

Wireless Radio Transmissions: Concerned About Safety?

Overview

To support today's mobile device environment the University has aggressively expanded our wireless infrastructure throughout campus. The presence of wireless access points (WAPs) has become more and more obvious, extending into classrooms, offices, residence halls... even bedrooms. With such proximity, the question of health and safety sometimes is called into question. This page provides links to articles which we believe support the assertion that WAPs and WIFI signals pose no immediate or long-term health risks.

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About WiFi and RF

Radiofrequency (RF) or electromagnetic radiation is all around us, occurring naturally in the environment (light, magnetic fields) as well as from man made sources such as X-Ray machines, AM/FM radio, TV broadcasts, electrical power lines, cell phones, microwave ovens, and wireless access points (WIFI). The effects of RF passing through the body can be both thermal (as in *heat*) and ionizing (changing a cell's molecular structure). In general, RF emitted from campus wireless access points are on the lowest end of the power/frequency spectrum – even lower than those involved with common cellular phone transmissions.

Source: <http://www.who.int/peh-emf/about/WhatisEMF/en/>

Is WiFi Harmful

According to the FCC -

"Several US government agencies and international organizations work cooperatively to monitor research on the health effects of RF exposure. According to the FDA and the World Health Organization (WHO), among other organizations, to date, the weight of scientific evidence has not effectively linked exposure to radio frequency energy from mobile devices with any known health problems."

"Some studies have shown that wireless devices might interfere with implanted cardiac pacemakers if used within eight inches of the pacemaker. Pacemaker users may want to avoid placing or using a wireless device this close to their pacemaker."

Source: <https://www.fcc.gov/consumers/guides/wireless-devices-and-health-concerns>

With these facts in mind, we believe the following statement to be true:

"The probable reason that WiFi-generated RFs aren't hazardous is because they're a type of low-frequency, non-ionizing radiation. This means the radiation isn't strong enough to charge molecules and therefore isn't likely to do damage to our bodies on a cellular level. And as RFs go, those produced by WiFi are particularly minor. At about 0.1 watt, the signals seem to be even lower than what are emitted from our cell phones."

Source: <http://health.howstuffworks.com/diseases-conditions/cancer/facts/can-get-cancer-from-wifi.htm>

Additional Articles of Interest

- <https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/rf-safety>
- <http://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm>
- <http://www.emfexplained.info/?ID=24788>
- http://www.health.gov.on.ca/en/news/bulletin/2010/cmoh_wifi.aspx

If You Are Still Concerned

Please contact the CIS HelpDesk help@spu.edu 206-281-2922 if you have concerns about the proximity of wireless access points in your campus residence, office or classroom location. We will gladly work on your behalf to make reasonable accommodations in response to your health concern.

Related articles

- [SPU-Wireless Internet Access \(Campus Members\)](#)
- [Remove Registered Personal Devices](#)
- [Wired Connections in Residence Halls](#)
- [Registering Non-Browser Devices for Network Access](#)
- [Network and Internet](#)