by restoring transparency and public safety over corporate profits.

In the meantime, the American public is being bamboozled with blatant falsehoods to embrace 5G as a necessary and innovative technology

that will benefit and improve their lives. But the real truth is the exact opposite. The future of the nation's health and the environment hangs in the balance. Without swift and decisive action to address the dangers posed by EMF radiation, the country will face a preventable catastrophe of monumental proportions.

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