

5G radiation and the COVID-19 pandemic: Coincidence or causal relationship  
Martin L. Pall, Professor Emeritus of Biochemistry and Basic Medical Sciences,  
Washington State University

Two documents reprinted on [1], each argue that there are reasons to think that 5G radiation is greatly stimulating the coronavirus (COVID-19) pandemic and therefore, an important public health measure would be to shut down the 5G antennae and particularly the small cell 5G antennae in close proximity to our homes, schools, businesses, house of worship and hospitals.

The first of these documents [1] published by Miller et al., concerns the impact of 5G radiation on the immune system of the body and also suggests that 5G radiation may also increase the replication of the virus. In both of these ways, 5G radiation may be expected to make the COVID-19 pandemic much worse.

The second of these documents [1] is my own and is derived from a larger document on 5G radiation effects [2]. It starts with the history of 5G in Wuhan, China, the epicenter of the COVID-19 epidemic. Wuhan is China's first 5G "smart city" and is the location of China's first 5G highway where 5G radiation is being used to test self-driving vehicles. Approximately 10,000 5G antennae were installed and activated in Wuhan in 2019, with approximately 75 to 80% of these installed and activated in the last 2 ½ months of the year. The epidemic was first detected near the beginning of that 2 ½ month period and became vastly more severe, with extremely large increases in numbers of cases and in deaths by the end of 2019. That may, of course be coincidental. The death rate in other parts of China from COVID-19 infections has been substantially lower than that in Wuhan with its unparalleled high numbers of 5G antennae (Xu et al., BMJ 2020; 368:m606) – that of course could also be coincidental.

South Korea, which became the site of the worst epidemic outside of China, has large numbers of 5G antennae all over the country. The Milan area of Italy, currently, the worst epicenter in Europe also is a 5G center. And Seattle area, which was the worst area in the U.S. is also a major 5G area. New York City has become the largest epicenter in the US is another 5G site. These non-Chinese epidemic areas are not discussed in my paper, but these findings are accurate. Again, the locations of these epicenters in 5G areas may be coincidental.

Table 1: COVID-19, cases and deaths in four regions of Northern Italy, March 26, 2020

Region	# of cases	# of deaths	Deaths/ cases	5G ?
Lombardia	34,889	4,861	13.9%	yes
Emilia Romagna	10,816	1,174	10.9%	no
Piemonte	6,534	449	6.9%	no
Veneto	6,935	287	4.1%	no

These figures add to the argument that 5G radiation may have a substantial role in exacerbating the COVID-19 pandemic – they are not definitive however and we must look to the mechanism of action of EMFs and the evidence that other EMFs produce similar, if less severe effects which are similar to but less severe than what we are apparently seeing following 5G exposure.

Electromagnetic fields, including the highly pulsed and therefore highly dangerous 5G millimeter wave radiation, act via activation of voltage-gated calcium channels (VGCCs) with VGCC activation producing five different effects, each of which have roles in stimulating the replication and spread of coronaviruses [1,2]:

1. Excessive intracellular calcium
2. Oxidative stress
3. NF-kappaB elevation
4. Inflammation
5. Apoptosis (programmed cell death)

The predominant cause of death in the COVID-19 epidemic, is pneumonia and each of these five effects also have roles in pneumonia, such that each of them is predicted to greatly increase the percent of people dying in this epidemic. It seems highly plausible that 5G radiation is greatly increasing the spread of the epidemic and also the death rate in individuals that are infected.

You may wish to consider all of this in conjunction with the broader findings with regard to the dangers of 5G and other effects apparently produced by 5G exposures [2].

How then did we get to this state? Many independent scientists, including myself, have argued that there should be no 5G rollout until there is extensive biological safety testing of genuine 5G radiation with all of its dangerous modulating pulses. However the industry has refused to get independent 5G testing and the FCC and other regulatory agencies have refused to require such testing. Furthermore, the EMF “safety guidelines” which are supposed to protect us from health impacts of EMF radiation have been shown, based on eight different types of highly repeated studies, to fail massively to predict biological effects. They therefore fail to predict safety [3]. It follows from this that all assurances of safety based on these “safety guidelines” are fraudulent. Consequently, there is no evidence whatsoever of 5G safety and much evidence of lack of safety.

It is my opinion, therefore, that 5G radiation is greatly stimulating the coronavirus (COVID-19) pandemic and also the major cause of death, pneumonia and therefore, an important public health measure would be to shut down the 5G antennae, particularly the small cell 5G antennae in close proximity to our

homes, schools, businesses, houses of worship and hospitals. I will list some of my professional qualifications following the citations.

Martin L. Pall, Professor Emeritus of Biochemistry and Basic Medical Science, Washington State University

[1] <http://www.electrosmogprevention.org/international-electrosmog-prevention-news/coronavirus5g/>

[2]

[http://www.electrosmogprevention.org/wp-content/uploads/2020/03/M.Pall\\_.Predicted-effects-5G-Coronavirus.pdf](http://www.electrosmogprevention.org/wp-content/uploads/2020/03/M.Pall_.Predicted-effects-5G-Coronavirus.pdf)

[3] <https://ehtrust.org/wp-content/uploads/SafetyGuidelineFraud2.pdf>

The VGCC activation mechanism has been amazingly well accepted in the scientific literature.

My first (2013) paper on it was placed on the Global Medical Discovery web site as one of the top medical papers of 2013. That paper has been cited 256 times according to the Google Scholar database. Most new scientific paradigms are only slowly accepted and this is much, much faster than usual.

I have given 59 invited professional talks on this topic in 15 countries, including 4 prestigious keynote addresses. I had been scheduled to give 1 more prestigious keynote address in April (has been postponed because of COVID-19).

Two of my papers, my neuropsychiatric paper and my Wi-Fi paper, are each described by the publishing journal as being the most often downloaded paper in the history of each journal – stunning scientific interest in both papers.

My recent talks, one sponsored by the Dept. of Engineering and Applied Science at Queens University and the other at the World Congress on Physics in Berlin (where I was given a certificate of recognition) show together that both engineers and physicists are starting to realize the importance of this mechanism.