

Electromagnetic Fields and Kids Factsheet



Have you noticed how at ease your kids are with a mobile phone in their hands? Isn't it nice that they can wander about the house and garden, surfing the Internet on their laptops? And aren't game consoles (and transformers) so much better now that you haven't got all those wires wandering all over the place?

All of this is great – but there is a downside. And this is that our kids are going to be the first generation of humans to be experiencing Electromagnetic Field (EMF) pollution throughout their whole lives.

Recent scientific studies have begun to provide us with a glimpse of the resultant health problems. A study in Denmark revealed that 54% of children born of mothers who were mobile phone users had behavioural issues. If the children grew up to be frequent mobile phone users, that percentage rose to 80%. That's 4 out of 5 children – a staggering figure.

Now 13% of 3 year olds have used a mobile phone, rising to 23% of 3-6 year-olds, 50% of 5-9 year-olds, and by secondary school 97% of children have their own mobile phone, a massive increase in usage since 2004.

But mobile phones are not the only emitters of EMF radiation. There are myriad other sources of EMFs in our homes and schools. WiFi routers, laptops and PCs, game consoles and transformers, smart meters and microwaves all emit EMFs. There are also external sources: TV, radio and mobile phone masts, and high voltage power lines to name a few. These have all been linked to increased cancer risks.

EMFs are a form of energy. You can't see them, nor can you smell them. But they are all around us, and they penetrate walls. They have many uses. We use them in our mobile and cordless DECT phones and other wireless devices, to communicate. We use them in microwaves to heat our food.

Children are at a higher risk because they absorb more EMF radiation than adults. This is because their bodies have a higher water content, which makes them more conductive to the radiation. They are also more vulnerable because their skulls are thinner, their brains are still growing, their immune systems are still developing, and their cells are still rapidly dividing.

We can only imagine the cumulative health effects on a child who has been exposed to EMF radiation all their lives. After two, three or even four decades of exposure, when we generally start to see environmental effects like tumours, the health effects will most likely be staggering.

You need to start informing, and protecting, your children now and there are several things that you can do as a parent to reduce your children's exposure to harmful EMF radiation.



EMF Radiation Reduction Tips For Kids

Mobile phones

Mobile phones offer a convenient way to stay in touch with friends and family. But for children, the risks may outweigh the benefits. If you do buy your child a mobile phone, explain to them the dangers. Encourage them to text rather than talk. Remember to tell them to hold their phone away from the body when they send the text. It communicates at maximum power then. Long drawn out conversations are to be avoided – they should only be talking in an emergency. If you have a mobile phone, do not use it while you're near your child.

It is important to note that Mobile phones emit Radio Frequency frequently when on standby, even when it is not in use. It tries to make contact, at full power, with the nearest base station to maintain the connection. If it is in a poor signal area, it may do so more than once a minute, trying to get a better signal. This will lead to a cumulative high exposure. This makes it all the more necessary to avoid carrying the mobile close to the body

Cordless (Dect) phones

Cordless phones use EMFs to communicate between the handset and the base station, just like mobile phones. The base unit is constantly bathing your home with EMF radiation. If you do have a cordless phone, make sure the base is nowhere near your child's bedroom. The base works a like mini mobile phone tower, so try to keep it away from your children as much as possible. Better still, get rid of the cordless phone and install a corded phone or a Dect phone that has an eco-setting (Siemens Gigaset make one) and this only emits when in use and not on standby.

WiFi

WiFi is probably the greatest contributor to your child's EMF exposure. WiFi also emits the same kind of radiation as mobile phones. With Wi-Fi the radiation is continuously emitted. Measurements have shown that Wi-Fi radiation can be three times stronger than EMF radiation from a mobile phone mast.

If you have a wireless network in your home, replace it with hardwiring (Hard wiring systems called dLAN can be purchased from Amazon). If you're unable to get rid of the wireless router, place it away from any living areas. Make sure it's not next to, or below, your child's bedroom as WiFi penetrates walls. When you're not using the wireless network, turn it off! Your children could also be exposed to WiFi radiation in their schools. "EMF aware schools" are now removing WiFi networks from their school grounds. If your child is in a school that has a wireless network, petition the schools to move to hardwiring.

Video Game Consoles

Newer game consoles come with wireless controllers that are a growing source of EMF radiation exposure to our kids. Wireless game controllers use WiFi or Bluetooth technology in their operation – this means they generate WiFi and Bluetooth radiation. Sony's PlayStation 3 uses EMFs to communicate between the handheld units and the main console, as does the Nintendo Wii. For the Sony PlayStation 3, buy your child wired controllers instead of the wireless versions. For those games where wired controls are not available, make sure your child switches off the console when he or she is not using it.



Specifically for babies

While EMFs are dangerous for adults, they can be life threatening for babies. Here's why...

- Babies' skulls are thin. This allows for radiation to penetrate deep into the brain. Experts attribute the rise in autism and brain tumours in children to EMF exposure.
- Babies are growing fast. This means their cells are dividing really fast. Every time a cell divides, it makes a replica of itself. Stuff like radiation can cause the new cell to be mutated. Mutated cells are also known as cancer.
- EMF exposure weakens the immune system. Babies don't yet have fully formed immune systems. This is why babies are so susceptible to colds and infections. Expose them to EMF's, and they become even less able to fight off bacteria, viruses or fungi.
- What's more, pathogens thrive in radiation. That's why babies whose cribs are over ground radiations (Geopathic Stress Zones) have a higher incidence of Sudden Infant Death Syndrome.
- Babies who sleep near a Baby Intercom are being exposed to dangerous microwave radiation. We can't control everything, but we can control the amount of EMFs our babies are exposed to. And it's pretty simple to do.
- Digital wireless baby monitors emit pulses of electromagnetic radiation directly into your baby's bedroom even when they are not actively making noise. Some models will emit radiation frequency equivalent to that of a microwave oven. It is recommended that you use low band (35 to 50 MHz) analogue baby monitors. Or a webcam linked via a wire.
- The baby monitor mats that check temperature, heartbeat, breathing, etc, should only be used if you have medical reasons to believe that your baby might be in danger of sudden infant death. When used with a wireless baby alarm they carry high levels of microwave radiation (up to 6 volts per metre) right into the cot, which cannot be good for the baby
- Do not have your WiFi, your cordless phone base or your mobile phone close to where your baby sleeps or spends any time.
- Do not use the microwave to warm your baby milk or food because microwaves significantly deplete the nutritional value of food.



- It is important to bear in mind when lighting your baby's room that there is increasingly strong evidence that light-at-night is bad for everybody, especially babies and children. This is because special cells in the back of the eye detect the light, even when you/they are asleep and it stops the pineal gland producing melatonin. Melatonin is the chemical that protects the body against damage by "free radicals" that could otherwise cause cancer or other serious developmental damage
- If you, or your child, needs some light at night then it should be very dim and red or orange in colour. The plug-top orange-glow-plugs are ideal. They provide enough light to see around the room when you wake up, or once your eyes have become adjusted to the dim conditions, and they do not stop melatonin from being produced.

There are now numerous studies attesting to the dangers of EMF radiation. And when the danger is to our children, it's better to be safe than sorry. Our children are our future; protecting that future is the key responsibility of parents. Being informed and vigilant is ultimately the best way to be safe.

To find out more about consultations that can help reduce the risk of EMF exposure, please get in touch:
07775 617400 or info@lighterspaces.com

Information sourced with recognition for their knowledge and expertise from: EMFields and Powerwatch and Modern Hippie Mag's published article by Lloyd Burrell 'Living a naturally healthy life in our electromagnetic world' (Electric sense).