

Olle Johansson: Stop! In the Name of Life!

Bacteria Exposed to Mobile Phones and WiFi Radiation Become Resistant to Antibiotics



By Olle Johansson, Ph.D, associate professor, and former head of The Experimental Dermatology Unit, Department of Neuroscience, Karolinska Institute, Stockholm, Sweden

Do you remember the song "Stop! In the Name of Love", a 1965 hit recorded by the trio Florence Ballard, Mary Wilson & Diana Ross, also known as The Supremes, for the Motown label, and written and produced by Motown's main production team Eddie Holland, Lamont Dozier, and Brian Holland.

Dozier said that he got the idea after he got cheated on by his girlfriend. In the heat of the argument, he said, "Baby, please stop. In the name of love – before you break my heart." (I recall that The Supremes' choreography for this song involved one hand on the hip and the other outstretched in a "stop" gesture.) Nearly 60 years later, I strongly argue that we must say, "Stop! In the Name of Life". Why...? Let me explain!

By Olle Johansson, associate professor, retired from The Karolinska Institute Medical University, Stockholm, Sweden. The article was first published in [NewsVoice](https://newsvoice.se/2025/01/radiation-exposed-bacteria/) 9/1, 2025, link: <https://newsvoice.se/2025/01/radiation-exposed-bacteria/>

Occurrence of new, antibiotic-resistant, high-risk bacterial clones

A short time ago, in November 2024, I read that a multi-resistant strain of the *Escherichia coli* (*E. coli*) bacteria has taken hold in Europe. According to a new study, the occurrence of new, more resistant forms of a high-risk clone has increased sharply in recent years, including also in my own country, Sweden. Traditionally, *E. coli* bacteria are spread via water, food and

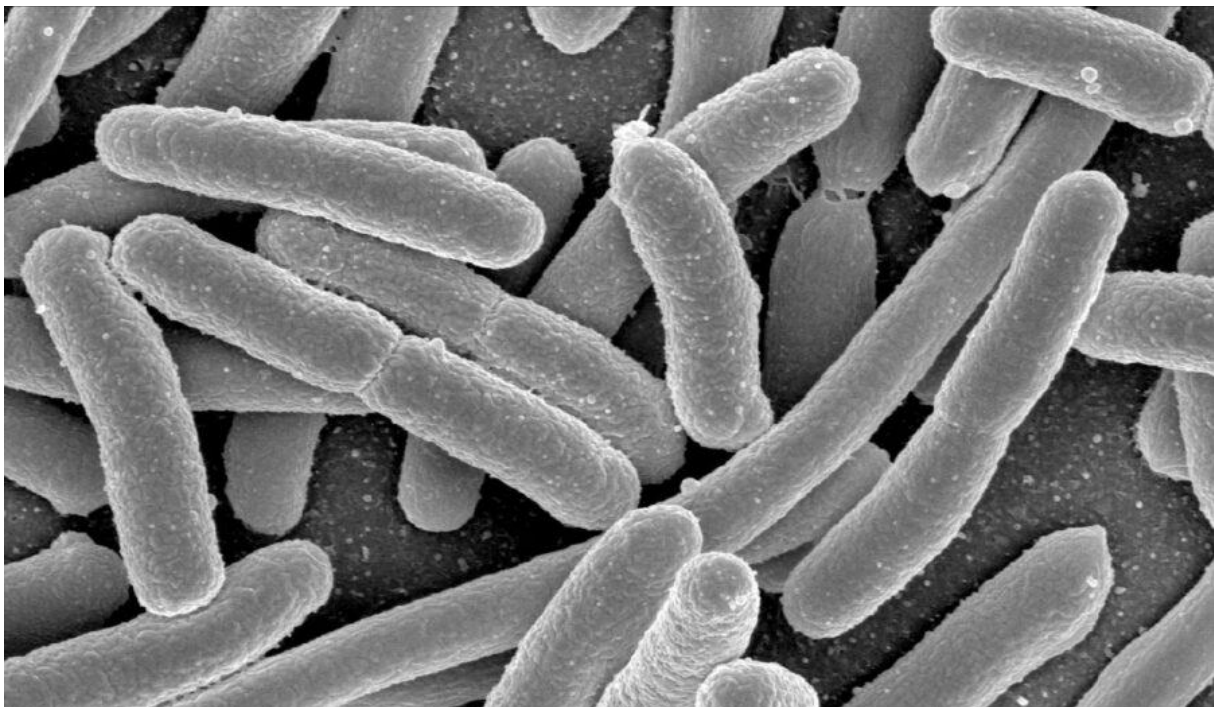
contact with infected humans, the latter especially in hospitals where a lot of antibiotics are used.

By mapping the genetic mass of the *E. coli* bacteria, the European infection control agency, The European Centre for Disease Prevention and Control (ECDC), in collaboration with, among others, the Swedish Public Health Agency, has been able to show how the resistant bacteria that carry ESBL-CARBA (Extended Spectrum Beta-Lactamase with Carbapenemase Activity, a substance found in some bacteria that makes them resistant to certain antibiotics) has spread within and between European countries. The study was recently published in the journal *Eurosurveillance* (Kohlenberg *et al.* 2024).

"The study gives further evidence of the serious increase in multi-resistant bacteria that risks reducing the possibility of treating severe bacterial infections in the future. Urgent measures are required to counter the spread of antibiotic-resistant bacteria in Sweden and globally", says Vilhelm Müller, investigator at the Swedish Public Health Agency.

Infections difficult to treat now will become very difficult, or even impossible, to treat in the near future ... and that will also include ordinary, everyday ones!

E. coli bacteria normally occur in our intestinal flora, but this particular clone is a common cause of, among other things, urinary tract infection and blood poisoning (sepsis). The bacteria now studied are resistant to several common treatment options, including broad-spectrum antibiotics such as carbapenems (carbapenems are antibiotics that work against many different bacterial species and are reserved for the treatment of infections in seriously ill patients and infections caused by bacteria resistant to first-line therapy).



E. coli. Foto: IAID, Public Domain

The consequence is that there are only a few treatment options left for patients with these infections. Down the line, if this antibiotic resistance is not countered, there is a risk that even simple, ordinary, everyday infections can no longer be treated, like a splinter in your thumb,

and you, therefore, risk dying. To state that this new situation is severe and dramatic must be this century's biggest 'understatement'.

Resistant bacteria a global health threat

The World Health Organization (WHO) classifies carbapenem-resistant bacteria as a global health threat and of the highest priority for research and development of new treatment methods. The ECDC study emphasizes the importance of continuing to develop and improve the conditions for reducing the spread of multi-resistant bacteria.

To map the occurrence and spread of multi-resistant bacteria across national borders is now of paramount importance, as are much more restricted open-border policies across the world, and limits on international work and holiday journeys.

(It should be noted that the recent COVID pandemic not at all reached the same global health threat classification level, as antibiotic resistance does. The latter even has been characterized, by the WHO, as the worst threat to mankind, and antibiotic resistance is referred to as "the silent tsunami facing modern medicine".)

A high-risk clone is a resistant bacterium of great clinical importance that has the ability to spread with high efficiency in inpatient care, cause serious infection, and cause long-term carriage in humans. High-risk clones are an important explanation for the spread of resistance in society.

The Swedish Public Health Agency closely follows the development of the number of cases and characterizes all findings with the aim of detecting and preventing the national spread of infection as well as changes in resistance mechanisms and resistance patterns. The same protective measures are now implemented in other countries as well.

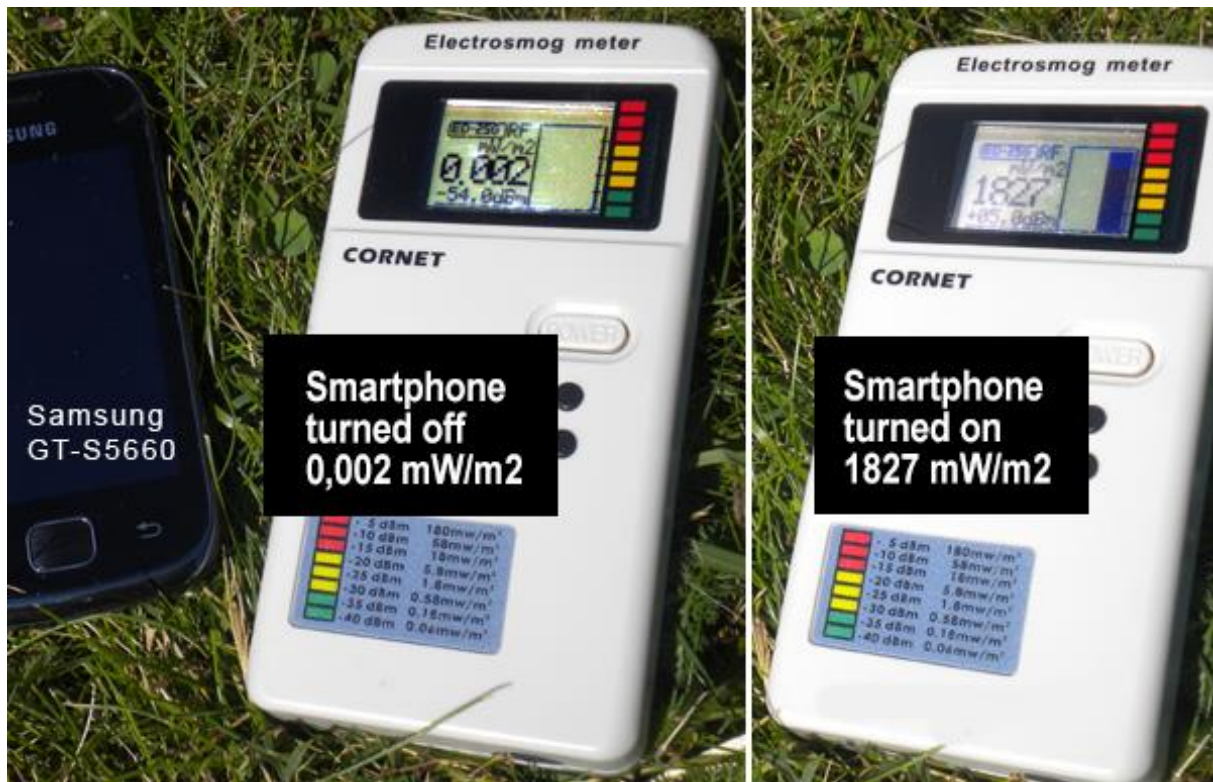
Previous observations of antibiotic resistance around the world

On Monday, May 22, 2017, the newspaper "Metro Stockholm" [reported](#) that the Ministers of Health from the so-called G20 countries, including Australia, France, India, Italy, Japan, Canada, China, Russia, Saudi-Arabia, Great Britain, South Africa, Turkey, Germany and the USA, have decided to cooperate to counter the ever-increasing and alarming world-wide resistance of bacteria to antibiotics.

Only within the EU there are yearly more than 35,000 deaths due to antibiotic-resistant bacteria, and by the year 2050, it has been calculated that more than 10,000,000 people worldwide will die prematurely each year due to antibiotic resistance.

Among the measures presented were national action plans to be in force at the end of the year 2018. Furthermore, the G20 countries are striving to only allow antibiotics to be purchased via formal medical prescriptions, as well as working towards supplying these medicines at lower and more reasonable prices in poor countries.

All of the above sounds very serious and scary, but still in the hands of highly capable authorities, civil servants, politicians, and health care officers, doctors and nurses. *But then why do they not pay attention to the following?*



Electro smog metering. Photo: NewsVoice

Antibiotic resistance, cell phone and WiFi radiations, and bacterial communication using microwaves

Surprisingly enough, nothing is – however – mentioned about the very recent results of several international research units like that of Taheri *et al.* (2017; <https://www.ncbi.nlm.nih.gov/pubmed/28203122>), who have demonstrated that the exposure to 900 MHz GSM mobile phone radiation and 2.4 GHz radiofrequency radiation emitted from common Wi-Fi routers made *Listeria monocytogenes* and *Escherichia coli* bacteria resistant to different antibiotics. These findings naturally have direct implications for the management of serious infectious diseases (cf. above), and may potentially lead to a future collapse of the global human population.

Another very important study is the US DARPA-funded one (Rao *et al.* 2022) which has found that bacteria, *Staphylococcus aureus*, biofilms communicate using frequencies that are in the range that are used by Wi-Fi and 5G C-band. The experiment found that notable radiation is observed in the 3–4 GHz band coming from the *Staphylococcus aureus* biofilms.

Radiation from three identical biofilm samples was monitored and recorded over 70 days. Two distinct frequency bands, namely the 3.18 GHz and the 3.45 GHz bands, were identified as potential “communication bands”. Furthermore, long-term and short-term cycles of the total radiation intensity within the band were observed over the course of the experiment.

So this recent study indicates that bacterial cells in biofilms may use electromagnetic signals to communicate which are of the similar type as our own cell phone and WiFi signals! Biofilms are one of the most ubiquitous forms of biological systems on earth, and are

commonly associated with infectious diseases. They are also responsible for contamination of medical devices and implants, deterioration of water quality, and microbial-induced corrosion.

This work confirms the presence of electromagnetic radiation within bacterial communities, which is a key requirement to demonstrate electromagnetic signalling among bacterial cells. The insight could lead to breakthroughs in demystifying how cells communicate as well as the advancement of important technologies in biology and communication systems. *But, much more importantly, this is a very firm and strong warning to mankind to stop playing with biology here on Earth – we may have to very profoundly regret it.*

My personal comment to this is: just imagine what our man-made high-frequency signals, used by cell phones, wireless smart meters, WiFi systems, wireless baby alarms, DECT phones, Internet of Things (IoT), Internet of Bodies (IoB), and many more gadgets/installations/systems, delivered at colossal power levels compared to the natural ones, may do to these intricate communicative mechanisms!

The above may, in addition – if replicated by independent scientists in further controlled studies – explain the observed occurrence of antibiotic resistance after exposures of common bacteria, like *Listeria monocytogenes* and *Escherichia coli*, to the radiation of 2G mobile telephony or WiFi-router fields (cf. above; see also Johansson 2017).

Soil bacteria are also affected by radiation from mobile phone towers

It must also be noted that Sharma Antim Bala and coworkers (2018) have demonstrated the impact of the radiations transmitted by mobile tower base stations on microbial diversity in soil and antibiotic resistance patterns. Soil samples were taken from near four different base stations located in Dausa City, India, while control samples were taken far from any base stations.

Isolation and identification of microorganisms were done using biochemical reactions and antibiotic resistance was observed. *Stenotrophomonas maltophilia*, *Chryseobacterium gleum*, and *Kocuria rosea* were isolated and identified in soil samples collected near radiation-exposed zones.

A statistically significant greater antibiotic resistance was observed in microbes present in the soil near base stations compared to the control, using nalidixic acid and cefixime as antimicrobial agents ($p < 0.05$). The authors stated that *“our findings suggest that mobile tower radiation can significantly alter the vital systems in microbes and turn them multidrug-resistant, which is the most important current threat to public health”*.

With the ongoing huge and highly frightening development into more and more antibiotics-resistant microorganisms around the world, this adaptive phenomenon and its potential threats to human health, according to my view, definitely and rapidly should be further investigated in controlled replication experiments, rather than only spend money and time on national action plans, commercially lowering the prizes, and flying to Mars!

“The War of the Worlds” coming true?

Talking about the planet Mars, in H.G. Wells’s famous novel “The War of the Worlds”, the invading Martians were finally successfully battled only by the bacteria, which eventually

killed them. Towards the end of the book, the narrator – to his surprise – discovers that all the Martians have been killed by an onslaught of earthly pathogens, to which they had no immunity: *”slain, after all man’s devices had failed, by the humblest things that God, in his wisdom, has put upon this earth”*.

In *”The War of the Worlds”*, Wells explores the extremes of what is possible under evolution and natural selection. Are we heading to the same extreme now, or...? Are we now seeing the sequel with the bacteria again reacting to a hostile ‘invasion’, this time of artificial, man-made electromagnetic fields and signals, but now instead killing off us – mankind – by their capacity to quickly adapt, producing new strains of antibiotic-resistant super-bacteria?!

And the only ones to actually be blamed for the extinction of ourselves are ... we and our love for ”progress”. Do we suddenly have a red doomsday button within our reach?! And are you prepared to take a chance on it?

The functional impairment electrohypersensitivity, food, bacteria, and artificial radiation

Finally, it should be noted that people with severe electrohypersensitivity have noticed a direct relationship between the severity of their functional impairment and sugar ingested (not white sugar, but sugary food), and as a result, heightened levels of electromagnetic field sensitivity. Such a direct relationship to their diet/internal bad gut load just from one day of cheating on a diet can result in a massively overwhelming and irritating increase of the electromagnetic field sensitivity during the next day.

So the impact on gut bacteria (*E. coli*; *Candida albicans*?) by diet perhaps may trigger attacks of electrohypersensitivity?

Will this also be a symptom of bacteria with a deranged communication due to the impacts of artificial electromagnetic fields and signals from our ‘smart’ world, the latter thus being not-so-smart? Perhaps it is high time to start de-smarting our life and our environment, and instead start listening carefully to our bacteria? Maybe they are trying to tell us something?

Conclusions

With all the new data from different investigations appearing, some days with several publications being released in parallel, maybe I was not wrong when I used my common sense and called for safety measures already back in the early 1980ies; maybe it was morally-ethically 100% right to sound the alarm, thus to warn everyone that we are under attack of an invisible invader using the colossal exposure levels – of modern telecommunication technologies – to conquer our cells and tissues, and change their sensitivity to pharmaceutical treatment?

From a public health point of view, the proof in the form of thousands of peer review-based scientific publications, covering various health and biological impacts, is overwhelming – *now society must act!* To instead disengage academic scientists, with great know-how and a firm scientific curiosity, from their workplaces due to “lack of money” will not sound good in the future. Not at all.

Being a mental fire brigade soldier (aka scientist), personally, I would hate to arrive at the Pearly Gates and hear Saint Peter say:

“Why did you not react and act, Olle, you understood, you knew, you saw; you could and should have done much more!”.

No, as a mental fire brigade soldier, I rather try my hardest and possibly be wrong – false alarms never make the ordinary firefighters or citizens weep, and so it should not make anyone sad or angry if my concerns are wrong. We must get out of the current society’s constant shooting at the piano player instead of listening to his or her tune, react to it, and act in a mature, adult way, using common sense.

As scientists we must have the clear, unmistakable and unambiguous right to sound the alarm, just like the ordinary fire brigade which we cherish for doing it one time too many rather than the opposite. This is a societal precautionary principle we must protect at all costs and not allow corporate, financial or political bullies to violate and destroy – never! For too long a time the latter have been allowed to run the show, and that must stop! In the name of love for life!

The above ECDC finding is potentially very important! It is part of a dangerous development I, Olle Johansson, have tried to emphasize and warn about for decades.

Science has already demonstrated that bacteria exposed to mobile phones and WiFi radiation are resistant to antibiotics. The implications of this are chilling and may easily explain the ongoing huge and highly frightening development of more and more antibiotics-resistant microorganisms around the world.

So I say again: Stop all forms of wireless energy feeds to bacteria. This potential madness must halt until we know if it is safe for everyone!

Stop! In the Name of Life!

By Olle Johansson, Ph.D, associate professor, and former head of The Experimental Dermatology Unit, Department of Neuroscience, Karolinska Institute, Stockholm, Sweden, and former guest and adjunct professor, respectively, of The Royal Institute of Technology, also Stockholm, Sweden. He is a world-leading authority in the field of artificial electromagnetic radiation and health & biological effects. Among many achievements he coined the term “screen dermatitis” which later on was developed into the functional impairment electrohypersensitivity which recognition mainly is due to his work. Read his full bio [here](#).

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