

16 June 2020

Michael Fleck

By email: fyi-request-12675-94912efe@requests.fyi.org.nz
Ref: H202002485

Dear Mr Fleck

Response to your request for official information

Thank you for your request under the Official Information Act 1982 (the Act) on 21 April 2020 for:

"In a recent Q&A on the MOH website, the following statement appears:

"5G is just another application of radio technology. There is nothing unique to 5G that would make it interact differently with the body than other radio frequency fields (radio signals). For this reason all the previous research on radio frequency (RF) fields and health also tells us about the effects and safe levels of 5G."

1. *Please identify the scientific evidence justifying this statement.*

Literally thousands of independent scientific studies demonstrate that higher frequencies of radiation interact differently with the human body. The skin absorbs this energy differently, and our skin has a role in the regulation of the immune system.

2. *Please review Dr Sue Pockett's peer-reviewed paper in the December 2019 NZ Journal of Medicine, to understand that, beyond the skin, there is cellular damage from RF radiation.*

Rather than "flying blind" and "experimenting" on the people of New Zealand, the Precautionary Principle and Article 10 of the NZ Bill of Rights require that you exercise due diligence and undertake independent testing of this technology -- testing by scientists without conflicts of interest or affiliation with the telecommunications industry.

3. *Please provide the names of the members of the Interagency Committee on the Health Effects of Non-Ionising Fields, together with their affiliations. It is essential that the public knows if any of these individuals have conflicts of interest"*

In response to part 1 of your request, please note that 5G is a term to describe a set of telecommunications protocols, not the frequencies at which those protocols will be used. Initially 5G will use frequencies similar to those used by current generations of cell phone technology (2, 3 and 4G). In the future, both higher and lower frequencies might be used. With respect to the higher frequencies (sometimes referred to as 'millimetre waves'), these have been in use for many years in communication links, and more recently in vehicle radars.

Exposure limits to protect against adverse effects have been published for several decades. The following publications are some examples of this:

- Simkó M, Mattsson MO. 5G Wireless Communication and Health Effects-A Pragmatic Review Based on Available Studies Regarding 6 to 100 GHz. *Int J Environ Res Public Health*. 2019; and
- W. H. Bailey et al., 'Synopsis of IEEE Std C95.1™-2019 "IEEE Standard for Safety Levels With Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz",' in IEEE Access. 2019

No novel interaction mechanisms have been identified that would invalidate current thinking on health effects.

In response to part 2 of your request, a response to Dr Susan Pockett's December 2018 paper was published by the New Zealand Medical Journal in August 2019.

In response to part 3 of your request, please refer to Document 1 attached to this letter for a list of members of the Interagency Committee on the Health Effects of Non-Ionising Fields, together with their affiliations.

I trust that this information fulfils your request. Under section 28(3) of the Act you have the right to ask the Ombudsman to review any decisions made under this request.

Please note that this response, with your personal details removed, may be published on the Ministry of Health website.

Yours sincerely



Deborah Woodley
Deputy Director-General
Population Health and Prevention