

Q. Do studies show that radiofrequency (RF) radiation from tablets, laptops and Wi-Fi routers is safe for children?

A. No. Recent government-funded, peerreviewed studies have confirmed that exposure to RF radiation causes an increase in the incidence of cancer, neurological disorders and DNA damage.^{1,2}

Children are at higher risk from RF radiation because of their immature and rapidly changing physiology and their vulnerable developing nervous systems. Children also have many more years to live and thus to develop health problems from longer lifetime exposures to RF radiation.³

1. National Toxicology Technical Report on Cell Phones and Cancer. National Toxicology Program TR595:1-466. (2018).

2. Brain and Heart Tumors in Sprague-Dawley Rats Exposed to Mobile Phone Base Station Environmental Emission. Falcioni, L, et al. Environmental Research 165:496-503. (2018).

3. Development of health-based exposure limits for radiofrequency radiation. Uche, U.I., Naidenko, O.V. Environ. Health 20, 84 (2021). The rapid proliferation of wireless devices in classrooms has brought increased concern about the potential health effects of nearconstant exposure to radiofrequency (RF) radiation, particularly for children. This concern stems from multiple factors:

- All wireless devices emit RF radiation.
- Multiple devices increase the amount of radiation exposure.
- Wireless devices are not tested in current real-life use patterns.
- Children are uniquely vulnerable to RF radiation because of their still-developing physiology.

This is why hundreds of medical and public health professionals from around the world have joined together with parents and professional educators to demand that government agencies adopt more stringent standards to protect children from exposure to RF radiation.

"Current FCC standards do not account for the unique vulnerability and use patterns specific to pregnant women and children."

- American Academy of Pediatrics

"Based on our review of the health risks and the inadequacy of current standards to protect children, while the science evolves, we urge schools to consider minimizing or eliminating radiofrequency radiation sources and taking steps to reduce classroom exposure."

- Environmental Working Group



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Let's protect our kíds. Let's hardwire our schools.



It's silent and invisible. But scientists are discovering that constant exposure to RF radiation, even at levels previously thought safe, can have serious and lifelong consequences for children.

Here are answers to some frequently asked questions.



Q. Our IT consultant had assured us that all of our equipment meets current FCC human exposure guidelines. Why should we be concerned?

A. Current FCC human exposure guidelines were developed back in the 1980s and adopted by the FCC in 1996. The guidelines were developed by engineers based exclusively on thermal (or heating of tissue) effects on a full-sized adult male. Nonthermal biological effects (e.g., neurological impacts, cancer, DNA changes or acute physiological impacts) were not considered.

"Compliance with FCC exposure guidelines does not guarantee that a device is safe, especially for a child."

In August of 2021, the U.S. Court of Appeals for the DC Circuit ordered the FCC to re-evaluate its safety guidelines based on current science that shows significant potential harm to children and the environment.

Manufacturers cite compliance with FCC exposure guidelines as proof that their devices are safe for children, but compliance with outdated guidelines is no guarantee of safety.



4 https://www.fcc.gov/document/dc-circuitdecision-environmental-health-trust-v-fcc

Q. Are there safer technology solutions?

A. Yes. Hardwired internet connections eliminate the risk of radiation exposure while having the added benefit of being more secure and up to 100 times faster than wireless. While hardwired networks are best, wireless systems can be adjusted to reduce transmit power and beacon interval rate from routers and access points. These adjustments can easily be made by school IT professionals from the controller or software.



Q. Is it difficult to install hardwired systems?

A. No. Most schools already have Ethernet cable installed in or near classrooms. (All wireless systems rely on a hardwired infrastructure to carry signals back and forth to the internet.) Amortized over time, wired systems are actually cheaper than wireless. They are also futureproof, whereas wireless systems may need expensive replacement or upgrades as technology changes.

Q. If our school is already heavily invested in wireless technology, what can we do?

A. Discontinue purchases or upgrades of wireless technology. Cancel agreements for any cell towers or antennas on school property. Ask your IT personnel to reduce the transmit power of routers and wireless access points to the lowest possible setting while still maintaining functionality, and reduce the frequency of the beacon signal. Hardwire all fixed devices in classrooms.

"In 2018, an independent expert panel reviewing the study found 'clear evidence' of increased cancer among the lab animals tested – the same lab animals we use to test pharmaceuticals."

Q. Has wireless radiation been linked to serious health issues?

A. Yes. A ten-year study by the National Toxicology Program of the National Institutes of Health was designed to determine whether non-ionizing RF radiation could cause cancer. In 2018, an independent expert panel reviewing the study found "clear evidence" of increased cancer among the lab animals tested – the same lab animals we use to test pharmaceuticals.



A concurrent study by the Ramazzini Institute in Italy (partially funded by the U.S. government) documented similar cancer risk from distant cell towers.

These studies confirm what thousands of other independent, peer-reviewed studies have found over the past fifty years: chronic exposure to wireless radiation can cause biological harm. Children and pregnant women are particularly vulnerable to its effects.