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Radiofrequency expert warns 5G radiation could be carcinogenic

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Thursday, 14 February 2019 6:11PM



‘Once deployed it will not be possible to avoid 5G radiation exposure ... our environment will be very much saturated with low-power millimeter-waves in order for 5G to perform correctly.’ Picture: AAPIMAGE



News of the [rollout of 5G technology across WA](#) has been eagerly received. But is the

technology safe? One of the world's leading radiofrequency experts isn't so sure.

5G is the 5th generation of mobile networks and represents a significant leap forward from today's 4G services. It promises to deliver ultrafast speeds with astonishing connectivity, transforming the world around us into a smart one with boundless potential.

But not all are welcoming the rollout, amid concerns the technology may pose serious health effects.

Professor Dariusz Leszczynski is one of the world's leading figures on the impact of radio frequency emissions, and was one of 30 experts who made up the International Agency for Research on Cancer/World Health Organisation 2011 evaluation group that classified all radiofrequency emissions - including parts of 5G - as potential carcinogens.



🎥 Videographic explaining fifth generation mobile, or 5G wireless technology, that will bring near-instantaneous connectivity, vast data capacity and futuristic technologies.

The expert voiced his concerns at a public lecture at Queensland's Griffith University in 2017, urging more research into long-term health risks before deployment.

Eighteen months on Professor Leszczynski said his concerns remain, and stressed reports 5G was safe were based on “assumption” rather than proof.

“(Since the 2011 IARC classification) there have been a few published studies that strengthened the notion that wireless radiation is possibly carcinogenic (2B) or might be even probably carcinogenic (2A),” he said.

“The 5G’s millimeter-waves - similarly to 1G, 2G, 3G, 4G - were not tested for their impact on human health before deployment. Permission to deploy wireless technologies was, and remains, based solely on an assumption the low power emitted by these devices will not have an effect on human health.

“5G’s millimeter-waves were never tested for human health hazard and there is only a very limited number of studies on biological effects. In practice, we do not know what the health effects of long-term and close proximity exposures might be.

“Once deployed it will not be possible to avoid 5G radiation exposure ... our environment will be very much saturated with low-power millimeter-waves in order for 5G to perform correctly.”

Dr Ken Karipidis of Australia’s radiation safety government body, the Australian Radiation Protection and Nuclear Safety Agency, said the agency was satisfied radiation exposure levels fell well below Australian standards, which are based on international guidelines.

“As long as exposure to radiofrequency is below the current Australian standards then there are no established health effects,” he said.

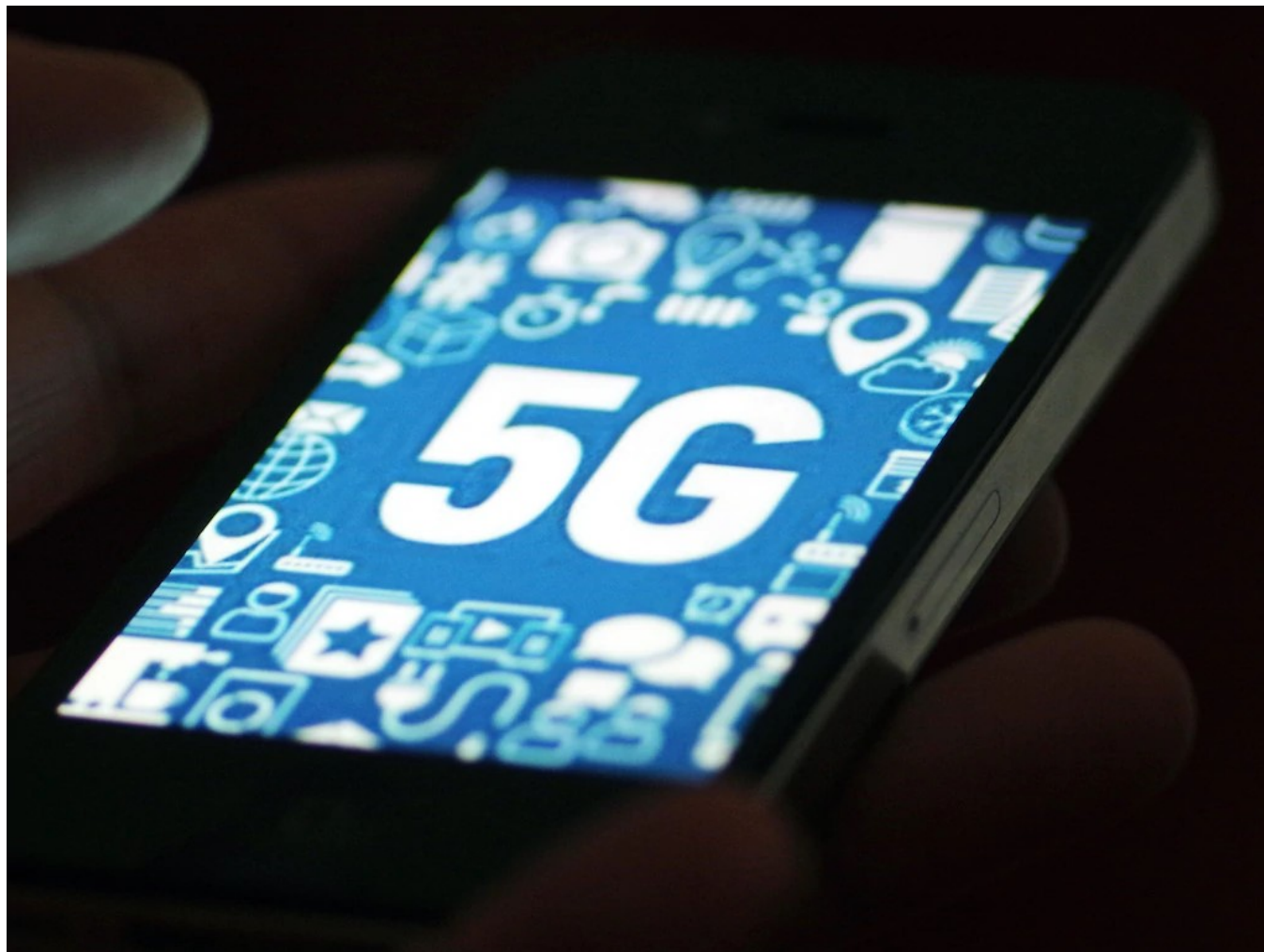
“From previous technologies - 2G, 3G and 4G - exposure has not only been below the standards, but has been many thousands of times below the standards. This is in terms of the towers.

“In terms of phones exposure varies, but it’s usually about a third of the standard.

“A lot of people are scared about 5G like it’s something different. It’s not. It uses radiofrequency fields just like older technologies.

“It’s important for ARPANSA to continue to measure this type of radiation in the environment to make sure it’s under the standard.

“There are 20-30,000 mobile phone bases in Australia so we can’t go and check all of them, but we do periodic surveys every time there’s a concern within the general public about technology. We did it a few years ago with 4 and 3G technology so it’s important we do it with 5G as well, not because we think the carriers will do something wrong but to give confidence to the Australian public.”



📷 5G is the 5th generation of mobile networks and represents a significant leap forward from today's 4G services. Picture: AP

Principal for Telstra’s Electromagnetic Energy Strategy, Governance and Risk Management program Mike Wood said the carrier acknowledged concern, but that it took its health and safety responsibility seriously.

“The WHO and ARPANSA advise there is no substantiated scientific evidence that radiofrequency technologies that operate within national and international safety standards cause health effects,” he said.

“5G wireless networks are designed to be very efficient and minimise EME. This means both the network and device power will be low, which means low levels of electromagnetic fields on 5G.

“Telstra has conducted extensive EME testing on the 5G trial networks, and the test results show EME levels are similar to the existing 3G and 4G mobile technologies and well below the EME safety limits.”

Professor Leszczynski said he acknowledged levels were below the standards, but denied exposure was safe and called for a revision of the safety limits and reduction in mobile phone radiation emissions.

“Epidemiological studies have shown use of such cell phones that were compliant with the current safety standards and emitted radiation levels that were below current safety limits for over 10 years led to an increased risk of developing brain cancer,” he said.

“The current safety standards are insufficient to protect the health of users.”

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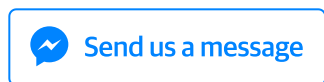
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