

# What parents need to know about the safety of mobile and Wi-Fi-enabled technologies

**Do your children use mobile/smart or cordless phones?**

**Do your children use iPads or other wireless tablet computers?**

**Do you have Wi-Fi at home or in your children's schools?**

Many parents are giving these devices to their children to use. But there is a problem. Scientists and doctors are warning that children shouldn't be using them and yet very few people know about it. Scientific studies have demonstrated that these technologies have **serious and life-threatening side effects**. There are so many studies now that mobile phones and Wi-Fi can no longer be considered safe. With government and industry making so much money from mobile communications, they may not admit the damaging effects for some time. However, if you are aware of the risks then you have the opportunity to choose safe alternatives.

- The World Health Organisation's International Agency for Research on Cancer has classified wireless phone and Wi-Fi signals as a possible human carcinogen (2B).
- Many doctors and scientists are calling for children not to use mobile phones or Wi-Fi-enabled technologies: The Austrian Medical Association, The American Academy of Environmental Medicine, The International Commission for Electromagnetic Safety, The Russian National Committee for Non-Ionizing Radiation Protection and many more (<http://wifiinschools.org.uk/resources/safeschools2012.pdf>).
- The UK Chief Medical Officers recommend that children under the age of 16 use mobile phones for essential purposes only. Similar specific absorption rates (SAR) for tablets and mobile phones suggest that this advice should also be applied to wireless tablet computers\*\*.
- The Italian High Court ruled that an employee's brain tumour was caused by his use of wireless phones for work. An employee in Australia successfully won compensation following illness which was attributed to electromagnetic fields in the workplace.
- Mobile and cordless phones have been found to significantly increase the risk of head and brain tumours. The risks were highest for those who first used a wireless phone under the age of 20 (<http://www.spandidos-publications.com/ijo/35/1/5>). Wireless signals increase the proliferation of human leukaemia cells (<http://www.ncbi.nlm.nih.gov/pubmed/22489926>). Doctors are also warning about mobile phones and breast cancers (<http://www.ktvu.com/videos/news/special-report-keeping-cell-phone-in-bra-may-lead/vhPF8/>).

- Mobile phone and Wi-Fi signals can indirectly\* fragment DNA in cells which may lead to cell death, mutations and cancers (\*they increase oxidative stress and the damage caused by free radicals).
- Mobile phone and Wi-Fi signals have been found to decrease fertility.
- Mobile phone and Wi-Fi signals have been found to change human brain activity. They inhibit learning and memory or decrease a measure of attention in human/animal studies.
- Mobile phones during pregnancy can lead to developmental abnormalities in the offspring in animals, including hyperactivity, decreased fertility and altered brain development.
- Mobile phone signals decrease the ability of human haemoglobin to carry oxygen.
- Cordless phones were found to trigger fast and irregular heart rates in some people.
- ...the list could go on...

**If the above side effects were the result of an oral medicine and not the absorption of radiation through the skin, would you give it to your children every day?**

#### **What can you do about it?**

**It is hard to choose not to give your children something when others are letting their children use it. But there are safe alternatives. Children can use wired landline phones and wired internet connections for computers at home and school. You can choose to switch off Wi-Fi at the access point and on the computer.**

**We can choose to protect children from these serious side effects, because they deserve the best chance of a healthy future.**

The above technologies emit microwave, radiofrequency radiation, from the transmitters inside of them and **we absorb some of this radiation into our bodies**. Modelling studies predict that children absorb 60-100% more into their brains than adults and 900% more into their bone marrow. Children are more likely to be damaged by any effects of wireless technologies because their bodies are still developing; cells are dividing more; their skulls are thinner and their brains more conductive, carrying the signals further into the brain.

Examples of scientific papers which describe side effects can be found at:

<http://wifiinschools.org.uk/resources/Wi-Fi+papers.pdf>; <http://wifiinschools.org.uk/resources/extracts.pdf>.

\*\* Average maximum SAR for 358 digital mobile phones is 1.02 W/Kg in 1g tissue (sarvalues.com; adult); iPad maximum SAR on Wi-Fi is 1.19 W/Kg in 1g tissue (iPad Information Guide; adult).

**Please pass on to others, so that they too have a choice.** www.wifiinschools.org.uk 2014