

No evidence mobile signals affect fertility

The Australian Mobile Telecommunications Association (AMTA) relies on the consensus of national and international health authorities such as the World Health Organization (WHO) who have concluded there is no convincing scientific evidence that mobile phone signals affect fertility.

There has been limited scientific research on mobile phone use and fertility and the results of the sparse body of evidence have been inconsistent.

Many studies have significant flaws in their design or analysis and often fail to account for lifestyle factors such as stress, diet, obesity, smoking, occupation and drug and alcohol use, which can all affect male fertility.

In assessing fertility it is also essential to note that sperm count varies widely over time and temporary low counts are common.

What do the experts say?

The current (June 2011) World Health Organization (WHO) [Fact Sheet N° 193](#) on Electromagnetic fields and public health - mobile phones, concluded:

A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use.

A [review](#) of the scientific literature by the German Federal Office for Radiation Protection (BfS) has concluded that the current findings provide no evidence that electromagnetic fields from mobile phones affect male fertility.

Studies in humans consistently show a reduced fertility in frequent mobile phone users, but this is most likely caused by the lifestyle of this group and not by electromagnetic fields. Laboratory studies show mainly thermal effects above the recommended limits, which can be explained by the high temperature sensitivity of sperm. Such high loads do not occur in everyday life. ([Translated from German](#))

A comprehensive review of all the scientific evidence by the UK Health Protection Agency's independent Advisory Group on Non-ionising Radiation (AGNIR) in April 2012, [Health Effects from Radiofrequency Electromagnetic Fields](#), concluded:

Despite many studies investigating effects on male fertility, there is no convincing evidence that low level exposure results in any adverse outcomes on testicular function. A lack of consistent field-dependent effects has also been reported on adverse birth outcome and development in rodents following prenatal or early postnatal exposure to a variety of signals associated with mobile phones and wireless communications.

A 2009 Polish review which considered possible environmental factors, found existing studies involving mobile phones only 'provided limited support' for the hypothesis they adversely affect



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semen quality. The review said the primary weaknesses of such studies were the large natural variation in semen quality not only between men but across time within the same man, exposure assessment, selection bias, and a lack of knowledge about mechanisms.

The International Commission on Non-Ionising Radiation Protection (ICNIRP) said in their [2009 review of RF health effects](#) that:

Overall, problems of exposure assessment temper any conclusions regarding reproductive outcomes, and no adverse effects of RF have been substantiated.

Also, a [comprehensive review](#) prepared for the European Commission in November 2007 on electromagnetic fields and fertility found no evidence of adverse effects. The report concluded:

Overall, the literature indicates that exposure to low intensity fields, at levels experienced by members of the public, should not have a significant impact on fertility or on development either before or after birth.

The National Radiological Protection Board in the UK [published a review](#) in 2003 on the influence radiofrequency (RF) energy has on reproduction. The review states:

Overall, there has been no convincing evidence that exposure to low level RF fields can affect reproduction and development in mammals; where consistent effects have been reported they can be attributed to the thermal insult induced by RF exposure.



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