

# The Safety of 5G Telecommunication: Policy-Makers Are “Dancing in the Dark”

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## Background

In 2019, I was informed by a Scottish public health activist that  
“There is something fishy going on with the rollout of 5G  
telecommunications technology across much of the Western World.  
I think you should have a look at it...”

# My Background

- Primary Care/ Public Health Physician-Epidemiologist, broad research interests
- Four decades of experience producing/assessing scientific evidence on disease causes/prevention
- Many studies of work-related stress and ergonomic hazards, diet, smoking, and the effects of poverty
- Wide clinical experience of diverse diseases, spanning Canada and Tanzania over 21 years

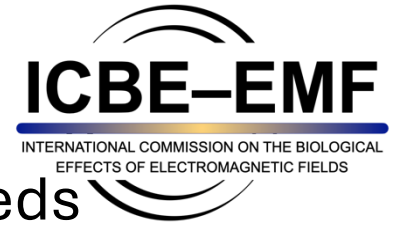
## BUT I HAD:

- No awareness of EMFs, 5G or potential harms from exposure to them
- No knowledge of current global rollout of dense networks of 5G transmission antennae, every few hundred meters, throughout every centre of population
- Dim awareness that phone-users want new technology, especially one able to provide high band-width and continuous connectivity “everywhere, all at once.”
- No awareness that much of that future market relates to driverless cars and “internet of things”

I found Scottish/English/Canadian public health research colleagues had also never heard of this controversy.

*I resolved to investigate this issue “on my own penny” to understand: 1) the extent of valid safety concerns about 5G EMFs; 2) how this situation came about; and 3) what can be done about it, in the public interest.*

# Key Findings



**2021:** Peer-reviewed commentary\* published, after reading hundreds of scientific and policy-relevant publications -- major concerns.

**2021-2024:** Even wider scientific and policy-relevant reading, discussions with global experts -- no reason to change my views.

**Currently:** I worry the world is *sleepwalking* into a potential health and environmental disaster related to adverse effects of 5G EMFs.

Yet the public, as well as most health professionals, seem to know virtually nothing about it...

\*Frank JW. EMFs, 5G and health: What about the precautionary principle? *J Epidemiol & Comm Hlth* 2021; 0:1–5.  
doi:10.1136/jech-2019-213595 (published online Jan. 18, 2021)  
Available at: <http://jech.bmj.com/cgi/content/full/jech-2019-213595?ijkey=GCK7F51Chz7Wz6o&keytype=ref>

# Five Key Issues in the Rollout of 5G Systems

1. 5G telecommunications *system status*:
  - *proliferation is rampant, without adequate health and environmental safety research*
  - virtually no human studies published of potential 5G EMF links to any disease
  - *such new technology protected by patents: not accessible to independent researchers.*
2. Emerging research on previous (2G, 3G, 4G) generations of telecoms technology:
  - *worrisome biological effects in the lab, spanning many body systems*
  - *increasingly convincing human epidemiological studies* in the field, typified by *long latencies (>20 years) between exposures and disease occurrence* (e.g. some brain cancers)
  - explains lack of earlier studies showing such links.
3. Increasing evidence that:
  - major global (and many national) *regulatory agencies for these exposures “captured” by vested interests (“Big Telecom”)*
  - *current safe-exposure limits: outdated, ignore recent research, inadequate for public safety.*

# Five Key Issues in the Rollout of 5G Systems (cont'd)

## 4. Parallel federal regulatory agency “capture”:

- UK, most EU, USA and Canada legislation pre-empts local planning processes *from even considering health and environmental concerns re new 5G installations.*
- such matters “reserved for national-level authorities with the requisite expertise.”
- local citizens thus limited to *expressing aesthetic concerns only.*

## 5. New to me since 2021 -- many *hundreds of low-altitude satellites*, for global 5G transmission, being *launched by private corporations*:

- activities in “space” apparently *not subject to any “worldly” governance.*
- yet, over time, these satellites age/lose orbital altitude, presenting *unpredictable hazards.*
- massive numbers due to “*competitive market model*” -- *unsuited to a) governance of public spaces; b) protection of the public’s health and c) preserving the environment.*

***As a result, I and many other experts internationally have called for a moratorium on the 5G rollout, pending the completion of independent, high-quality research into:***

- *its safety for humans*
- *potential adverse effects on other species and on the environment itself.*

## Subsequently...

**2023:** Contacted by ICBE-EMF (due to my journal publication):

- invited to be a Special Scientific Advisor to non-profit ICBE-EMF.
- entirely voluntary role, with no remuneration of any kind.

**2023-24:** Working with expert ICBE members from many scientific disciplines:

- current focus: co-authoring critical commentaries on emerging summaries of the research evidence on these issues, some of which are methodologically weak.
- our critiques to be submitted to full peer-review by a respected scientific journal.

In the interim, I provide – on an entirely *pro bono* basis:

- the best scientific advice I can to dozens of activist citizens, globally, who contact me regularly.
- input sought on the safety of new 5G communications equipment in their communities.
- they are appreciative of such assistance.

*Meanwhile, the entire regulatory system, in its lack of scientific foundation, is “dancing in the dark.”*