Can 5G Cause Flu-Like Symptoms and Disease? Electrical Engineer Whistleblower Provides Answers

Electrical Engineer Whistleblower Exposes 5G Health Hazards, Explains 5G Propagation Into Every Orifice of the Head

by <u>State of the Nation</u>

Submitted by a Radiofrequency/Microwave/Millimeter-Wave Engineer April 1, 2020

Radiofrequency/Microwave/Millimeter-Wave Engineer Explains Hard Science Behind the Propagation of 5G into the Human Body & Offers Mitigation Advice

SOTN Editor's Note: Our readership has been waiting for this conclusive exposé since the nationwide 5G roll-out was first announced years ago. Truly, it doesn't get any more compelling and authoritative than the following revelations about 5G and how it really affects the human body. This exclusive submission is only the first in a series of highly consequential disclosures made by an industry deep insider who i s currently working as а credentialed Radiofrequency/Microwave/Millimeter-Wave Engineer (for 25-plus years). Hence, this excellent introduction to 5G science is as accurate as the graphic depiction of 5G technology that follows. Our deep appreciation for this outstanding analysis.

Can 5G cause flu-like symptoms and can it be used to activate the Coronavirus?

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Before we begin, let's look at what 5G is. 5G is the fifth generation of cellular communications. 1G was deployed in the 1980's and it was those old-school phones that only very wealthy people had. These phones were about 6" x 6" x 12", plus or minus a few inches. Many of the people who used these phones a lot had a region in their brain the size of a walnut that had been literally cooked. 2G came after that. 3G is the old-school flip phones from the early 2000's, then 4G and 4G LTE came along. 5G is the next generation of cellular communications that is rolling out worldwide. 4G LTE offers 10s of Megabits per second (Mbps) where as 5G offers 100s of Mbps and into the Gigabits per second (Gbps). What does this get you? You are now able to stream high-resolution video over your cellular network.

There are multiple variants of 5G being deployed around the world. 5G in China has the data encoded on a 28 GHz microwave carrier. 5G in Europe is supposed to operate on a 28 GHz carrier. Verizon wants to be like the rest of the world and operate at 28 GHz. The FCC recently auctioned off 37 GHz, 39 GHz and 47 GHz for use in 5G applications. AT&T wants to operate on 39 GHz. T-Mobile has launched their version of 5G on a 400 MHz carrier.

You are probably confused by all of this and there is solid engineering rationale behind all of this. Let's start with a simple calculation, wavelength and what wavelength is for some common radiofrequency, microwave and millimeter-wave frequencies.

 $\lambda = v/f$

 λ = Wavelength

v = speed of light in vacuum = 3 x 108 meters/s

f = frequency

Example 1:

Determine the wavelength at 400 MHz.

 λ = v/f = 3 x 108 m/s / 400 x 106 Hz = 0.75 meters = 29.5 inches

Example 2:

Determine the wavelength at 850 MHz (Cellular).

 λ = v/f = 3 x 108 m/s / 850 x 106 Hz = 0.353 meters = 13.9 inches

Example 3:

Determine the wavelength at 1.5 GHz (Global Positioning System or GPS).

 λ = v/f = 3 x 108 m/s / 1.5 x 109 Hz = 0.2 meters = 7.87 inches

Example 4:

Determine the wavelength at 2 GHz (Close proximity to many 4G LTE Bands).

 λ = v/f = 3 x 108 m/s / 2.0 x 109 Hz = 0.15 meters = 5.9 inches

Example 5: Determine the wavelength at 2.45 GHz (WiFi, first resonant frequency of a water molecule/ operating frequency of a microwave oven). $\lambda = v/f = 3 \times 108 \text{ m/s} / 2.45 \times 109 \text{ Hz} = 0.122 \text{ meters} = 4.8$ inches Example 6: Determine the wavelength at 5 GHz (WiFi upper band). $\lambda = v/f = 3 \times 108 \text{ m/s} / 5 \times 109 \text{ Hz} = 0.06 \text{ meters} = 2.36 \text{ inches}$ Example 7: Determine the wavelength at 14 GHz (Approximate Satellite TV and Internet). $\lambda = v/f = 3 \times 108 \text{ m/s} / 14 \times 109 \text{ Hz} = 0.021 \text{ meters} = 0.843$ inches Example 8: Determine the wavelength at 28 GHz (5G in China, Europe, Verizon). $\lambda = v/f = 3 \times 108 \text{ m/s} / 28 \times 109 \text{ Hz} = 10.7 \text{ millimeters} = 0.421$ inches Example 9: Determine the wavelength at 39 GHz (AT&T 5G). $\lambda = v/f = 3 \times 108 \text{ m/s} / 39 \times 109 \text{ Hz} = 7.7 \text{ millimeters} = 0.303$ inches Example 10: Determine the wavelength at 60 GHz (WiFi, Unlicensed Frequency Band).

 λ = v/f = 3 x 108 m/s / 60 x 109 Hz = 5 millimeters = 0.303 inches

Example 11:

Determine the wavelength at 90 GHz (Crowd Control machine that makes skin feel like it's on fire).

 λ = v/f = 3 x 108 m/s / 90 x 109 Hz = 3.3 millimeters = 0.13 inches image.png



What is wavelength? It is the length of the electromagnetic wave. From examples 1 through 11, we can see that as we increase frequency the wavelength gets smaller. In general, the longer the wavelength the deeper it will penetrate into your body. The shorter the wavelength the less it will penetrate. 90 GHz penetrates to a depth that makes your skin feel like it's on fire. T-Mobile's 400 MHz 5G has a long wavelength that will penetrate very deep into your body.

Everything else is somewhere in between. Human blood is very good at converting radiofrequency, microwave and millimeter waves into heat. This is the basic premise on which many medical devices work.

These waves will undoubtedly induce currents into nerves, since they are ultimately conductors. We can only speculate what the outcome may be, but the possibilities are near infinite. Anxiety, insomnia, depression, ADHD are all neurological. Disrupting nerve signals and replacing them with radiofrequency waves may also cause things like *Irritable bowel syndrome* and all of these "new diseases" that have emerged in the last 10 or 20 years.

Let's summarize what we have learned so far.

• Lower frequencies have longer wavelengths that penetrate deep.

• Higher frequencies have shorter wavelengths that do not penetrate deep.

Before we get into specifics about 5G and the coronavirus, let's first talk about how you can protect yourself from these radiofrequency, microwave and millimeter waves. Do not attempt to use metal except in limited applications and circumstances. You can inadvertently set up a cavity resonance by using metal and generate very strong fields and make things worse. There is also a 7.83 Hz field that exists everywhere in the universe. If you isolate a person from this field by using a thick steel Faraday Cage you will die in about 3 to 4 weeks. Please don't try this at home and, if you do, you were forewarned. If you must completely isolate yourself, an earth-mound house or a house built into the side of a mountain is much safer. It is far better to convert the waves to heat.

Carbon impregnated foam is known to be one of the best and most cost-effective ways to convert radiofrequency, microwave

and millimeter waves into heat. Once converted to heat, there is no wave. Use carbon-loaded foam if you can. More is better, but you eventually run into practical limitations. Make sure you do not build perfect square and rectangles to avoid cavity resonances. Alternatively, drywall, wood, fiberglass insulation, books, furniture, mattresses, common glass and all sorts of other common stuff will convert radiofrequency, microwave and millimeter waves into heat. Remember, lower frequencies penetrate deeper and need more thickness than higher frequencies. 5G operating at 28 GHz is stopped dead in its tracks by drywall, especially at a humidity level of 55% or 60%. T-Mobile 400 MHz 5G penetrates deep and blasts right through your house and everything in This is why it "travels farther and delivers the it. strongest signal".

If 5G 28 GHz doesn't penetrate deep into the body, how can they get 5G to activate the coronavirus that is in your lungs?

5g propagates into your mouth and nostrils, down your throat and into your lungs. It will also propagate down your ear canals and excite your inner ear, the nerves and that entire region of your brain that is in close proximity to your inner ear.

In example 8, we determined that the wavelength of a 28 GHz microwave data carrier is 10.7 millimeters or 0.421 inches. This small wavelength will propagate through your mouth and nose openings and into your lungs, where there will be small microwave fields and currents. There will also be a lot of heat generated in this process because blood readily converts microwave fields into heat. We are going to analyze this and demonstrate that, yes, this really happens using state of the

art microwave field analysis software.

I am sure you are freaking out by now and saying, "OMG, how can I stop this from happening to me?" So, before we get started on the technical deep dive, let's discuss a simple solution about how to stop this.

This is the one instance where we advocate using metal. You can get one of those handy-dandy dust masks that everyone is wearing and cover it with some kind of metalized cloth. Copper Compression Socks can be used for this purpose. A single layer of Copper Compression Sock material covering your mouth, nose and ears will greatly reduce the 28 GHz field and offer a lot of protection. Do not wrap the cloth around the back of your head. Creating a metalized cylinder offers the opportunity to create cavity resonances, and your head will happen to be in the middle of the resonator. This is bad and we want to avoid this. Use enough to be effective and no more. Brick walls, foliage, shrubs, forest, drywall, carbon-impregnated foam are all known to stop 28 GHz microwave fields dead in their tracks. Use everything to your advantage. The main thing is if you know where the 28 GHz antennas are, you want to keep something between yourself and it to the maximum extent possible. 28 GHz fields do not penetrate automotive glass very well and you are safe to drive by one. Make sure the windows are rolled up and you will be fine.

Lets' start with the outside of the body and then we will move onto the mouth, nose, throat and lungs. Many of the 5G deployments are using Phased Array technology. This means you can focus a lot of power into a very small area and steer it to follow a person. You can also "track" multiple people at the same time. There are 2 microwave energy sources in this situation, the cell tower transmitter and your smartphone. The Institute of Electrical and Electronics Engineering (IEEE) Standard C95.1-2005 states that a maximum Power Density of 10 milliWatts/ square centimeter is the maximum power density one should be exposed to. This is for 9 minutes for every 24 hours.

Now think about your cellphone. It contains a 500-milliwatt transmitter and we can assume it broadcasts out of an area that is approximately 1 cm x 3 cm area, meaning the power density is 166.67 mW/cm2. When your smartphone is against your head, the power density is 16 times higher than that recommended by the IEEE!!! Even if we assume the energy is divided equally among 5 sides of your smart phone, that is still 166.67 mW/cm2 / 5 = 33 mW / cm2 which is 3 times higher than that recommended by the IEEE. The IEEE Limit is the maximum exposure limit for a 9-minute total in a 24-hour If half of this is transmitted into your brain, which period! it is, it is still about 15 mW/ cm2 or 1.5 times the IEEE We haven't done any real math, only rough calculations Limit! and we can see that smartphone use is not looking that safe, since it is going against the recommendations of the world's most knowledgeable body of radiofrequency, microwave and millimeter wave communications.

The outside of your body is being illuminated with all kinds of radiofrequency and microwave signals from DC to daylight. We know this because we can look at the FCC's Frequency Allocation Plan and see that there aren't any unused frequencies below 20 GHz. No one has ever asked: what is the cumulative effect of being illuminated 24 hours a day, 7 days a week? Answer: Who knows! **In America, it is SAFE until PROVEN UNSAFE.** Not only are we literally being heated by radiofrequency and microwave energy sources, we are also being fed GMOs (genetically modified organisms) in our food. Is our government really looking out for us? Who on God's green earth are they representing? Answer: **THE MONEY**.

After a few detours we are now ready to start looking at how a 28 GHz microwave signal propagates down into your mouth and down your throat into your lungs. In our next article we are

going to use a high-quality 3-Dimensional Electromagnetic Field Solver to analyze this and present results. We will start with a simple case and move into more complex problems. The first case will be a simple 1" long cylinder of sea water (saline solution) that is 0.3" inside diameter and 0.4" outer diameter to approximate the ear canal. We can then define the cylinder as blood and see how much signal gets to the bottom of the ear canal, as well as how much gets turned into heat along the way.