Wireless and EMF Program
Environmental Health Sciences

RESEARCH
Science and Policy
BRIEF

Why Cell Towers Do Not Belong At Schools

Daily RF Radiation Exposures

Cell towers emit continuous radiofrequency (RF) radiation, linked to increased cancer risk and impacts to the nervous, reproductive, and immune systems. Children absorb higher RF into their brains and bodies compared to adults.

Banned by School Boards and Entire Countries

School districts across the United States—from Los Angeles, CA to Loudoun County, VA—as well as many countries, prohibit new cell towers on school property due to the health and safety issues.

RF Radiation Exposure

- Cell towers emit environmental RF radiation 24/7.
- Children absorb more RF from towers compared to adults.
- Peer-reviewed research links higher RF to health effects, from cancer to headaches and biochemical changes.
- Reports show RF levels are higher at schools with cell towers and increase over the years.

Liability And Risk

- Insurance companies classify RF as “high-risk” and compare it to asbestos.
- Most insurance policies exclude RF damages.
- Wireless companies inform stockholders of the risk, but not the school community.

Outdated FCC RF Limits

- Outdated 1996 RF limits remain without scientific review for 3 decades.
- FCC has not complied with a 2021 federal court mandate to review current science.
- Limits are only designed to protect for effects of short term exposure.
- No protections for effects of long-term exposure.
- No federal oversight for measuring RF levels.
- No premarket safety testing required.

Financial Impacts

- Reduced property values
- Loss of homeowner equity without compensation
- Reduction in local tax revenue
- Minimal lease revenue
- Revenue projections exclude administrative costs and staff time spent addressing parent concerns.

Hazardous Materials

- Diesel fuel tanks
- Gas lines
- Lead-acid and lithium-ion batteries
- Herbicides sprayed without oversight
- Tower compounds are classified as HazMat sites in several areas due to the potential for chemical leaks and flammable fuel.

Fall Zone

- Children and teachers are within tower collapse/structural failure fall zone.
- Injury risk from falling ice, debris, and tower equipment.

Fire Risk

- Equipment can catch fire due to electrical faults or lightning strikes.
- Battery backup systems and power supply cabinets at the base are fire hazards.
- Tower fires have closed sports fields and ignited ground vegetation.
- Electrical fires require power shutdown and specialized non-conductive agents before suppression can begin, delaying firefighting efforts.

Long-Term Leases

- 30-year leases with automatic renewals bind future school boards.
- School renovations often must be designed around existing towers.
- Parents are left out of the decision-making process.

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Cell Towers
Near Schools and Homes

A HEALTH AND SAFETY ISSUE

DID YOU KNOW?

- Cell towers emit radiofrequency radiation (RFR) 24/7.
- The American Academy of Pediatrics says children are more vulnerable to the effects of RFR.
- RF radiation was classified by the WHO as a possible carcinogen in 2011.
- Research links RFR from cell towers to impacts on motor skills, memory, brain function, diabetes, hormones, and more.
- Insurance companies consider RFR a "pollutant," classify RFR as "HIGH" risk, and will not insure for health damages from exposure.

73.6% of studies on people living near cell towers found harmful effects: radiofrequency sickness, cancer and bio-chemical changes.

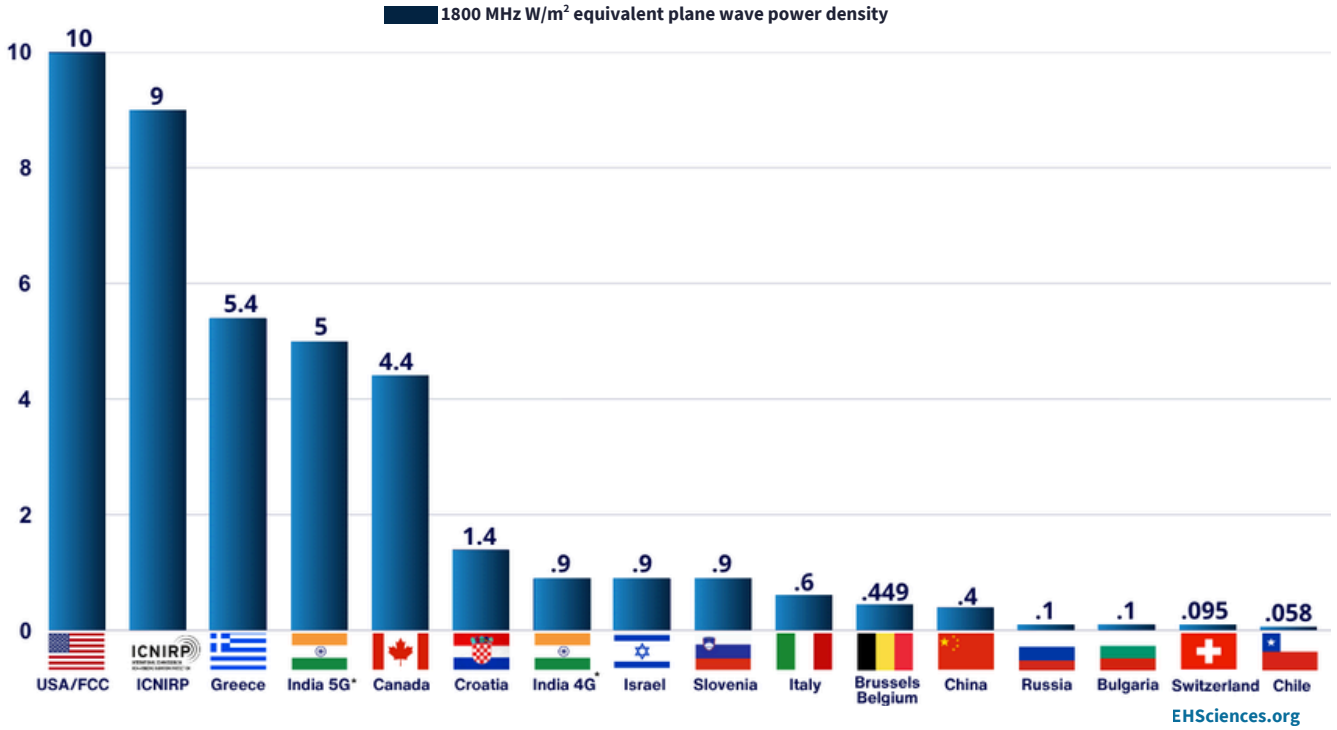
-RESEARCH REVIEW BY BALMORI (2022) *ENVIRONMENTAL RESEARCH*

U.S. ALLOWS HIGH RF RADIATION EXPOSURE

The U.S is among the countries that allow the highest levels of cell phone radiofrequency (RF) radiation in the environment —with regulations that have remained unchanged since 1996, despite scientific studies showing harmful effects at far lower exposure levels.

COUNTRY COMPARISON OF WIRELESS RF RADIATION LIMITS

for Ambient Exposures That Apply to Schools and/or Homes (1800 MHz)
Environmental Sources: Cell Towers, Wi-Fi Networks, Cell Antennas
1800 MHz W/m² equivalent plane wave power density



GOVERNMENT MEASURES TO PROTECT CHILDREN

U.S. POLICY ON CELL TOWERS AND SCHOOLS

While numerous countries ban cell towers at schools, the U.S. lacks any federal laws to minimize exposure in classrooms. Some state and local communities have taken steps to safeguard children by restricting towers at schools or enacting ordinances to ensure a setback that distances towers away from schools and homes.*

School District Bans on New Cell Towers: Los Angeles CA, Palo Alto CA, Temecula Valley CA, West Linn-Wilsonville OR, Portland OR, Loudoun County VA.

Local Policies with Cell Tower Setbacks: Shelburne MA (3,000 ft away from schools, 1,500 ft away from homes), Williamson County TN (1,500 ft schools), Copake NY (1,500 ft homes/schools), Sallisaw OK (1,500 ft homes), Walnut Creek CA (1,500 ft schools), Calabasas CA (1,000 ft homes/schools), Scarsdale NY (500 ft homes/schools), San Diego County CA (300 ft schools), Bedford NH (750 ft residential), Bar Harbor ME (1500 ft schools).

New Hampshire: State Commission Report on 5G Health and Environment recommends a 1,500 foot setback for cell towers and 4G/5G antennas.

INTERNATIONAL POLICIES THAT BAN CELL TOWERS AT SCHOOLS

Russia: Antennas for cell towers and base stations are no longer permitted near schools, with a national plan in place to relocate existing sites away from schools.

Turkey: Cell antennas must be distanced from schools and playgrounds.

Greece: Towers are banned on school grounds. Stricter RF limits apply within a 300-meter radius around kindergartens, schools, hospitals, and elderly care facilities.

France: For towers or wireless facilities within 100 meters of schools, daycare centers, or healthcare establishments, levels must be minimized.

Bangladesh: Cell towers are prohibited on residential properties, schools, colleges, playing fields, densely populated areas, and heritage sites.

Israel: Minimum setback of 100 meters required for cell towers near schools and homes.

Chile: Cell antennas not allowed in “sensitive areas” (kindergartens, hospitals, and nursing homes).

Queensland, Australia: New cell towers prohibited on school property, with a 200-meter setback and emissions capped at no more than 1% of federal guidelines.

New Zealand: Cell towers prohibited on school property with 50 meter setback from schools.

Toronto, Canada: A "Prudent Avoidance Policy" recommends keeping RF exposures at least 100 times below Health Canada’s guidelines.

India: Mumbai, Zilla Parishad, Rajasthan & Karnataka: Cell towers are prohibited/removed near schools, colleges, orphanages, and old age homes.