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The Intersect

Are 'WiFi allergies' a real thing? A quick guide to electromagnetic hypersensitivity.

By [Caitlin Dewey](#) August 31, 2015

Science is nowhere *near* convinced that “WiFi allergies” are legit. But the French legal system is apparently far more credulous: Last week, it ruled that a 39-year-old woman is eligible for nearly \$900/month in disability benefits because of her struggles with so-called “electromagnetic hypersensitivity.”

It's one of the first times a court of law has recognized EHS, or “electromagnetic hypersensitivity syndrome” — which is incredible, given that actual, hard evidence linking adverse health affects and WiFi signals is pretty negligible. Below, a quick review of what we do and don't know about the world's most mysterious “allergy,” with advice for those of you on the verge of chucking your router entirely.

What is EHS?

EHS is, essentially, a grab-bag of physical symptoms with no known cause. Sufferers of EHS, estimated as “several” per million people, tend to experience some combination of physical symptoms like nausea, headaches, palpitations, fatigue and rashes/other dermatological problems, often at the same time. (Less commonly, they may also complain of confusion, memory loss, panic attacks and the like.)

Researchers and public health officials have documented these symptoms: They're definitely real, and patients aren't making them up. EHS, to be clear, is a real syndrome, and the international health community has recognized it as such.

The problem with EHS is that “E” bit: multiple double-blind studies have suggested that, despite anecdotal reports, EHS has no relation to electromagnetic or radio-frequency signals. In fact, the World Health Organization has concluded that there’s no known “medical, psychiatric or psychological” cause for the syndrome, at all. At the conclusion of a ground-breaking, global workshop on the science of EHS in 2004, WHO suggested renaming EHS to “idiopathic environmental intolerance with attribution to EMF,” or electromagnetic fields” — a mouthful that makes it clear that the symptoms’ relationship to EMF is unclear.

How do we not know what causes it?

We don’t know its causes because its symptoms are so fantastically common. In medical terms, these are called “nonspecific symptoms”: symptoms that can indicate a ton of different problems. A headache can indicate, for instance, that you drank too much coffee this morning; it’s also a sign of meningitis, carbon monoxide poisoning and the literal plague. (Nonspecific symptoms are basically the reason that using WebMD can be very scary.)

EHS poses that problem several times over: A lot of things could cause each of these symptoms, and different sufferers manifest (or don’t) the symptoms differently.

What are the leading theories?

There are two primary schools of thought here: The first, that environmental conditions that are not Wifi could trigger EHS; and the second, that it represents a sort of reverse-placebo effect.

WHO has compiled a whole laundry list of environmental factors that could cause EHS symptoms, including the “flicker” of fluorescent lights and the glare from screens, and recommended that sufferers engage the services of someone who can evaluate their work environment for issues like indoor air pollution and excessive noise.

They also recommend that patients see a psychologist or psychiatrist — a proposal in which they’re not alone. Writing in the Guardian earlier this year, James Rubin and Simon Wessely of King’s College London call EHS an instance of the “nocebo effect,” in which people tend to feel sick because they believe they’ve been exposed to something that will sicken them. In one experiment, the pair showed half of their subjects an episode of the BBC series “Panorama,” which alleged that WiFi signals were harmful. They then exposed the whole group to a fake WiFi signal and waited to see who would get sick. The ones who watched the documentary were far more likely to develop EHS symptoms.

That echoes findings from WHO, which suspects that symptoms can be caused by “pre-existing psychiatric conditions as well as stress reactions as a result of worrying about believed EMF health effects.”

What does the French ruling mean?

To that last point about the stress of EMF health effects, the French ruling could be pretty damaging. By essentially ruling that EHS is a disability, the court legitimized claims that WiFi and other electromagnetic and radio-frequency signals can cause adverse health effects. If more people begin to worry about that claim, more people could certainly develop EHS.

The French ruling also adds to a growing body of global legal precedent on EHS and its legitimacy. Courts in Australia have already awarded workers' comp to EHS patients. In Sweden, the syndrome is officially classified as a “functional impairment,” which affords sufferers a range of legal protections and accommodations. (No such steps have been taken in the U.S., where — just this spring — a court in New Mexico threw out a \$1.43 million lawsuit over the alleged health effects of iPhone and Wifi signals.)

Perhaps most importantly for sufferers, however, the French ruling affirms that they're not making all this up. That's a big deal to a group of people who often say they feel marginalized by their disorder. In March, New York magazine ran a fascinating interview with a woman who says she's suffered EHS symptoms since 2009: “It takes a lot of energy to not to get depressed by it,” she said. “People say that the electro-sensitive are crazy.”

Soo ... should I turn off my WiFi/throw my iPhone into the sea?

Probably not, no. Using WiFi, we can say with some confidence, will *not* cause you to develop EHS. Unfortunately, we don't know if that means WiFi and cell signals are 100 percent, totally safe across the board. There isn't a whole lot of long-term research, and questions remain around fuzzy links between, say, cellphone signals and infertility. In *general*, however, the advice from the medical community has been pretty comforting: The radio-frequency signals you encounter in your daily life are (a) extremely weak and (b) not damaging.

If you don't believe me, of course, there's a growing body of people who'd love to tell you exactly how dangerous WiFi signals and their ilk can be. An entire industry has grown up, in fact, around selling bracelets and blankets and blockers and pills that “negate” or “disrupt” electromagnetic energy. The great

irony, of course, is that by hyping these so-called health risks, hucksters just make people more nervous — and thus clear new ground for EHS.

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Caitlin Dewey is the food policy writer for Wonkblog. Subscribe to her daily newsletter: tinyletter.com/cdewey.  Follow @caitlindewey