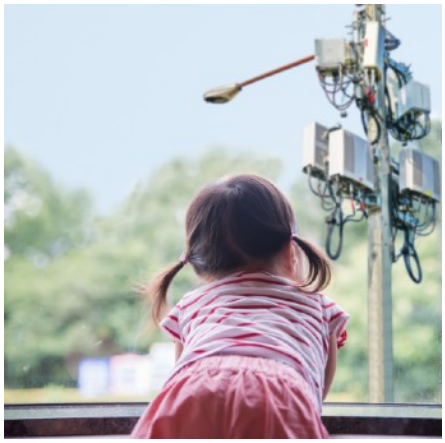
5G in Your Neighborhood: What You Should Know

5G is the next generation of wireless technology. It uses new types of radio-frequency (RF) microwave radiation to transmit large amounts of data. The rollout of 5G will mean the deployment of up to 800,000 powerful new antennas in neighborhoods all across America. Here are the facts:

• In 2018, the U. S. National Institutes of Health released study proving that exposure to RF radiation from wireless devices and antennas causes cancer. This corroborated a robust body of independent, peer-reviewed scientific research showing significant biological impacts from exposure to RF microwave radiation, including "clear evidence" of cancer, neurological and cognitive harm, heart abnormalities, reproductive effects and microwave sickness among other serious health problems.* Populations especially at risk include pregnant women, children, the elderly, and individuals with implanted medical devices.

• Human exposure guidelines for RF microwave radiation used by the Federal Communications Commission (FCC) are nearly 25 years old and address only the thermal (heating) effects associated with exposure to RF microwave radiation, not the proven biological impacts.



Children are especially vulnerable to wireless radiation

• The American Academy of Pediatrics (AAP), the American Academy of Environmental Medicine (AAEM), the American Association for Justice, and other expert organizations have all called for the FCC to update its RF microwave radiation public exposure guidelines based on this emerging science.

• Major insurance companies have refused to insure telecoms against losses from personal liability claims related to exposure to wireless radiation. Swiss Re, the second-largest reinsurance company in the world, has classified 5G as a "high impact" liability risk due to potential adverse health impacts.

• Local governments across the country are busy strengthening their municipal codes to protect their communities. Many are rejecting applications for 5G "small cell" antenna installations near homes and schools on the basis of aesthetics, safety, privacy, property values, security, lack of insurance and a failure by applicants to prove a significant gap in personal wireless service coverage.

** A digest of recent independent scientific studies documenting biological harm from exposure to wireless radiation can be found at www.AmericansForResponsibleTech.org/scientific-studies*

The notion that exposure to radio-frequency microwave radiation is not harmful to humans, which has been the underlying principle of all federal legislation and regulations regarding wireless technologies for more than twenty years, has now been proven false.

Recent and Significant Health Studies on Wireless Microwave Radiation*

The National Institutes of Health (NIH) study. This $30 million-dollar study, conducted by the National Toxicology Program (NTP) of the NIH, was designed to determine whether exposure to RF microwave radiation emitted by cell phones and other wireless devices could cause cancer in humans. A review of the data by independent experts showed that the causal relationship was much stronger than previously thought. Despite industry spin, experts have labeled this study as "clear evidence" of the link between RF microwave radiation and carcinogenicity.

The Ramazzini Institute Study. This study found that lab animals exposed to RF microwave radiation emitted by distant cell towers had a greater chance of developing heart tumors than those that were not exposed. This study, funded in part by the U.S. government, was the first large-scale study to show clear evidence of cancer risk from far-field exposures.

Cancer Epidemiology Update. This September 2018 study shows that the current scientific evidence supports the conclusion that RF microwave radiation is a proven cause of cancer. The paper reviews animal experimental evidence and human epidemiology studies (case-control, cohort, time trend, and case studies) published after the World Health Organization's (WHO) International Agency for Research on Cancer (IARC) categorized RF microwave radiation as a possible human carcinogen ("Group 2B") in 2011.

Reproductive Health Studies. Several recent studies have been conducted to investigate the direct influence of electromagnetic radiation (EMR) on sperm. The conclusion of virtually all independent studies is that men who carried their phones in a pocket or on the belt were more likely to have lower sperm counts and/or more inactive or less mobile sperm. These findings corroborate similar results in laboratory animals.

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