TechSafeSchools
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Information for Administrators

Most wireless technology systems in schools emit much more radiation than is actually required for connectivity within typical classrooms. Step One in addressing unnecessary exposure to RF radiation is to measure the current levels being experienced by students, teachers and staff.

We recommend the consultation with a professional who is trained in measuring RF exposures. We do not recommend asking vendors to perform this testing due to potential conflicts of interest and lack of professional training.

As an alternative, school IT personnel can purchase or rent a professional grade RF meter to test exposures. There is a huge variation in the quality and reliability of meters used to conduct RF surveys. For recommendations of specific meters, please see the Mitigation section of our website.

Reducing Power Levels, Beacon Frequency & Timers

- **Power levels** of institutional routers and wireless access points are generally set at the factory for maximum performance with the idea that the more power output, the better. But that may not be best for children sitting in a classroom, especially those who may have a heightened sensitivity to RF radiation.
- **There is no standard** for how much power is required in a classroom. We recommend reducing power levels by 50% and checking connectivity, then reducing by another 50% and so on until connectivity is compromised.
- **Beacon frequency** can also be increased to reduce exposure, especially as children are typically stationary when using devices. We recommend increasing the factory setting of 100ms to1000ms or greater.
- **Dedicated timers** can be used to turn wireless access on and off based on need. See our website for more information.

"We wired all our classrooms with Ethernet, and were able to reduce the power output of our few wireless access points by 75% without any noticeable impact on performance. From our perspective, even though we don't have all the answers, it's much better to take precautionary measures than to take the risk, especially when it comes to our students."

- Frances Cameron, former Head of School, The Hartsbrook School, Hadley, MA

Scientific Experts & School Officials Express Concerns about RF Radiation

"Children are not little adults and are disproportionately impacted by all environmental exposures, including [wireless] radiation. Current FCC standards do not account for the unique vulnerability and use patterns specific to pregnant women and children."

- American Academy of Pediatrics

"The [Federal Communication] Commission's failure to provide a reasoned or even relevant explanation of its position that RF radiation below the current limits does not cause health problems … renders its explanation as to the effect of RF radiation on children arbitrary and capricious."

- The US Court of Appeals for the District of Columbia Circuit

"It has now been well demonstrated that adverse biological effects occur at far lower levels of radiofrequency fields that do not induce tissue heating."

- Anthony Miller, Ph.D., Center for Global Health, University of Toronto

"The various agencies setting safety standards have failed to impose sufficient guidelines to protect the general public, particularly children who are more vulnerable to the effects of EMF."

- International Scientist Appeal to the United Nations

"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

"We recognize that children have a fundamental human right to be free from intentionally addictive devices, platforms, and apps, the right to be free from excessive exposure to radiation, and the right to be free from commercial exploitation."

- International Declaration on the Human Rights of Children in the Digital Age

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- Frances Cameron, Head of School, The Hartsbrook School, Hadley, MA

" Our IT staff executed our safer technology-based curriculum by significantly reducing exposure without impacting the delivery of our curriculum."

- Amber Way, Head of School, The Linbrook School, Ontario, Canada

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TechSafeSchools is a project of Grassroots Environmental Education,
an award-winning environmental health non-profit organization
recognized by the US EPA for Excellence in Children's Environmental Health.