



5G and Public Health

5G (fifth generation wireless technology) provides vastly faster internet connectivity than 4G and 3G networks that cell phones currently operate on.

The Federal Communications Commission (FCC) sets exposure limits for radiofrequency (RF) exposures from cell phones and antennas. The limits are based on health guidelines developed by national and international organizations (including the US Food and Drug Administration, the World Health Organization and the International Commission on Non-Ionizing Radiation Protection) that protect from the heating effects of RF energy. Heating of body tissues is the health effect that is the basis for current health standards for RF radiation.

Some scientists around the world have raised concerns about 5G exposure, noting the lack of peer-reviewed research on the health effects from exposure to 5G emissions.

5G signals are higher frequency (shorter wavelength) than cell phones currently in use (3G and 4G). The higher frequency 5G signals are reflected by the skin to a greater extent than lower frequencies. This means that 5G energy absorption is more confined to surface layers of the skin rather than deeper tissues and therefore exposure to deeper tissues should be less.

In December 2019, the FCC concluded a six-year inquiry into whether its radio frequency standards should be updated. The FCC reviewed an extensive record of public comment, presentations, and peer-reviewed scientific papers in response to the inquiry. The FCC made up of bi-partisan commissioners, voted unanimously to leave in place its existing standards for RF exposure limits deeming that they continue to be protective of public health. The FCC conclusion is consistent with the FDA statement in April 2019 that based on the totality of scientific evidence, existing RF exposure limits are protective of public health. RF emissions from 5G technology fall within the acceptable exposure range covered by FCC limits.

Relevant Links:

[FCC Votes Unanimously to Maintain Current RF Exposure Safety Standards](#)

[FDA Deems the Current Limits for Cell Phone RF Exposure Acceptable for Public Health](#)