CELL TOWER RADIATION LIMITS U.S. & WORLDWIDE

POLICY BRIEF

U.S. PERMITS HIGH RF RADIATION EXPOSURE

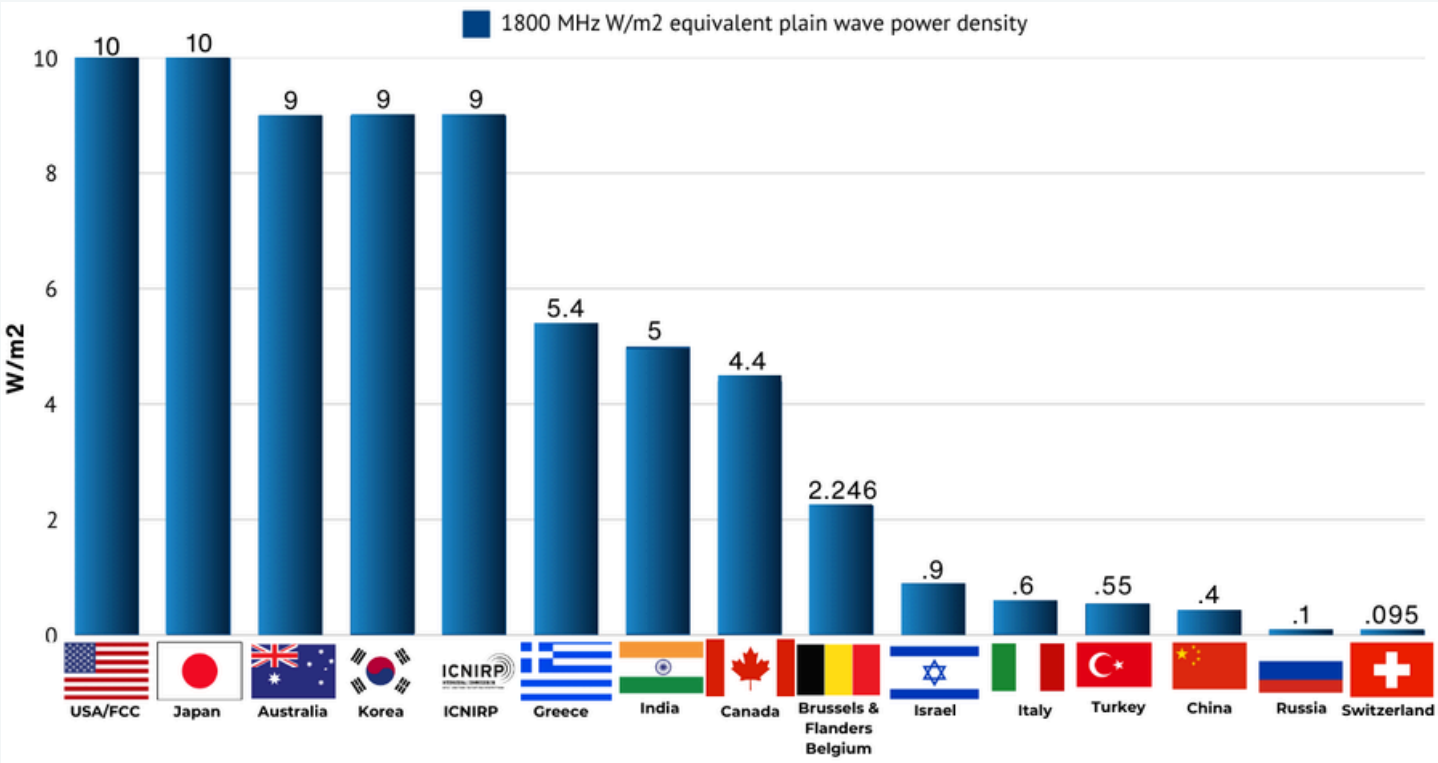
The U.S is among the countries that allow the highest levels of cell phone radiofrequency (RF) radiation in the environment — with regulations unchanged since 1996—despite scientific studies showing harmful effects at far lower levels.

Environmental RF Sources

- Cell towers
- 4G/5G small cells
- Boosters
- Wi-Fi networks
- Rooftop antennas
- Smartmeter

COUNTRY COMPARISON OF WIRELESS RF LIMITS

for Ambient Exposures That Apply to Schools and Homes (1800 MHz)
Environmental Sources: Cell Towers, Wi-Fi Networks, Cell Antennas



U.S. LACKS SCIENTIFIC OVERSIGHT

The Federal Communication Commission's wireless radiofrequency (RF) radiation limits are used to assess RF levels indoors (like classrooms and homes) and outdoors (such as playgrounds and sports fields) and serve as the compliance limit for cell towers.

Many governments enforce stricter limits, especially in children's areas. Italy and Switzerland take a precautionary approach, while China and Russia maintain active RF research programs. However, the U.S. has no agency conducting ongoing scientific review of the long term effects of cell tower radiation despite a federal court order.

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

-Research Review by Balmori (2022)
Environmental Research

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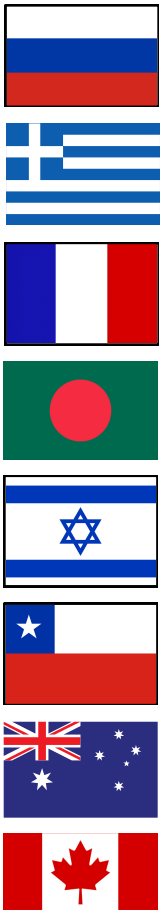
U.S. POLICY ON CELL TOWERS NEAR SCHOOLS

The U.S. lacks federal regulations governing the placement of cell towers near homes, hospitals, and schools. However, some state and local communities have taken steps to address the issue.*

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 Policy with Cell Tower Setbacks: Shelburne MA (3,000 ft schools, 1,500 ft 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 TO PROTECT CHILDREN

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.

Lithuania: Cell antennas are prohibited on kindergartens and hospitals.

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 for cell towers near schools and homes.

Chile: Cell antennas are not allowed in “sensitive areas” such as 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 and 50 meter setback from schools.

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

Click on country or policy for hyperlink to source.

CELL TOWER RADIATION LIMITS U.S. & WORLDWIDE

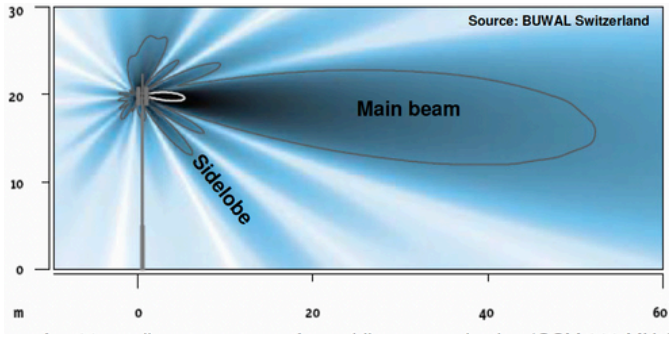
POLICY BRIEF

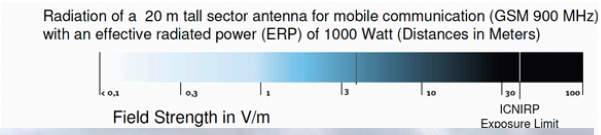
HIGHER RF RADIATION IN CLOSE PROXIMITY TO CELL ANTENNAS

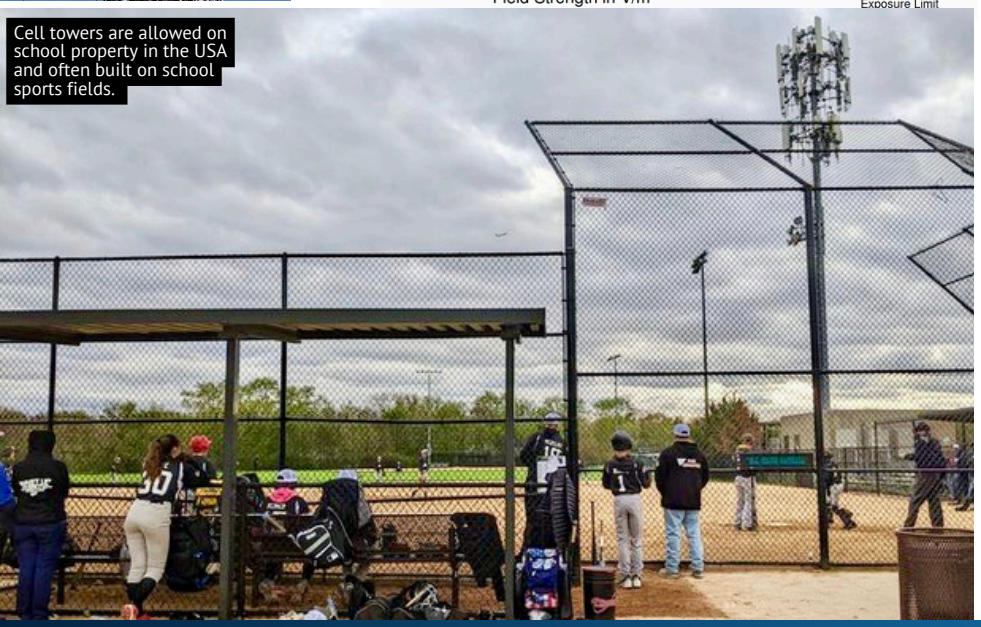
The 2022 study "**Measurements of radiofrequency electromagnetic fields, including 5G, in the city of Columbia, South Carolina, USA**" published in *World Academy of Sciences Journal* by Tarmo Koppel and Lennart Hardell, MD of the Environment and Cancer Research Foundation found the highest RF exposure readings were registered close to cell phone base station antennas.

Image: Hardell and Koppel (2022) 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)."

RADIATION PATTERN OF A SECTOR CELL ANTENNA







Cell towers are allowed on school property in the USA and often built on school sports fields.

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Click on research paper to hyperlink to source.