

5G

The Ultimate Directed Energy Weapon System, Says Particle Physicist

This article comes from a 2-hour interview between Dr. Katherine Horton and Alfred Lambremont Webre that I happened to watch two weeks ago. It speaks to the horrors of what is associated with 5G technology being rolled out, Chicago and Minneapolis had their 5G systems activated this past May of 2019.

I devoted two entire segments (part 7 & 8) in my series **“666/999, 5G, the Mark of the Beast, and the UPC Bar Code”**. I have been doing a lot of study on this technology for almost three years. 5G is not really all that new, it has been a “weapons” system in use since the early days of the Gulf War, and U.S. Navy declassified documents confirm that the U.S. military has been aware of the dangers of 5G since 1971. It is an integral part of the U.S. military using LRAD Active Denial System.

Since the early 2000's the U.S. military have experimented with both acoustic and directed energy 5G technology. While U.S. efforts to deploy it's microwave Active Denial System (which transmits a searchlight sized bean of energy when makes people downrange feel like their skin is on fire) was in development, another non-lethal system, LRAD (Long Range Acoustic Device) had been quietly deployed to Iraq. And there the story gets a little strange.

LRAD is basically a focused beam of sound. Originally, it was designed to emit a very loud sound. Anyone, whose head was touched by this beam, heard a painfully loud sound. Anyone standing next to them heard nothing. But those hit by the beam promptly fled, or fell to the ground in pain. Permanent hearing loss is possible if the beam is kept on a person for several seconds, but given the effect the sound usually has on people (they move, quickly), it is unlikely to happen. LRAD works.

It was recently used off Somalia, by a cruise ship, to repel pirates. Some U.S. Navy ships also carry it, but not just to repel attacking suicide bombers, or whatever. The system was sold to the navy for a much gentler application. LRAD can also broadcast speech for up to 300 meters. The navy planned to use LRAD to warn ships to get out of the way. This was needed in places like the crowded coastal waters of the northern Persian Gulf, where the navy patrols. Many small fishing and cargo boats ply these waters, and it's often hard to get the attention of the crews. With LRAD, you just aim it at a member of the crew, and have an interpreter "speak" to the sailor. It was noted that the guy on the receiving end was sometimes terrified, even after he realized

it was that large American destroyer that was talking to him. This apparently gave the army guys some ideas, for there are now rumors in Iraq of a devilish American weapon that makes people believe they are hearing voices in their heads. More than rumor, the system was instrumental in the surrender of over 100,000 Iraqi soldiers during the first Gulf War.

This made more sense when an American advertising firm recently used an LRAD unit to support a media campaign for a new TV show. LRAD was pointed at a sidewalk in Manhattan, below the billboard featuring the new show. LRAD broadcast a female voice providing teaser lines from the show. The effect was startling and a bit scary for many who passed through the LRAD beam. It appears that some of the troops in Iraq are using "spoken" (as opposed to "screeching") LRAD to mess with enemy fighters. Islamic terrorists tend to be superstitious and, of course, very religious. LRAD can put the "word of God" into their heads. If God, in the form of a voice that only you can hear, tells you to surrender, or run away, what are you going to do? Hence, the mass surrender of Saddam Hussein's huge army through the use of putting voices into the heads of Iraqi soldiers.

Meanwhile, the microwave powered ADS, a non-lethal weapon that looks like a radar dish, languishes in politically correct limbo. The ADS "radar dish" projects a "burn ray" that is about four feet in diameter. It is effective in fog, smoke and rain. When pointed at people and turned on, it creates a burning sensation on the skin of its victims, causing them to want to leave the area, or at least greatly distracts them. The microwave weapon has a range of about 500 meters. ADS is carried on a Humvee or Stryker, along with a machine-gun and other non-lethal weapons (like LRAD). The proposed ROE (Rules of Engagement) for ADS were that anyone who kept coming after getting hit with microwave was assumed to have evil intent, and could be killed. The microwave is believed to be particularly useful for terrorists who hide in crowds of women and children, using the human shields to get close enough to make an attack. This has been encountered in Somalia and Iraq.

Deployment of ADS has been delayed for years because of concerns about how non-lethal it really is. ADS has been fired, in tests, over 2,500 times. Many of these firings were against human volunteers, and the device performed as predicted, without any permanent damage. But generations of exposure to lurid science fiction descriptions of "death rays" has made the defense bureaucrats anxious over the negative public relations potential if something like ADS was actually used. From a publicity perspective, using more lethal "non-lethal-weapons" is preferable to deploying something safer, but that could be described, however incorrectly, as a "death ray." In any event, it appears that the cheaper, smaller (about 45 pounds), gentler and more flexible LRAD has taken ADS's place in the American arsenal. ADS systems today have advanced significantly, and come in a variety of size packages, for multiple needs!

Laser weapons have been developed, tested, and are being installed on Army 5-ton truck chassis, Navy frigates, and destroyers. Contracts have been issued for wide-scale equipping an array of military weaponry. Without going into detail, the use of the

phrase “death ray” is not beyond the potential of all this technology, and so 5G has a huge military role, both in the present as well as the future.



Dr. Katherine Horton sees the current rollout of the 5G network in a way that is different from mainstream perception. And for very good reason.

To begin with, she is a particle physicist with a PhD from prestigious Oxford University. She worked as a high energy physicist on the particle collider at the German

Electronsynchrotron DESY in Hamburg, Germany, and on the infamous Large Hadron Collider at CERN in Geneva, Switzerland.

At Oxford, Dr. Horton worked as a research fellow at St John's College, a position that allowed her to expand her research from particle physics into medical physics and the physics of complex human systems. As part of the latter, she conducted systems analysis research of the English legal system, economies, the financial system, currencies, as well as white collar crime and organized crime.

In other words, she has the credentials to be public enemy number one to a global elite that are trying to deceptively use technology as a key cog in their plan to enslave humanity under a totalitarian world government.

During her childhood in Romania, Dr. Horton alleges that she and her family experienced intimidation and terrorism because they were highly educated and refused to take part in the snitching and informant criminality being promoted by mob networks there.

Dr. Horton says that stalking and other such activities ramped up in November 2011, as she was attending a High Court case in London as part of her systems analysis research into the English legal system. She says she was openly being stalked on her way home from court and started noticing a thug waiting for her outside her home every morning to follow her to the train station.

Attempts to face these forces head-on, through the courts and through activism, have led to a rise in these attacks upon her which include not only human intimidation but torture through Directed Energy Weapons. You can read more details about her experiences on her "Stop 007" website, which among other things offers support and legal guidance for Targeted Individuals.

In the extensive 2-hour interview hosted by Alfred Lambremont Webre, Dr. Horton attempts to bring to bear her vast knowledge of the capabilities of energy weapons, and awaken us to the fact that these are the true modern weapons of warfare of today, not the ballistic weapons that we still see portrayed in movies and talked about in geo-political conflicts.

She also employs her knowledge and personal experience of the 'Targeted Individuals' phenomena, as well as her run-ins with the shadow government and their military and intelligence tentacles to create a broad context for what the 5G network really is:

I think the average person struggles so much understanding what all this is about and that's what they [Global Elite] are banking on. So they are banking on the fact that, for example, there is a very simple con hidden in this marketing ploy that is 5G. For example when they brought up 3G and 4G, everybody assumes that 5G is just a better 3 and 4G so what's all this fuss about? Is it just Luddites who are just, you know, they just, they are scared, and they are tree-huggers, and they just don't really enjoy

watching happy kitten videos super-fast on their phone? But that's not what it is. So 5G is a fundamentally different system.

I think what I would like to do is to take all the people who are maybe even more overwhelmed than I am, you know, I want to pick them up where they're at, maybe, and then bring them up to speed and tell them everything I know, so by the end of the show they at least know what I think and what I know, so that they can make up their own mind what they think. And there's several discoveries I had, trying to research the subject, and I should say that my main focus is not even 5G or 5G campaigning. My main focus is campaigning to have all the Directed Energy Weapons systems shut down, which includes also satellite weaponry, weaponry hidden in cars, weapons carried by gang-stalkers in rucksacks, and all this sort of stuff and out of all that, 5G is, if you like, the state system. It encapsulates everything. It can do a bit of everything and it will be everywhere."

"So your 5G system is like a gang-stalker with a Directed Energy Weapon in his rucksack who shoots you in the face as you're walking behind him, you know, on the pavement for example. But it will not be a gang-stalker; they can do away with those, if they just have these 5G antennas every 50 or 100 meters. So the 5G system will do everything that the current global weapons systems can do and, it can also, I strongly believe, it can also instantly kill. Ok?"

"So in other words, if you want to cut to the chase, my view of the 5G system, and I'll show you why I think that's the case, the 5G system should be best imagined as the government, or this shadowy group that has infested the government, taking over every city on the planet and every village and even the smallest town and even then, you know, the forest, where you think there is nothing, and putting up hidden machine guns that follow you and your family pointing right at you and these are, you know, set sharp so that they can shoot you dead at the speed of light if somebody so wishes. Ok? So that is the best description of the 5G system that I have."

The above description and much of her explanation in the video may strain credulity for many readers. It certainly challenges the mainstream worldview that our elected leaders are the flawed but ultimately legitimate authorities of our world, that wars and killing are conducted for justifiable reasons, that intelligence agencies protect us and will not try to harm us, or that we are not in some way victims of complex social engineering designed to turn us all into obedient slaves.

How clearly is the depopulation agenda coming into view? In the interview Dr. Horton points us to the website deagel.com, a website that monitors the sale and distributions of military weapon technology all over the world. She shows us that plans for genocide are actually reflected in published estimates of depopulation within the next decade. As you can see from the page below, which can be directly accessed here, the population of the United States is predicted to be 100 million by 2025, down from 327 million in 2017.

Home - Country Listing - United States of America Last Updated on 29 July 2019 12:20

United States of America Orders

United States of America News

United States of America Holdings

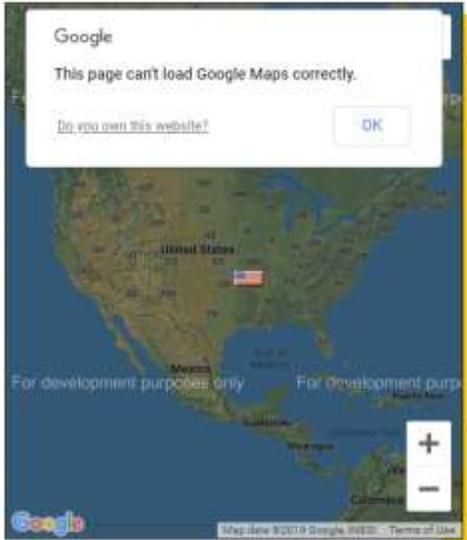
Government Links & Sources

Deagel.com  **United States of America**

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		Rank	%	World Figures
Currency:	US Dollar USD (\$)	-	-	-
Year:	2017	-	-	2017
Population:	327 million	3	4.4	7.4 billion
Surface:	9.6 million sq. km	3	7.2	133 million sq. km.
Density:	34 inhabitants / sq. km.	157	62	55 inhabitants / sq. km.
Gross Domestic Product:	\$19 trillion	1	24	\$79 trillion
GDP per capita:	\$59,274	14	563	\$10,719
Purchase Power Parity:	\$59,600	15	350	\$16,985
Budget:	\$6.3 trillion	1	24	\$26 trillion
Military Budget:	\$637 billion	1	36	\$1.7 trillion
Imports:	\$2.4 trillion	1	14.4	\$16 trillion
Exports:	\$1.6 trillion	2	9.4	\$17 trillion

Forecast 2026				
Population:	100 million	14	1.4	6.9 billion
Density:	10 inhabitants / sq. km.	168	19.6	51 inhabitants / sq. km.
Gross Domestic Product:	\$2.4 trillion	6	3.8	\$65 trillion
GDP per capita:	\$24,561	24	261	\$9,421
Purchase Power Parity:	\$16,374	57	141	\$11,634
Military Budget:	\$32 billion	6	2.8	\$1.2 trillion



For Dr. Horton, this insidious decline in the American population over the next few years is likely contingent upon a successful implementation of the 5G network in the U.S. But this does not mean her overall message is one of doom and gloom, meant to evoke fear and hopelessness. Rather, as someone who has fought against this authority for the better part of her life, she believes that this rush to roll out 5G is a desperate attempt on the part of the global elite, the ‘criminal cartel’ as she calls it, to hold on to the power they have held since Biblical times:

“I want to show what the 5G system really looks like in practice, then I want to show, you know, how the industry is actually gloating with it, they know that this is a weapon, they’re gloating, they’re jeering at us, and they’re making fun of us and then I will show you what this weapon is planned to be used for and is already being used for right now.”

“So what I’m talking about is not just, oh, it’s five years in the future, no, this system is killing people right now. And now, the only question is: the time lag between us ‘realizing,’ accumulating a critical mass, and shutting this system down, and arresting the criminals—whoever thought of putting this into the mangle, knowing full well [the consequences]—now that time delay pretty much maps out how many people are going to die, ok?”

“And this crime cartel...they know what they’re doing, and their goal is to kill as many people as they possibly can, and that is because they realize that with the population growing and the Internet coming in, they cannot hold the same type of control on humanity – it is mathematically impossible to hold the same type of control on

humanity – that they used to have, you know, back in the 1980s, even the 1990s and the control they had up until the 1990s was pretty much the control they had going back to Biblical times, and Babylonian times and before.”

Dr. Horton reviews some of the presentations that the technical companies have put into the public domain about 5G and shows many instances where these companies seem to be mocking us at our expense, putting in plain sight, with thinly-veiled images and symbols in their drawings, their plans to roll out a weapons system that can target any individual they choose.

It is perhaps this hubris of the ruling class that will be the main cause of their downfall, as they are just helping to accelerate human awakening. For Dr. Horton, the most important thing is that those who receive her message spread it far and wide, because we are actually the ones who will determine how long the time window is before we reach a critical mass and are able to stop the operations of this criminal cartel altogether. From her own personal experience of being a Targeted Individual, her collaborations with other victims, and her research, Dr. Horton truly believes that the more quickly we awaken to these truths and take our power back, the more quickly we end the needless suffering and killing of innocent people.

While some things are uncertain in these times, there can be no doubt that as a collective, humanity is beginning to awaken to what has actually been going in the world. Zbigniew Brzezinski noted this in 2008, and it was a sage warning to his global elite partners.

For the first time in human history almost all of humanity is politically activated, politically conscious and politically interactive. There are only a few pockets of humanity left in the remotest corners of the world that are not politically alert and engaged with the political turmoil and stirrings that are so widespread today around the world. The resulting global political activism is generating a surge in the quest for personal dignity, cultural respect and economic opportunity in a world painfully scarred by memories of centuries-long alien colonial or imperial domination.

There is a free online 5G Crisis: Awareness & Accountability Summit running from August 26th to September 1st that features a host of expert speakers. I will provide a link to this forthcoming conference at the bottom of this article.

Below is a list 13 of reasons you need to be concerned about the dangers of 5G technology. 5G (5th Generation) is now being actively rolled out in many cities around the world. Simultaneously, as awareness over its horrific health and privacy impacts is rising, many places are issuing moratoriums on it or banning it, such as the entire nation of Belgium, the city of Vaud (Switzerland) and San Francisco (USA). Radio-frequency radiation (RF or RFR) and electromagnetic fields (EMF) are being increasingly recognized as new types of pollution – environmental pollution. Here are 13 reasons exposing the 5G danger, which could turn into an unmitigated health and privacy catastrophe if enough people don't rise up to stop it.

1. 5G Danger: Hijacking Your Sweat Duct Antennae

The 5G network uses and broadcasts frequencies which affect our sweat ducts, which act as antennae. In other words, our largest organ, the skin, can be influenced and manipulated by 5G. As I reported in my series **“666/999, 5G, Mark of the Beast and the UPC Bar Code”** 5G will change your world. The article *“5G and IoT: Total Technological Control Grid Being Rolled out Fast,”* scientist Dr. Ben-Ishai exposed the connection between 5G and our body’s sweat ducts in his video:

“[The 5G frequencies] will zap [us] with wavelengths that will interact with the geometrical structure of our skin ... We found that sweat ducts work like helical antennas ... the sweat duct was an integral part of the mechanism for the absorption of energy, electromagnetic, between 75-100 GHz, and that if you changed the character of the sweat duct, i.e., made it work, you could actually change that absorption at some point, and if you could do that you could trace how a person is under stress.”

2. 5G Danger: 5G Amplifies EMF Damage via VGCCs

Wireless radiation and EMF scientist Dr. Martin Pall has done groundbreaking research in explaining exactly how EMFs cause premature aging and injury to the human body, including damage to fertility, brains, hearts and even DNA! He pioneered research showing how EMFs activate the body’s VGCCs (Voltage-gated calcium channels) which causes them to release excess calcium ions into the cell. This then leads to nitric oxide (NO) and superoxide which react nearly instantaneously to form peroxynitrite and free radicals. Many studies like [this](#) show peroxynitrite damages DNA. Dr. Pall has stated unequivocally that the “5G rollout is absolutely insane.”

3. 5G Danger: Pulsed Wave Far More Damaging than Continuous Wave Radiation

A significant and unique feature of Smart Meters is that they emit pulsed wave radiation not continuous wave radiation. In other words, they run in start-stop cycles of emitting a burst of EMF then going temporarily inactive. This happens at an incredibly high amount of times per day; court documents with testimony from utility companies (like Pacific Gas and Electric Company of California) reveal that smart meters send pulsed waves between 9,600 and 190,000 times per day!

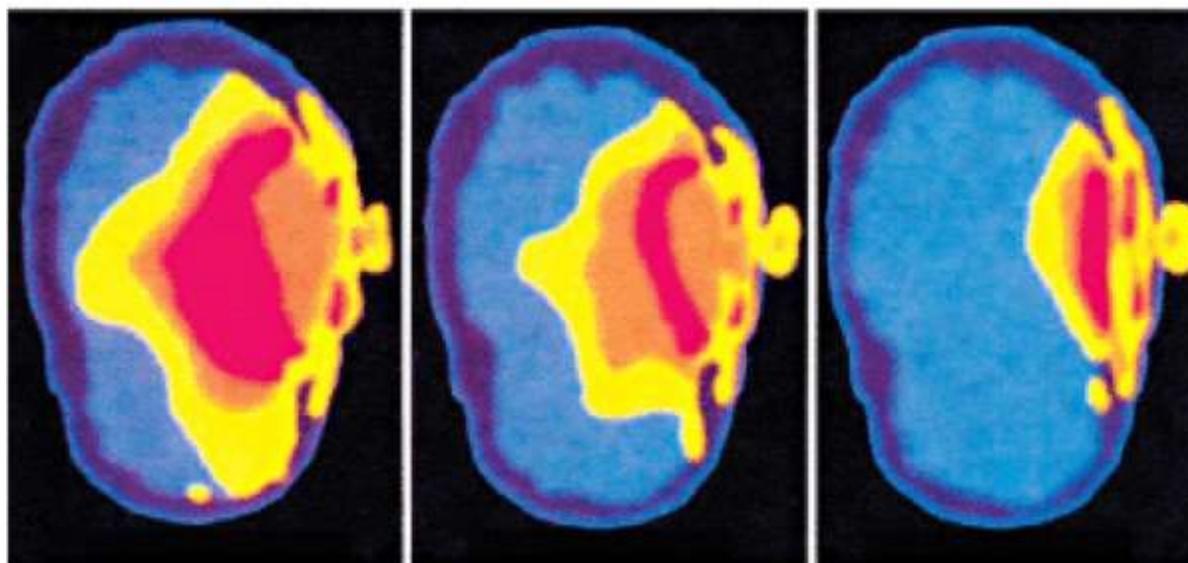
In his 2018 video, Dr. Pall states there are 13 studies which show that pulsed wave EMFs are more active (and dangerous) than continuous wave EMFs.

4. 5G Danger: 5G Promotes Deep EMF Penetration

The main reason why cell or mobile phones are more dangerous for children than adults (apart from the fact that radiation absorption is cumulative over a lifetime) is due to EMF penetration.

Microwave Cellphone Effects

Absorption in the Brain According to Age



5 Year Old

10 Year Old

Adult

Image courtesy of Dr. Om Gandhi, University of Utah, 1996, IEE Publication

Dr. Pall writes:

“The industry has also made claims that more conventional microwave frequency EMFs are limited in effect to the outer 1 cm of the body. We know that is not true, however because of the effects deep in the human brain, on the heart and on hormone systems. Perhaps the most important two studies demonstrating effects deep within the body are the studies of Professor Hässig and his colleagues in Switzerland on cataract formation in newborn calves. These two studies clearly show that when pregnant cows are grazing near mobile phone base stations (also called cell phone towers), the calves are born with very greatly increased incidences of cataracts.”

Hässig wrote in his 2009 study:

“Of 253 calves, 79 (32%) had various degrees of nuclear cataract, but only 9 (3.6%) calves had severe nuclear cataract. Results demonstrate a relation between the location of veals calves with nuclear cataracts in the first trimester of gestation and the strength of antennas. The number of antennas within 100 to 199 meters was associated with oxidative stress and there was an association between oxidative stress and the distance to the nearest MPBS (Mobile Phone Base Station).”

5. 5G Danger: 5G is a Weapons System Disguised as a Consumer Convenience

Mark Steele has been very outspoken against 5G and has now been widely interviewed, including by Project Camelot and also by Sacha Stone in his documentary “5G Apocalypse: The Extinction Event.” Steele claims that although widespread reports state that 5G is operating in the 24-100 GHz range, it is actually sub-gigahertz (meaning under the GHz threshold, so still measured in MHz). He says 5G is a weapons system like long-range radar, phased array radar and directed energy (DEW was used in 9/11 and various fires like the Paradise fires). He claims that when you examine 5G hardware, it has a dielectric lens which is proof it is a weapons system. Autonomous vehicles can use 5G to shine in mirrors of other drivers (which is so strong and damaging it is equivalent to assault). Mark talks about how 5G is powerful enough to kill babies in wombs. He states:

“5G is a weapons system, nothing more, nothing less. It’s got nothing to do with telecommunications for humans. 5G is a machine to machine connection for autonomous vehicles.”

6. 5G Danger: LA Firefighters Develop Ailments After Being Too Close to Towers

In a video a 25 year veteran firefighter from Los Angeles compares cell towers to cigarettes. He calls for a stop to the cell/mobile phone base stations being built on or near fire stations. Firefighters are not the only ones suffering the effects; it was reported that hundreds of birds fell from the sky in the Netherlands during a 5G test. Recent news reports showed bees falling to the ground dead beneath a 5G antenna mounted on a telephone pole in a California community. Another report revealed that 3 elementary school students and 2 teachers had been diagnosed with brain cancer. Sprint removed the 5G antenna from the school yard to silence the parents opposition.

7. 5G Danger: Same Frequencies as used for Crowd Dispersal

5G purportedly uses millimeter wave (MMW) frequencies, so called because the frequencies are so high (in the 24-100 GHz range). Since 1 GHz = 1 billion Hz, we are talking about frequencies with very very short wavelength (the distance between the peak of one wave and the next). The distances are so tiny they are measured in millimeters, hence the term millimeter wave. These are the exact same frequencies used by the military for their non-lethal weapons such as Active Denial Systems for crowd dispersal. These weapons have the capacity to cause tremendous injury. Dr. Paul Ben-Ishai said, *“If you are unlucky enough to be standing there when it hits you, you will feel like your body is on fire.”*

8. 5G Danger: Mutagenic (Causing DNA Damage) and Carcinogenic (Causing Cancer)?

The MMW frequencies of 5G cause mitochondrial DNA damage – which is then passed down generations. 5G is mutagenic. These mutations are inherited by the next

generation! This has grave implications for genetic purity. How many people are thinking about this when they can't stop looking at their screens? This website lists many studies showing the mitochondrial damage that occurs after exposure to EMF radiation.

With mutagenesis usually comes carcinogenesis. In other words, once something is powerful and dangerous enough to cause DNA damage, chances are high it will lead to cancer. Mark Steele says 5G is a class 1 carcinogen, although the WHO (World Health Organization) very conservatively classifies cell phone towers as a class 2b possible carcinogen. It's important to note, however, that the WHO is an agency of the UN which was set up by the Rockefellers, an illustrious NWO Illuminati family who plan to use the UN as a vehicle to usher in a One World Government.

5G is being rushed out without the proper safety testing done, so we don't have much data on how 5G specifically causes cancer, but there is an abundance of evidence showing how 2G, 3G and 4G EMFs are implicated in many kinds of cancer, including brain cancer.

9. 5G Danger: Phased Array Densification

5G requires significantly more transmitters or broadcasters than earlier generations. It is a plan of massive infrastructure creation, with stations, towers and bases planned to be put almost everywhere, including in the heart of residential neighborhoods. The effects of this kind of densification could be disastrous.

5G is powerful enough to 3D map the inside of your home and other buildings. Mark Steele specifically highlights the 868 MHz frequency, previously used for battlefield interrogations and which can travel with ease through bricks and concrete. He claims this frequency can single out specific people ... interesting given all the electronic harassment and gang stalking which occurs against TIs (Targeted Individuals).

5G infrastructure will consist of small phased array antennas shooting out radiation at their targets like a bullet. The rays of microwaves they produce will be strong enough to pass through walls and human bodies. We will be blanketed with this 24/7/365, and what's worse, the coverage area is slated to be broader than the current 4G, eventually encompassing every square inch of Earth. 20,000 low orbit satellite 5G antennas are being deployed to provide a space-net-fence, from which all life on earth will be continuously bombarded with 5G millimeter waves. Four telecommunications companies are in a race to bring this 5G technology to every doorstep in the world.

10. 5G Danger: Killing All the Insects?

Insects, birds and children are the most vulnerable to 5G due to their body size. Claire Edwards is a former UN staff editor who brought the EMF/5G issue to their attention of UN Secretary General Antonio Guterres. She stated in an anti-5G rally speech in Stockholm:

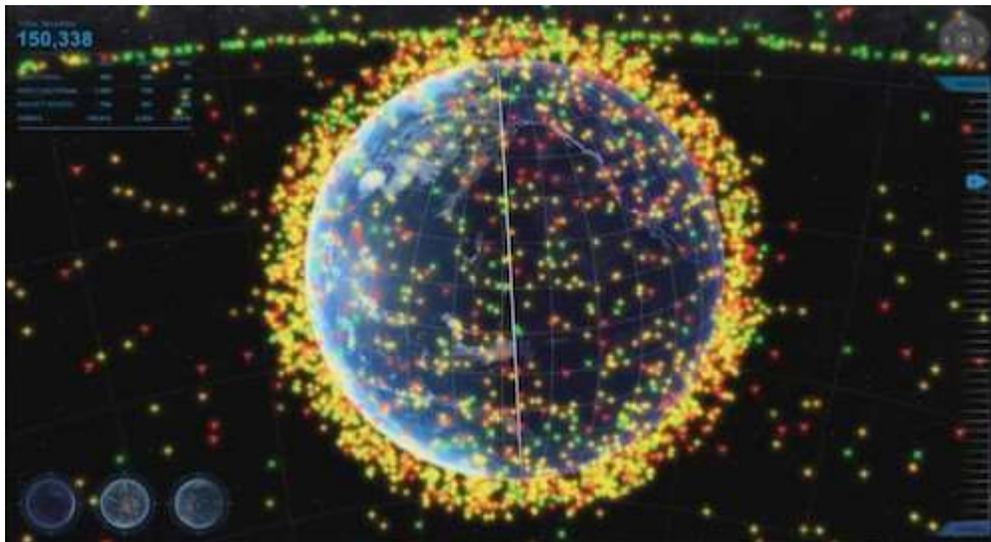
“It’s interesting to note that in the last 20 years we have lost 80% of our insects. And if we get 5G, we’re going to lose 100% of our insects. When the insects go, we go too.”

Both insects and 5G need antennas: insects use them, among other things, in their sense of smell, while 5G uses them to propagate waves. Not surprisingly, insects are sensitive to 5G EMF waves; this recent study showed that insects exposed to 5G radiation experienced an increase in their body temperature.

“Studies have shown that the frequencies used by 5G increase the body temperature of insects. This phenomenon was not observed with 4G or WiFi.”

Meanwhile the study Exposure of Insects to Radio-Frequency Electromagnetic Fields from 2 to 120? GHz concludes:

“Future wavelengths of the electromagnetic fields used for the wireless telecommunication systems will decrease and become comparable to the body size of insects and therefore, the absorption of RF-EMFs in insects is expected to increase.”



11. 5G Danger: Space-Based 5G

5G is planned to be an inescapable grid – with plans afoot to beam it down from space! This ties into the Space Fence agenda as discussed in the article *Space Fence: Connecting the Surveillance and Transhumanist Agendas*. The organization *International Appeal Stop 5G on Earth and in Space* writes:

“At least five companies are proposing to provide 5G from space from a combined 20,000 satellites in low- and medium-Earth orbit that will blanket the Earth with powerful, focused, steerable beams. Each satellite will emit millimetre waves with an effective radiated power of up to 5 million watts from thousands of antennas arranged in a phased array.”

It is vital to understand the bigger picture of the grand conspiracy here. All these disruptive and hazardous technologies – 5G, Wi-Fi, wireless radiation, HAARP, ionospheric heating, geoengineering, GMOs, etc. – are going to be woven into one giant integrated system of surveillance, command and control. Just as one small example, geo-engineering involves the spraying of chemtrails loaded with metal particulates – which 5G can use.

12. 5G Danger: Re-Radiation Inside the Body

Way back in 2002, RF researcher Arthur Firstenberg published an analysis of 5G long before the technology was approved. He explained how, due to 5G EM pulses being extremely short and delivered in bursts, they actually *replicate* inside the body – and end up creating tiny new 5G antennas internally. Firstenberg wrote:

“... when extremely short electromagnetic pulses enter the body, something else happens: the moving charges themselves become little antennas that re-radiate the electromagnetic field and send it deeper into the body ...”

“These re-radiated waves are called Brillouin precursors ... They become significant when either the power or the phase of the wave changes rapidly enough ... This means that the reassurance we are being given – that these millimeter waves are too short to penetrate far into the body – is not true.”

This echoes a previous point made – that 5G penetration is a serious danger.

13. 5G Danger: Insurance Companies Refuse to Underwrite Big Wireless. What Do They Know?

Insurance companies (the most famous of which is Lloyds of London) have made headlines by refusing to insure *Big Wireless* (the telecommunication corporate conglomerate) against Wi-Fi and 5G-related illnesses and claims:

*“Well, Lloyd’s November 2010 Risk Assessment Team’s Report gives us a solid clue: **the report compares these wireless technologies with asbestos**, in that the early research on asbestos was “inconclusive” and only later did it become obvious to anyone paying attention that asbestos causes cancer. Keep in mind that Lloyd’s Risk Assessment study of Wi-Fi was published over 8 [now 9 – Ed.] years ago. Even back then, however, their Risk Assessment Team was smart enough to realize that new evidence just might emerge showing that the various Wi-Fi frequencies do cause illness.”*

Conclusion: 5G Grid Part of Larger Command, Control, Surveillance and AI Agenda

5G is qualitatively and quantitatively different to 4G. It is much more than just the next step up from 4G. 5G will not only beam tens to hundreds times more radiation than 4G, but the introduction of MMW technology means a whole new host of hazards. History repeats itself. Just like it took some time for real science to catch up with tobacco/cigarettes, and just like it took some time for real science to catch up with the

monstrosity that are GMOs (now rebranded as *BioEngineered Foods*), so too will real science catch up with 5G. In the meantime, you can expect all sorts of *junk science* to be put forth to justify it, including mis-directions and distractions like only focusing on the thermal effects of wireless (and ignoring the evidence of dangerous non-thermal effects).

Ultimately, 5G is part of the NWO agenda to set up a giant, inescapable command and control grid that eliminates all privacy and allows the manipulators to surveil every single person on the planet all the time. If there was ever a time for activists to step up in the name of freedom, truth, health, privacy and sovereignty, now is the time.

On Dr. Horton's web site, she has a page that deals specifically with 5G. On that page is a link to a video interview with Dr. Barrie Trower, UK microwave weapon expert, explaining the dangers of 5G on the Richie Allen Show in the interview called '5G Will Devastate Humanity But Those Behind It Are Above The Law!'.

Dr. Horton's web site is "Stop 007". On that page is a series of topics, if you scroll down to the icon which states: "Research Library", click on the words "Read More". It will open to an index, scroll down to "Genocide and Assault Methods" and click on to the "5G". This opens to all the most important information on 5G. It contains the link to the interview with Dr. Barrie Trower, and a detailed "Technical Info on 5G", a presentation by experts from Rohde & Schwartz. The presentation is a 161-page visual graphic on 5G. This is helpful for those unfamiliar with or untrained in the field of electrical magnetic field, toxic electricity, microwave technology, and wireless technology.

This is a Genocidal method of reduction of the world's population, hiding behind the mask of the "Internet of All Things". I hope you understand what that means. The mistake people make in underestimating the harm of 5G is to assume it is just a faster version of 3G and 4G. That is absolutely wrong! 5G is 1,000% more powerful than anything you have in the existing world of current wireless communications.

Existing cell phone technology uses those tall cell towers sitting on hills, which send out a signal in a 360-degree pattern. The signal range is about 25-miles in all directions. 5G technology requires a microwave transmission beam, point to point, free of obstructions such as trees, poles, signs, buildings, etc. When 5G is installed in your community, booster cell towers will have to be installed every 400-500 feet, virtually every other telephone pole on your street. Up until now, microwave transmission has been exclusively used in business and industrial communication of data. Studies have concluded that the closer one lives to one of those tall cell phone towers there is an increased incidence of cancer. Thousands of studies have confirmed this to be true over the past twenty-five years of the existence of cell phones.

Since 5G requires a point-to-point microwave signal, it requires a much more powerful radio signal, and that signal is beamed out in what is called a phased array pattern, pulsing at greater energy levels. Most readers of this know what their

microwave does. It uses energy pulsed into your packet of popcorn or warming up leftovers from the day before.

Think of your world now, your home, or vehicles as a huge microwave oven, but without the protection of a sealed compartment such as the microwave oven. Many microwave ovens have a button labeled popcorn, and in about 2-minutes you have a batch of warm popcorn. With 5G, think of yourself as that packet of popcorn, but only this time you are the target of those microwaves, but not for 2-minutes, but rather 24/7/365, at all times. 5G is cooking your entire body inside day and night. The human body is electrical in its biology and chemistry. 90% of your body mass is liquid in form and purpose. Think of what is happening inside your body organs when it is being microwaved with EMF waves. 5G cooks from the inside out, the exact opposite of your microwave oven at home.

The telecommunications industry has invested \$59-billion dollars in the roll out of 5G for the Internet of Things. Seventeen major cities were chosen to go full 5G this year. In my case, Louisville, KY was one of those cities. For two years now AT&T have been installing 5G technology to rural areas in central Kentucky. I live within 2,500-feet of an existing cell tower to the north of my residence. In the coming months, we can expect AT&T to install small 5G antennas on the telephone poles lining the road I am located.

But that is not the end of it; the five major telecommunications companies will be deploying 20,000 low orbit 5G satellite transmitting stations covering the globe with a “sky fence” or “sky net” communication network. This system of 5G satellite transmitting stations will be beaming down 5G EMF upon every inch of the planet. When fully operational there will be no place to hide from these microwave beams.

Lockheed Martin, the developer of the “Space Fence” will be tracking space junk, debris from earlier satellite deployments, material still flying around the globe. The “Space Fence” can be used to target or monitor a piece of space garbage the size of a marble that could disable a satellite – the same satellites that guide us to a new restaurant location, allow us to access our banking and financial accounts and surf the internet to check the latest weather forecast. These satellites also protect complex systems that safeguard our way of life.

The 5G network is being marketed as a communications system; however, the downside of all this is far more horrendous than you can possibly imagine. As Dr. Barrie Trower notes, the people pushing this technology have intentionally disregarded all of the potential health and safety issues. Dr. Barrie Trower was involved with the development of radar for the British military during World War II. He accuses the telecommunications industry of not knowing what it is doing.

I have read everything that I could get my hands on for the past two years on what 5G is all about and several experts in the field of electrical biology state that the human race will begin to decline in about eighteen months and will go extinct in five

years. Those figures were reported on Dr. Bill Deagle's site noted on page 4 above. Dr. Deagle's population estimates for various industrial countries like the one on page 4 has been on the Internet for several years.

Dr. Katherine Horton has jeopardized her life by coming forth and revealing things about 5G that should cause our concern. As she said in her interview, it is now in the hands of the people of the world to share and expose what is about to fall on the world. If each individual reading this article were to share it with at least two others, and they in turn did the same thing, etc., the World Health Organization and the United Nations would be pressured to stop this insanity!

Dr. Barrie Trower has stated that there are several hundred known physical health issues that are impacted and directly related to 5G technology, and its harmful effects on humans, animals, birds, bees, and other insects. Lest I forget, its effects have been found on trees which are exposed to EMF toxic electricity. Areas where "Smart" meters are in place, such as California, were the first to experience the effects of EMF on the trees and foliage.

Last but not the least of importance in this 5G technology is how 5G plays into the "Mark" of the Beast System described in Revelation 13:17 of the Bible. "666" plays a significant but largely obscured part of this system. Every electronic device you own or use requires an interface "hand-shake" connection with the Internet of Things. Every device, router, wireless printers, keyboards, mouse, cell phone, iPad, iPhone, Kindle, has the basic "666/999" function incorporated into its design and use. This connection or "hand-shake" enables all these gadgets and devices to operate in tandem in this world of communication and technology. We have had the "666/999" "Mark" since 1935. Each year thereafter, it has been embedded deeper into our world and oblivious to public awareness. Without it, none of those devices could function in a seamless network of electronic communication.

My series: **"666/999 – 5G, the Mark of the Beast, and the UPC Code"** covers the history of the infamous number, from its roots in Babylon, how it came to be what it is today and its validating of Scripture for us today. Nothing in print today explains it clearer or better than my series in eBook format! As complex as "666" many think it is, in reality it is so simple to be missed by nearly all!

Pastor Bob,
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Link to The 5G Crisis: Awareness & Accountability Summit is online and FREE from August 26 - September 1, 2019.
the5gsummit.com/?idev_id=13197

Attached to my article is an important report posted 8/9/2019 on the Internet and it has additional information of use to those concerned about the coming 5G technology. The more one is able to learn for themselves about the subject of 5G, the more one is able to make their own decisions as to the harmful health effects and reasons why 5G does not serve the well-being, health, and safety of the public.

The Telecommunications Industry promises fast, ubiquitous and unlimited mobile internet access with the next generation of 5G technologies by 2020, along with removal of cheap, secure and safer landlines. This 5G network is designed to provide faster downloads, streaming movies, wireless virtual reality, in addition to being the platform for the Internet of Things, whereby all our household devices are connected to this system wirelessly for remote control. While there may be limited medical applications, 5G will mainly be used for more immersive entertainment and surveillance with much greater public exposure, especially in "Smart Cities". Military uses have also been discussed. This 5th generation (5G) system uses high frequency electromagnetic radiation with Gigahertz (GHz) wavelengths in the millimeter range. These high frequency tiny wavelengths penetrate only the outer layer of the skin, unlike 2G, 3G and 4G technology which passes through the body. Major health concerns with exposure to 5G are to skin, eye and adverse systemic metabolic signaling through skin sensors, as well as heat effects. Some in Congress have seriously questioned the lack of independent research on 5G safety.

The First Report of 5G Injury is in Switzerland

The first reported injury of 5G in a news report comes from Switzerland, where 5G has been launched in 102 locations. The weekly French-language Swiss magazine L'illustré interviewed people living in Geneva after the 5G rollout with alarming details of illness. In their article, *With 5G, We Feel Like Guinea Pigs*, posted July 18, 2019, they report neighbors met to discuss their many common symptoms and many unanswered questions. See also *First Report of 5G Injury from Switzerland*

What is the Difference Between 5G and 4G Wireless Technology?

To start, be careful not to confuse 5G Fifth Generation Technology with the 5Gigahertz (GHz) frequencies used in wireless devices. Some devices state they are 5G, but at this point in time it is meant to be 5GHz frequency of transmission. 5G technology uses much higher frequencies (10-300 GHz) and is still in development stages (other than pilot projects). See also *What's the Difference Between 5G and 5GHz Wi-Fi?*

5G technology is different than prior 2G, 3G or 4G technology in the following ways:

- Frequencies: 4G uses several different frequencies from 750MHz to about 2,400-5,000 MHz(2.4 GHz to 5 GHz- typical Wi Fi and cell phone) - 5G (proposed 5th generation) uses 10GHz to 300GHz, but lower frequencies will also be used and the frequencies and speed will vary with each carrier i.e. 600 MHz will be used by T Mobile. Sprint will use 2.5GHz, called mid-band, which will penetrate walls. PC Magazine on April 16, 2019 notes, "The actual 5G radio system, known as 5G-NR, isn't compatible with 4G. But all 5G devices in the US, to start, will need 4G because they'll lean on it to make initial connections before trading up to 5G where it's available. That's technically known as a "non standalone," or NSA, network.

<https://www.pcmag.com/article/345387/what-is-5g>

- Wavelengths: 4G electromagnetic wavelengths are inches to feet long - 5G frequencies are in centimeters to millimeters, but again lower frequencies will also be used, creating a mix of frequencies and therefore wavelengths.

- Depth of Skin and Body Absorption: 4G microwave radiation (2.4GHz and 5 GHz) passes through bodies and the energy is absorbed by anything that contains water (can't cook dry rice in a microwave oven), while 5G (5th Generation) penetrates only the outer layers of the skin in humans. Again the mix of frequencies in cell towers and cell phones will have a mix of skin and body penetration.

- Distance Radiation Travels: 4G can travel dozens of miles in a line of sight and if poles are placed high. In experiments 5G can travel a few miles but is easily blocked by objects, trees and plants thus poles are planned for every 300 feet in cities.

- Mechanisms of Harm: 4G and low band 5G (600MHz) emissions can cause oxidation of tissues (93 of 100 studies), 5G millimeter wavelengths can have their effect through heat (tissue destruction), through a resonance effect of increased vibration in an object the size of the wavelengths, and at low power levels through signaling of skin structures that can affect metabolism, the nervous system, the endocrine system, the reproductive system (Declassified Military studies).

- Amount of Testing Done: 4G technology has been tested by the military and by international scientists with an abundance of studies showing broad harm to animals, humans, plants, insects and bacteria. 5G technology has been studied by some in the military showing broad harm and some newer studies are showing damage to insects, tissue burns and overheating with streaming of data, but there has been no safety testing of 5G before it is rolled out.

Size of Wavelengths with Varying Frequencies

In general the higher the frequency the shorter the wavelength. One conversion chart is here that shows the different wavelengths and frequencies for 2G, 3G, 4G and 5G.

- 5G: 600 MHz = cm microwaves of 50cm ≈ 20 inches ("MHz" = Megahertz)

- 4G: 700 MHz = cm microwaves of ~43cm ≈ 17 inches ("cm" = centimeter)

- 3G/4G: 800 MHz = cm microwaves of 37.5cm ≈ 15 inches

- 3G/4G: 900 MHz = cm microwaves of ~33.3cm ≈ 13 inches
- 3G/4G: 1800 MHz = cm microwaves of ~16.7cm ≈ 6.6 inches
- 3G/4G: 2100 MHz = cm microwaves of ~14.3cm ≈ 5.6 inches
- Wi-Fi: 2450 MHz = cm microwaves of ~12cm ≈ 5 inches
- 5G: 3100 MHz to 3550 MHz = ~9.7 to ~8.5cm ≈ 3.8 to 3.3 inches
- 5G: 3550 MHz to 3700 MHz = ~8.5cm to ~8.1cm ≈ 3.3 to 3.2 inches
- 5G: 3700 MHz to 4200 MHz = ~8.1cm to ~7cm ≈ 3.2 to 2.8 inches
- 5G: 4200 to 4900 MHz = ~7cm to ~6cm ≈ 2.8 to 2.4 inches
- Wi-Fi: 5800 MHz = ~5cm microwaves of ~2 inches ("mm" = millimeter)
- 5G: 24,250 to 24,450 MHz = mm microwaves of ~12mm ≈ 0.5 inch
- 5G: 25,050 to 25,250 MHz = mm microwaves of ~12mm ≈ 0.5 inch
- 5G: 25,250 to 27,500 MHz = mm microwaves of ~11mm ≈ 0.4 inch
- 5G: 27,500 to 29,500 MHz = mm microwaves of ~10mm ≈ 0.4 inch
- 5G: 31,800 to 33,400 MHz = mm microwaves of ~9mm ≈ 0.4 inch
- 5G: 37,000 to 40,000 MHz = mm microwaves of ~8mm ≈ 0.3 inch
- 5G: 42,000 to 42,500 MHz = mm microwaves of ~7mm ≈ 0.3 inch
- 5G: 64,000 to 71,000 MHz = mm microwaves of ~5mm ≈ 0.2 inch
- 5G: 71,000 to 76,000 MHz = mm microwaves of ~4mm ≈ 0.2 inch
- 5G: 81,000 to 86,000 MHz = mm microwaves of ~3.6mm ≈ 0.1 inch

Old and New Research on Millimeter Waves is Alarming

New research by Neufeld and Kuster 2018 highlights the significant tissue heating generated by 5G technology with rapid short bursts of data transfer on a device, prompting them to call for reevaluation of thermal safety standards (let alone biological standards). The researchers state, "The results also show that the peak-to-average ratio of 1,000 tolerated by the International Council on Non-Ionizing Radiation Protection guidelines may lead to permanent tissue damage after even short exposures, highlighting the importance of revisiting existing exposure guidelines." In addition, there is convincing emerging scientific evidence causing great concern for the environment, with harm to mammals, insects and bacteria, prompting scientists around the world to call for a moratorium on 5G. This 5G technology is complex, likely to be costly, accompanied by privacy concerns and will also consume significant amounts of energy, contrary to global climate goals. Despite this scientific evidence, the FCC is accelerating the deployment of wireless antenna infrastructure by limiting local governments ability to refuse these towers, limiting charging fees and shortening the shot clock for approval, effectively blocking the power of local authorities.

An older Russian paper, "Biological Effects of Millimeter Wavelengths" by Zalyubovskaya (1977) was declassified by the CIA in 2012. This paper disturbingly describes the research on both humans and animals showing a myriad of adverse effects of millimeter wavelengths. The author notes that millimeter wave technology had been used for years without any studies on biological effects. The researchers found that "millimeter waves caused changes in the body manifested in structural alterations in the skin and internal organs, qualitative and quantitative changes in the blood and bone marrow composition, and changes in the conditioned reflex activity, tissue

respiration...and nuclear metabolism. The degree of unfavorable effect of millimeter waves depended the duration of radiation and individual characteristics of the organism." The author confirmed that millimeter waves do not penetrate skin but act on nerve receptors in the skin to cause such diverse biological and metabolic effects as a reduction in hemoglobin and erythrocytes, higher blood cortisol levels, adrenal stimulation, mitochondrial dysfunction, and suppression of the central nervous system with notable changes in liver, kidneys, heart and brain. The declassified paper is Biological Effects of Millimeter Wavelengths. Zalyubovskaya-Declassified by CIA -1977

The 2018 European Commission Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) Lists 5G Electromagnetic Radiation
SCHEER regularly updates emerging risks to public and environmental health. In their 2018 European Commission Statement on Emerging Health and Environmental Issues lists e cigarettes, perflourinated compounds, plastics, nanoparticles and also includes virtual reality and electromagnetic radiation, especially 5G technologies. They state "The lack of clear evidence to inform the development of exposure guidelines to 5G technology leaves open the possibility of unintended biological consequences."
https://ec.europa.eu/health/scientific_committees/scheer_en or SCHEER Report Emerging Concerns 2018-

New Danish Legal Compendium of Health and Environmental Effects of 5G

The Danish Institute for Public Health and the Council for Health-Safe Telecommunications has prepared legal document related to the broad harm from 5G as well as other wireless technologies. They state, "The legal opinion is based on the rules of law in the European Convention on Human Rights, the UN Convention on the Rights of the Child, the EU directive on the conservation of natural habitats and of wild fauna and flora, the EU directive on the conservation of wild birds, on the precautionary principle as well as on the Bern- and Bonn-conventions on the protection of animals and plants."

The Compendium can be found and downloaded here. 5G Danish legal opinion Jensen 2019. PDF.

No Testing, No Regulation, No Safety Guidelines

There has been no premarket testing of this technology or the mix of frequencies we will be exposed to. There are no protective regulations to assure monitoring of radiation levels for each antenna or a registry to document reported health effects. The Departments of Public Health are not informed about any potential health or environmental effects and have not given any guidance with regards to non-ionizing wireless radiation safety except to tell people to reduce their current exposure (California Department of Public Health). Effects on our most vulnerable populations i.e. children, pregnant women, the elderly and those with chronic diseases, have not been taken into account.

Fiber optic Networks provide even faster broadband speeds, are safer, more cyber secure, and more reliable in rural areas, however, telecommunications companies are abandoning these to push for a cheaper alternative, wireless antenna, which emit biologically harmful radio frequencies. Critical secure and sophisticated landlines are also planned for removal by AT&T by 2020 to further force customers into wireless systems. Some cities are moving to community owned fiber optic networks with Municipal Open Fiber Networks,

5G Mobile Telecommunications to Use a Blanket of Fixed Antennas Networks

The 5G deployment proposes to add frequencies in the microwave spectrum in the low- (0.6 GHz - 3.7 GHz), mid- (3.7GHz - 24 GHz), and high-band frequencies (24 GHz and higher) for faster communications. They call this mobile communication, however, because these wavelengths travel only short distances, this system will need to use a dense network of fixed antennas outdoors every 300 meters as well as indoor systems, as the gigahertz radiation is blocked by buildings. This radiation, like the 2G, 3G, 4G telecommunications systems, has not had pre-market testing for long term health effects despite the fact that people will be exposed continuously to this microwave radiation. Environmental effects have also been ignored. Published scientific literature is listed below. See also PST 5G "Mobile" Communications

Risks from 5G include:

- Damage to the eyes- cataracts, retina
- Immune system disruption
- Metabolic disruption
- Damage to sperm
- Skin damage
- Collapse of insect populations, the base of food for birds and bats
- Rise in bacterial resistance and bacterial shifts
- Damage to plants and trees

5G Short Wavelengths Mixed With Longer 2G, 3G and 4G:

5G high frequency wavelengths are short and in the millimeter range (fractions of an inch). This is in contrast to the 2G, 3G and 4G telecommunications systems which use longer centimeter-length (inches to feet) microwave frequencies in the megahertz (MHz) range. Industry states the deployment of 5G will increase productivity, boost the economy and give us a sense of well-being. In order to accomplish this, they will not just be using just 5G short wavelengths to transmit data, but will integrate 5G with current 3G and 4G systems, with plans to add much of the remaining spectrum in the microwave frequencies. Industry states this will operate fluidly in a highly dense cell antenna arrangement throughout neighborhoods and cities. This cell antenna network will accommodate multiple types of access technologies, multi-layer networks, multiple types of devices, multiple types of user interactions including self-driving automobiles and massive industrial automation.

Increase in Frequencies with Constant Exposure:

This means that the human population as well as pets and other species will be exposed to an even larger mix of frequencies continuously inside and outside the home. Industry is fast-tracking placement of cell antennas for this new technology by promoting new legislation on a local, state and federal level. This will preempt local authority to place antenna on potentially every public utility pole and preexisting cell tower structure.

More Questions than Answers: Health and Environmental Effects?

What are the public health implications of this novel technology? What research supports its safety? What research indicates harmful effects? What are the implications for the unsolved privacy and security issues that are also related to health as products are being developed to interface with the medical community and patients? What are the contributions to global climate change? What are the societal and mental health effects in a population increasingly addicted to this technology and disconnected with each other? Patients and physicians are becoming increasingly aware of these related issues and concerned about the long term consequences of our convenient yet problematic wireless technologies. There appear to be more questions than answers.

Millimeter Wavelengths Hazards: Cell Membranes, Internal Signaling, Skin Changes

Millimeter wavelengths (MMW) have been used in non-invasive complementary medicine in many Eastern European countries, typically to therapeutically heat the tissues over a short time frame. Millimeter wavelengths (at high intensity) have also been used in military applications in Active Denial Systems (95 MMW for non-lethal crowd control weapons) that create heat to repel persons. Studies show these systems can burn the skin.

Some research on non-thermal effects has shown that millimeter wavelengths target cell membranes and have adverse biological effects as well as clinical effects such as cataracts, immune system alterations and physiological effects on the heart and blood pressure. Betzalal et al (2018) have demonstrated that the sweat glands which are coiled structures in the upper layers of the skin can act as antenna receiver for 5G sub-THz band wavelengths. The presence of sweat glands in skin significantly increase the specific absorption rate (SAR), or heat absorption, for millimeter radio frequency radiation. This varies depending on factors such as perspiration and stress levels. Le Qument (2012) looked at non-thermal skin genome effects of 60.4 GHz exposure for 1, 6 or 24 hours and found at 6 hours there was differential expression of 5 transcripts. He states , "this is the first large-scale study reporting on potential gene expression modification associated with MMW radiation used in wireless communication applications."

Adverse effects have also been found in bacteria and insects (Trchounian 2016). The cellular and organism effects are nonlinear and depend on a variety of individual factors as well as specific wavelengths, phasing and modulation of the wavelength signals. With widespread exposure even small physiologic alterations would be magnified in a population and contribute to a negative public health outcome.

Research Lacking

A review of the literature reveals that there is inadequate research into 5G health and environmental effects. There is science which shows both harmful and beneficial effects but no independent long term studies have been performed on 5G or any research on the mix of frequencies we would be exposed to. Critical long term health studies are lacking for 3G and 4G wireless technologies as well as 5G. Current FCC standards are based only on heat effects for all telecommunications radiofrequencies and not biological effects seen with low level exposures that do not heat or burn tissues.

IEEE: Heat is Still the Only Standard of Harm Considered in 5G Applications, not Biological Effects

The Institute of Electrical and Electronics Engineers (IEEE) is an industry association primarily composed of engineers, computer scientists, software developers, information technology professionals, physicists, scientists, and allied professionals. It is the world's largest technical professional association. Their input has been pivotal in setting standards for radiofrequency exposures. The IEEE performs its own research and is involved in computer and wireless technology product development. Some of their research is included in this section. Even in their 2015 report on 5G "Safe for Generations to Come" the authors state, "At this time, more reports of beneficial effects than detrimental effects from low-level exposure to mmWave radiation appear to exist in the literature, but this area needs to be better understood, and the specific effects need to be demonstrated reproducibly by independent investigators before any potential non-thermal effects are to be considered in determining the regulatory limits on this regime of nonionizing radiation." So far science is not sufficient to support the safety of this technology.

New Evidence of Significant Heat Tissue Damage with 5G: FCC Standards for 5G Gigahertz Wavelengths Urgently Need Reevaluation

The short millimeter waves for 5G technology bring along new challenges for public safety. To improve the performance of 5G and IOT devices, pulsed phased antenna arrays will be used in cell towers and wireless devices- See A Beam-Steering Antenna for 5G Mobile Phones. This beamforming technology uses a cluster of pulsed microwave antenna beams whose shape and direction can be controlled to have an individual beam pointed at a device to improve signal, similar to missile control. 5G technology will have dozens of smaller antennas packed in a single cell antenna array. The heat generated by these antenna is a huge concern (Nasim and Kim 2017) . New research on heat effects of 5G, by (Neufeld and Kuster 2018), demonstrates that permanent tissue damage from heating may occur even after short exposures to 5G

millimeter wave pulse trains, where repetitive pulses can cause rapid, localized heating. The scientists highlight an urgent need for new thermal safety exposure standards to update current guidelines which do not adequately prevent excessive heating from pulsed millimeter wave exposure.

If 5G millimeter wave transmissions associated with these new technologies fail to meet current public safety standards, as the authors predict, then the rollout of IOT becomes questionable on significant thermal health effects, which are regulated and felt to be the only significant health effect. Current FCC policy does not consider non-thermal biological and physiological radiofrequency effects on living organisms, despite abundant literature for 2G 3G and 4G system. This research underscores the obvious lack of meaningful public safety standards.

Physicists State RF Energy is Not High Enough to Cause Damage but Now Explained by Dielectric Permittivity, Radical Pairs and Oxidation

It has long been believed that non-ionizing (RF) radiation could not be harmful to living organisms as RF radiation did not break chemical bonds or have enough energy to remove an electron from (ionize) an atom or molecule. It was felt radio frequency radiation damaged tissue only through a heating or burning mechanism. We are now learning that microwave radiofrequency electromagnetic radiation from wireless devices acts as an environmental stressor with direct oxidative toxic effects on cellular processes that are not related to heat or to ionization. The effect of radiofrequency EMR is indirect, inducing biochemical changes in cellular structures and their membranes. (49,50,78)

Many physicists argue vehemently that there could not be a biologically toxic effect from electromagnetic radiation, however, toxicity has been demonstrated in many research investigations and is similar to effects from other chemical exposures. Their own publications now explain the effects of dielectric permittivity and radical pair mechanisms.

Hinrikus (2018) explains "The cumulative impact of coherent MW field in a medium has been convincingly confirmed by the measurable dielectric permittivity of the medium. The described mechanism of MW field-induced effect confirms that the nature of the effect differs from the thermal effect and that the exposure by MW radiation can create the specific consequences in biology and materials not characteristic for conventional heating."

Nielson (2019) states, "Weak radiofrequency (RF) magnetic fields in the MHz-range was shown to influence the concentrations of reactive oxygen species (ROS) in living cells [1-4]. Remarkably, the energy that could possibly be deposited by such radiation is orders of magnitude smaller than the energy of molecular thermal motion. A plausible explanation to the observed effect relies on the interaction of RF magnetic fields with transient radicals within the cells, affecting the ROS formation rates through the radical pair mechanism [5-9]."

Articles on How Non Ionizing Radiation Can Cause Damage to Cell Structures

- Towards predicting intracellular radiofrequency radiation effects. (2019) Nielson C et al. PLOS One. March 14, 2019.

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Insect Armageddon

5G Licensed to Kill: The Insect Inspector Discusses the Insect Apocalypse

As scientists are working to explain the insect apocalypse , this video highlights one common environmental toxin that is known to kill insects that is 5G as well as 3G and 4G radiation. He points out that "the 30-year radiation from millions of cellular phone masts is the single factor present in every region of insect decline." Science backs this observation up. Wireless radiation may not be the only factor in this "insect Armageddon" but it may be the critical one. Pesticides can be avoided and habitat can be restored, however, once cell phone masts are placed they are rarely removed and the continuous waves of radiation just intensify to cover broader areas of land with more and more towers. The disappearance of birds and bees points to wireless technology as the yet unrecognized factor hastening this decline. 5G will be like 3G and 4G on steroids as these smaller millimeter wavelengths are the size of insects and the resonance effect of these continuous waves will set up additive vibrations that destroy the insect and essentially cook it. Microwave radiation is known to kill insects and is already being used for insect control in stored grains and other foods. Studies in food and agriculture literature confirm this effect. (Yadav 2014) (Das 2013) (Geveke 2009) (Ponomaryova 2009) (Zhejiang 2004) (Geveke 2003) (Mishenko 2000)

Scientists Urge Moratorium on 5G Technology:

It is notable that currently over 207 scientists and physicians who have researched the biological and health effects of radiofrequency radiation have signed the 5G appeal, calling for a moratorium on the use of 5G technologies until more research is conducted and proves the safety of this technology. See also Scientists call for 5G Moratorium-Safer EMR

Newest Articles 5G

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