Australian Government

Fact Sheet

THE SCIENCE OF SAFE CONNECTION. EXPLAINED.

EME from telecommunications such as 5G and Wi-Fi is harmless to humans. This has been proven over many years. But don't take our word for it, look at the evidence.

EME from telecommunications such as Wi-Fi and 5G is ...



RESEARCHED

- EME was discovered in the early 1800s. Scientists have been studying it for decades.
- EME from telecommunications is constantly being researched by leading bodies, including the World Health Organisation.
- Scientific research concludes that EME from telecommunications is not hazardous to human health.
- Scientific reviews of the research are conducted regularly, and the standard for Maximum Exposure Levels of RF EME from 100 kHz to 300 GHz set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) was last updated in March 2021 to reflect the latest research.



REGULATED

- ARPANSA, the Australian Government's leading research authority, uses the scientific research to set strict, safe limits on EME.
- These limits are far within what international best practice says is safe.
- ACMA, Australia's regulatory authority, then strictly enforces the limits.
- These controls apply to telecommunications equipment and infrastructure, including 5G.
- Every telecommunication base station in Australia must fully report on their compliance, to meet operational safety regulations.



SAFE

- Radio waves used in telecommunications are at the low end of the EME spectrum. This means they are non-ionising, and therefore don't have the energy to harm our DNA.
- EME is emitted by the earth, the sun and even human beings.
- We've been living with devices that emit safe levels of EME for hundreds of years, since the invention of the telegraph in the early 1800s.
- Your home is filled with these devices that emit safe levels of EME, including your TV, remote controls and toaster.
- The World Health Organisation reviews all the research and has found that there is no convincing scientific evidence that EME from base stations and wireless networks causes adverse health effects.