

# 5G

IN 5 MINUTES

QUICK & RATIONAL GUIDE ON 5G RADIATION

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*“THE EMF GUY”*  
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“5G” has officially made it to the buzzword status, and is now in the news worldwide – in some countries more than others. For example, filmmaker and EMF activist Josh Del Sol reported that 5G is a topic that carries as much media weight in Switzerland as climate change!<sup>1</sup>

But what’s the rational truth about 5G? Should you be worried? Reassured? What does science really say about the health risks associated with this vast increase in radiation exposure?

This short report will shed some light on all of these questions, and help you make informed decisions about how you use technology.

Enjoy the read,

**Nick**



# What the Heck is 5G?

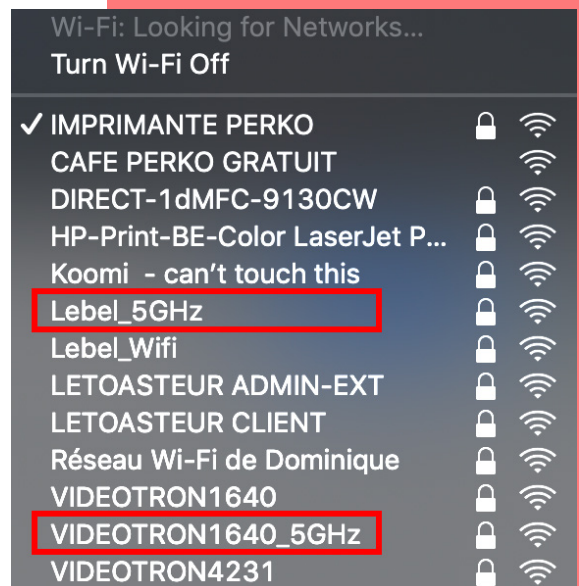
“5G” stands for the 5th generation of wireless cellular technology. In plain English, 5G promises a dramatic transformation in the wireless technology we currently have, lightning-fast download speed and ubiquitous connectivity.

5G uses a mix of frequencies that are currently used by 2G to 4G networks (0.6 to 7.1 GHz), but also new frequencies that are much, much higher on the EMF (electromagnetic field) spectrum. These higher frequencies fall into what’s called the “millimeter wave” range (mmW) — and might go from 24 GHz to about 71 GHz.<sup>2</sup>

One of the most common concerns about 5G is the fact that it requires an unprecedentedly high number of new cellular antennas to be installed — up to one new antenna on every block in downtown areas, and every few homes in residential areas.

For example, in the city of Montreal alone, the 5G rollout would require increasing the number of antennas by up to 50-fold — from 1,200 3G/4G antennas to about 60,000 new antennas with 5G capabilities.<sup>3</sup>

An All-Too-Classic Mistake:  
These Are NOT 5G Networks!



The “5G” you might see on WiFi networks around you stands for “5.8 GigaHertz” — the frequency at which they operate — and not the “5th generation of wireless cellular technology”.

# Are 1G to 4G Technologies Even Safe?

“Houston, I’m *pretty* sure we have a problem” — because these “older” wireless technologies are definitely not safe in the first place.

While a lot of mainstream health institutions cling to the idea that “there’s no clear link between EMF radiation and health”, *hundreds* of independent scientists worldwide say the exact opposite. In their expert view, the thousands of available peer-reviewed studies on EMFs clearly demonstrate that our current exposure to 2G/3G/4G, WiFi and Bluetooth EMF radiation is linked to a myriad of negative health effects<sup>4</sup> — and that the last sane thing to do would be to increase our global wireless exposure further.

It took me nothing short of **an entire book** (and years of research) to explain the short version of why EMFs aren’t safe, so I obviously won’t be able to lay out *all* the science and build a rock solid argument in this short report. But here are a few scientific facts that speak for themselves:

- 1.** Radiofrequency EMFs (cell phones, cell towers, WiFi, Bluetooth) are a Class 2B “possible” carcinogen, but several leading EMF scientists now argue that based on new studies published in the last decade, it should be reclassified as a “Class 1” definite carcinogen (just like smoking and asbestos).<sup>5</sup> Ouch.
- 2.** EMF “safety” guidelines haven’t been updated since 1996,<sup>6</sup> and are based on very short-term exposure to ONE device — which is completely unrealistic considering how much we use technology these days.
- 3.** The link between EMFs and reduced fertility in men is very strong. That’s why top fertility researchers at the Cleveland Clinic tell men to avoid keeping their phones in their pocket.<sup>7</sup> Regardless of that fact, 67% of all Canadian adults do it every day.<sup>8</sup>



**4.** Leading functional medicine doctors such as Dr. Dietrich Klinghardt, MD, PhD have observed that EMFs are at the very root cause of many “Mystery” symptoms experienced by their patients, including insomnia, fatigue, depression, memory loss and digestive issues.<sup>9</sup>

**5.** Growing children’s brains are especially at risk, since their head absorbs twice the radiation compared to adults.<sup>10</sup> This is especially concerning since a 2014 survey by the American Academy for Pediatrics found out that up to 75% of 4-year old children in certain neighborhoods possess their own cell phone!<sup>11</sup> Since our bogus and outdated EMF safety guidelines do not protect adults, how can we expect them to protect children?

## What Does Science Say About 5G?

That’s the (crazy) thing... there has been NO study done by the cell industry to ensure 5G’s safety. This bears repeating... there are exactly ZERO biological studies which shows that the new type of EMF radiation that 5G is going to bring to the table is safe for humans, animals, plants, or insects. This is like rolling out a new drug on the market without

Want to Learn More Science About 5G?



[Click Here to Watch The Video](#)

Watch this short clip where Dr. Martin Pall explains the science behind 5G — and why it’s a very, very bad idea.

ensuring it is safe and effective!

Scientists who are experts in how EMFs impact humans on a cellular level, such as Dr. Martin Pall, professor emeritus from Washington State University, are extremely concerned about 5G — to say the least. Dr. Pall doesn't put it lightly: "Putting in tens of millions of 5G antennae without a single biological test of safety has got to be about the stupidest idea anyone has had in the history of the world."<sup>12</sup>

Science has already shown that 2G, 3G, and 4G LTE networks are already causing health issues — and that the real consequences of these exposures might be seen decades from now. You don't have to answer because this is purely rhetorical: do you think that 5G will be any different, and that adding it to the mix of electrosmog we're bathed with is really "smart"?

What we do know about 5G is that the higher-frequency millimeter waves (mmW) that will be used widely within a few years' time are not safe.

Researcher Dr. Cindy Russel has reviewed the available science on mmW in 2018<sup>13</sup> and concluded that "the addition of this added high frequency 5G radiation to an already complex mix of lower frequencies, will contribute to a negative public health outcome, both from physical and mental health perspectives."

Among other things, she found that mmW radiation is linked with effects on the immune system, a potential increase in antibiotic-resistance, an increase in the functional impairment of those with electrohypersensitivity demonstrating a number of EMF-related symptoms, and effects on the eyes and skin.

# Millimeter Waves: A Distraction From The Real Issue?

A lot of people who talk about the problems with 5G often focus on the high frequency millimeter waves (mmW) that the technology will use. But as top engineer and close collaborator Pawel Wypychowski<sup>14</sup> kindly reminded me in a recent email exchange, mmW are just the tip of the iceberg.

In reality, the main problem with 5G — and with 6G, 7G and however many G's they'll come up with in future decades — is how “artificial” the new signals are.

In plain English, what will likely make 5G much more harmful to our biology than previous technologies is that the EMF signals it emits will be much more chaotic.

Pawel explains that the biological impacts of EMFs are not just related to the frequency a signal has:

“There are at least three even more important factors than frequency alone which makes 5G more dangerous:

- **Communication bandwidth**, which refers to the range of frequencies used in communication simultaneously (i.e., the width of the communication channel) – which is much wider in 5G in the mmWave band
- **Modulation scheme**, which refers to different techniques used by industry to modify signals and improve connectivity – will be much more complex and most probably much more disturbing biologically with 5G
- **Polarization**, which refers to the orientation of an EMF signal – is again much more complex for 5G. The industry will use new techniques such as beam-forming and “massive-MIMO”, which will likely make the signal much more disturbing biologically

For the non-geeks out there, this simply means that the more engineers tamper with an EMF signal to improve its speed and fidelity, the more chaotic and foreign it becomes to our body. This has been confirmed numerous times by researchers such as Blackman<sup>15</sup> and Panagopoulos.<sup>16</sup>

The bottomline to this entire EMF debate is this:

In a world where the health impacts of 2G to 4G technologies are just emerging, it's pretty darn irresponsible to add 5G to the mix instead of actively *reducing* our global exposure to this "electrosmog". This is why very credible organizations such as the Swiss Federation of Doctors<sup>15</sup> are taking a firm stand against the 5G rollout.

## “What Can I Do About It?”

*Thanks for ruining my day, Nick.*

You know, I realize that the entire topic can seem daunting at first. I've been spending most of my waking hours the last 3 years researching, writing and doing advocacy for a pretty doom-and-gloom topic, so... *I feel 'ya.*

The truth is that once you learn this information, you too can become part of this movement towards global change, and help shape the future of technology.

Here are four important ways you can take action:

### **1) Visit [5Gcrisis.com](https://5Gcrisis.com) and get involved**

There are a lot of incredible grassroots organizations out there, but one in particular has caught my eye. A group called “Americans for Responsible Technology” has launched the 5G Crisis initiative to help large groups of people in various communities mobilize and take a common front against 5G.

If you want to get involved and do your part to show that you don't want unsafe technology installed in your city or state, it is one of the best organizations to follow.

### **2) Reduce your EMF exposure as much as possible**

In case you haven't read it yet, my book *The Non-Tinfoil Guide to EMFs* is still recognized as one of the best resources around to learn everything you can do to reduce your EMF exposure.



Remember that your *cumulative* EMF load is what matters most. So even with 5G around, simple steps such as turning your phone on Airplane Mode as often as you can (especially at night or when you carry it on the body) still matters.

If you want to go a step further, I highly recommend hiring an EMF mitigation specialist from one of these 3 organizations. These professionals will take precise EMF readings in your home or workplace and help you reduce minimize your exposure:

- [Find a Building Biologist](#)
- [Find a Geovital consultant](#)
- [Find a Shielded Healing consultant](#)

### 3) Reduce your overall use of wireless

New, faster, and potentially harmful wireless technologies are being rolled out because users demand it and there's money to be made... never forget that.

This means that each time you choose wired ethernet cables over wifi, cut down on your cell phone use and use corded landline telephones instead, and avoid Bluetooth and other so-called "smart" technologies, you're sending a clear message to the industry. Your individual power is greater than you think!

### 4) Stay informed about 5G and the future of technology

I dedicate most of my waking hours updating my website and podcast on the various ways you can use technology more safely. Visit [TheEMFGuy.com](https://TheEMFGuy.com) often and make sure you stay subscribed to my newsletter to stay in the know.

#### About The Author

Nick "The EMF Guy" Pineault (\*like the wine\*) is the #1 bestselling author of *The Non-Tinfoil Guide to EMFs* and an advocate for safe technologies. Through his unconventional approach of blending humor, science and common sense, he's becoming a leading voice on the topic of electromagnetic pollution and how it affects our health.



# Sources:

- 1.** Interview between Claire Edwards and Josh Del Sol as part of The 5G Crisis Summit: Awareness & Accountability. Published in September of 2019.  
See <https://the5gsummit.com/>
- 2.** The exact frequency bands used by 5G have not been determined yet for all countries and all Internet service providers, and are subject to change.
- 3.** <https://www.journaldemontreal.com/2019/05/28/reseau-5g-jusqua-60-000-antennes-seraient-necessaires-a-montreal>
- 4.** Countless appeals (which are outlined in my book) have been made by thousands of doctors and scientists in the last 2 decades alone to sound the alarm on the dangers of 2G to 4G EMF radiation. See this one launched in 2018 by 164 scientists and medical doctors, on top of 95 NGOs: <https://www.emfcall.org/>
- 5.** In 2011, radiofrequency EMFs (from cell phones, Bluetooth, wifi and cell towers) was classified as a Class 2B “possible carcinogen” by the World Health Organization (WHO). Several scientists who were on the international committee looking at the available science at the time (including Ronald Melnick, Dariusz Leszczynski, Anthony Miller, Lennart Hardell and many more) are now saying that using the exact same scientific criteria, EMFs should be re-classified as a Class 2A or 1 carcinogen. See this recent epidemiology updated by Dr. Anthony Miller et al.: <https://www.sciencedirect.com/science/article/pii/S0013935118303475>
- 6.** [https://transition.fcc.gov/Bureaus/Engineering\\_Technology/Orders/1996/fcc96326.pdf](https://transition.fcc.gov/Bureaus/Engineering_Technology/Orders/1996/fcc96326.pdf)
- 7.** <https://health.clevelandclinic.org/lowering-your-sperm-count-male-infertility/>
- 8.** Statistic cited in this exposé by CBC’s Marketplace.  
See [https://www.youtube.com/watch?v=Wm69ik\\_Qdb8](https://www.youtube.com/watch?v=Wm69ik_Qdb8)
- 9.** Even if mainstream medicine and science still claims that EMF-related symptoms are psychosomatic, this belief seems to be based on bogus provocation studies that hold little scientific value. See this great critique of these provocation studies by Dariusz Leszczynski, PhD.: <https://betweenrockandhardplace.wordpress.com/2019/03/25/influential-australia/> In the meantime, top functional medicine doctors often report that

their patients clearly suffer from EMF-related symptoms, which are greatly reduced or eliminated when the patient's EMF exposure is reduced. These practitioners include Dr. Dietrich Klinghardt, Dr. Zach Bush, Dr. Jay Davidson, Dr. Lee Cowden, Dr. Dan Pompa, and hundreds of doctors specialized in environmental medicine worldwide, such as those who are part of the European Academy for Environmental Medicine (EUROPAEM) and the Austrian Medical Association.

10. <https://www.ncbi.nlm.nih.gov/pubmed/21999884>

11. <https://pediatrics.aappublications.org/content/136/6/1044>

12. <https://s3.amazonaws.com/media.electrosmogrx.com/dr-pall-5g-hazard-letter.pdf>

13. <https://www.ncbi.nlm.nih.gov/pubmed/29655646>

14. You can support Pawel's incredible work by becoming a member of his Patreon blog at <https://www.patreon.com/pawelwypychowski>. Pawel also offers online health coaching for electro sensitive individuals, and EMF measurement coaching to help you determine the best strategies to reduce your exposure at home or at your workplace. You can contact him at [pawelw@bioemf.eu](mailto:pawelw@bioemf.eu)

15. [https://bioinitiative.org/wp-content/uploads/pdfs/sec15\\_2007\\_Modulation\\_Blackman.pdf](https://bioinitiative.org/wp-content/uploads/pdfs/sec15_2007_Modulation_Blackman.pdf)

16. <https://www.nature.com/articles/srep14914>

17. <https://www.thelocal.ch/20190918/why-the-swiss-are-rebelling-against-5g-rollout-mobile-phones>