

Sick from Wi-Fi? If So, You're On the Wrong Wavelength

By *Nicholas Staropoli* — September 3, 2015



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Anyone who relies on their mobile device will tell you without hesitation that access to Wi-Fi has grown exponentially over the last few years. According to the website iPass.com [1], which tracks the global number of wireless hotspots worldwide, Wi-Fi hotspots have increased by 271 percent since 2013. These hotspots are everywhere: planes, restaurants, coffee shops, the subway, and, believe it or not, even all along your way up [Mount Everest](#) [2].

As with most technology, increasing ubiquity leads to distrust of the technology. Some people allege that they're suffering from a condition called Electromagnetic Hypersensitivity Syndrome (EHS), which they claim is characterized a syndrome caused by exposure to electromagnetic radiation. These symptoms include a litany of non-specific manifestations such as headache, fatigue, dizziness, memory deficits and whole-body skin symptom. However, there's no scientific evidence that confirms this condition exists.

A Wi-Fi router emits a signal that is about one watt in strength. To put that in perspective, a router produces around 1,000 times less radiation than a regular microwave. Furthermore, the signal from a router or a tower dissipates from its source, so the amount a person would experience is *even less* than the minuscule amount of radiation that are emitted from the sources. Therefore, it's difficult to believe that these devices could produce any adverse health effects at all.

One of the [seminal papers](#) [3] debunking the legitimacy of this alleged condition was published in 2009. It was a meta-analysis that included data from over a 1,000 people, in addition to data from 46 blind or double-blind provocation studies. All of the study's participants either claimed to have recovered from, or claimed to be suffering from, EHS. The paper was published in *Bioelectromagnetics* and reported that there was zero evidence found to support the theory this condition existed. The analysis did turn up evidence of the nocebo effect among these "patients."

Despite this evidence, some still believe the condition does exist. The World Health Organization acknowledges its existence, but the body has a confusing stance on what to do about it. [Their 2005 fact sheet on EHS](#)

[4] says, "the symptoms are certainly real and can vary widely in their severity." However, it also acknowledges the research that shows it does not exist, stating that "the majority of studies indicate that EHS individuals cannot detect EMF exposure any more accurately than non-EHS individuals. Well controlled and conducted double-blind studies have shown that symptoms were not correlated with EMF exposure." The WHO adds that to "treat" the condition physicians should "encourage patients to return to work and lead a normal social life." None of this is a strong acknowledgement that the condition exists.

Of course, none of this is preventing some from insisting the opposite, and are looking to the courts to prove just that. In two separate cases, parents claimed Wi-Fi in their children's school adversely affected their child and filed lawsuits seeking damages. In Oregon, one school system spent \$172,000 fighting an EHS-based case, and currently a Massachusetts family is threatening a similar suit. The Oregon suit was thrown out, so none of this nonsense prevailed. But consider the waste that occurred, and how all that money could have been put to use instead in the classroom.

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Links

[1] <http://www.ipass.com/wifi-growth-map/>

[2] <http://www.slashgear.com/mount-everest-now-with-wifi-29111220/>

[3]

<http://onlinelibrary.wiley.com/doi/10.1002/bem.20536/abstract;jsessionid=FF32334E40616B5E7FC1B95F959D167E.f0>

[4] <http://www.who.int/peh-emf/publications/facts/fs296/en/>