

4 March 2019

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Ref: H201900437

Dear ██████████

Response to your request for official information

I refer to your request of 10 February 2019 under the Official Information Act 1982 (the Act) for:

*“- Research looking the negative health effects on humans with regard to WIFI and 4G networks
Furthermore Spark (and other cellular networks) have plans to roll-out 5G wireless network (probably by 2025). What research has the government done to ensure this is safe for the population - therefore I also request the following information.
- Research into the negative (or potential negative) effects of 5G on humans
- Other information considering the ramifications of installing a 5G network.”*

The Ministry of Health (the Ministry) has not done any research specifically on 4G and 5G transmitters, however, the Ministry website has links to many of the significant review papers that guide its policy and advice on this subject and research conducted on related topics. This information is itemised in Appendix One of this response.

The balance of research evidence suggests that exposure to the radiofrequency fields produced by cellphones, cellphone networks and WiFi does not cause health problems, provided they comply with international guidelines. Research reviews since the introduction of cellphones and WiFi have not found persuasive evidence of any adverse effects of exposures at levels which comply with those guidelines.

The Ministry recommends the use of exposure limits as outlined in New Zealand standard: NZS 2772.1:1999 Radiofrequency fields- Maximum exposure levels- 3 kHz to 300 GHz. This Standard sets limits on exposures to radiofrequency radiation, produced by all types of radio transmitters (including 5G transmitters), for both the workplace and the general public. These limits are consistent with international guidelines.

The Ministry also convenes an expert advisory committee, known as the Interagency Committee on the Health Effects of Non-Ionising Fields, to review new research. The Committee meets every six months, and its terms of reference require that should there be reasonable suspicion of health hazards, or other issues of significance, these be brought to my attention. The Committee will continue to monitor new research as and when it becomes available.

In addition, the Ministry participates in a World Health Organisation project to assess the health effects of electromagnetic fields. You can find more information and links to the research on the Ministry's website by searching 'research into non-ionising radiation'. This page is regularly updated and links to recent research are included.

I trust this information fulfils your request.

You have the right, under section 28 of the Act, to ask the Ombudsman to review any decisions made on this request.

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

Yours sincerely

A handwritten signature in blue ink that reads "D/ Woodley". The signature is written in a cursive style with a large initial "D" and a long horizontal stroke.

Deborah Woodley
Deputy Director-General
Population Health and Prevention

Appendix One

<p><i>Research looking the negative health effects on humans with regard to WIFI and 4G networks</i></p>	<p>www.health.govt.nz/publication/interagency-committee-health-effects-non-ionising-fields-report-ministers-2018 www.health.govt.nz/your-health/healthy-living/environmental-health/household-items-and-electronics/cellphones www.health.govt.nz/your-health/healthy-living/environmental-health/radiation-environment/cellsites www.health.govt.nz/our-work/radiation-safety/non-ionising-radiation/research-non-ionising-radiation www.health.govt.nz/our-work/radiation-safety/non-ionising-radiation/independent-cellsite-monitoring www.health.govt.nz/your-health/healthy-living/environmental-health/household-items-and-electronics/wifi-networks</p>
<p><i>What research has the government done to ensure [5G wireless network] is safe for the population... Research into the negative (or potential negative) effects of 5G on humans Other information considering the ramifications of installing a 5G network</i></p>	<p>www.health.govt.nz/our-work/environmental-health/non-ionising-radiation</p>