



#### **Protect**

children and pregnant women against potential risks of radiation emitted by wireless devices and Internet connections, mobile phones, baby monitors and wireless Internet connections e.g. via WI-FI, mobile data



"Non-ionizing electromagnetic radiation (EMR) radiofrequency (30kHz - 300GHz) including radiation emitted by mobile phones, Wi-Fi and other wireless devices/communication connections, is possibly carcinogenic (Group 2B) to humans"

(World Health Organization, 2011)

While research is in process, based on existing scientific evidence and the Precautionary Principle, **reduction of child and fetus exposure** and effective protection, is the only responsible choice,

These guidelines will provide you with useful information on how you can protect your children.

Translation of 2<sup>nd</sup> revised edition, October 2016





...Say yes to healthy and joyful Activities
Stay away from radiation emitted by
Wi-Fi, mobile phones etc.

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Besides the increase of cancer risk, according to thousands peer review studies, exposure to this kind of radiation [Nonionizing electromagnetic radiation (EMR)] - on humans and especially children - can possibly cause the following effects:

## Direct effects particularly noticeable on children as a result of relative short-term exposure:

 Sleep disorders, attention deficit, concentration problems, learning disabilities, "inexplicably" poor school performance, headaches, irritation, ear buzzing etc.

#### Long term exposure effects:

- Effects on fertility, destruction of nerve cells, associated with neurological disorders, depression, behavior problems, autism, ADHD etc.
- Increase in stress hormones, development of free radicals and DNA damage (as a result of oxidative stress).
- Decrease in the ability of brain vessels (blood-nerve barrier) to prevent certain toxic substances from passing from the blood into the brain.
- Decrease in melatonin production (which is a major anticancer mechanism and important in repairing damage to cells and especially to DNA).
- Destruction of myelin (protecting nerve cells) or interference with the effective transmission of signals from one neuron to another in fetuses and children.

Attention! These effects are likely to occur even at low intensities of radiation, well below the existing "acceptable" levels, especially in conditions of prolonged, multiple and frequent exposure.

# PROTECT the fetus and child because they are particularly vulnerable (World Health Organization)

Any potential effects will be <u>much greater</u> and <u>more serious than for an adult</u>, for the following reasons:

- The brain begins to develop within four weeks of conception. If the pregnant woman is exposed to radiation, then the fetus cannot be protected and is also exposed.
- The brain of both fetuses and children is undergoing continuous programming and development.
- Their cells proliferate more rapidly and as a result they are more vulnerable to any genetic damage that may be caused by EMR.
- The reproductive, immune and other systems are also being developed.



A child's brain absorbs more electromagnetic radiation as compared to adults, since the child's brain has:

- greater conductivity,
- smaller size,
- thinner cranial bones and
- shorter distance from the transmitter.
- Exposed to radiation and its effects for a longer period of time, and with more years of life ahead of them, children have a greater risk of developing long-term diseases, such as cancer.



# The only choice, based on the Precautionary Principle, is PREVENTION, meaning REDUCING the EXPOSURE to ELECTROMAGNETIC RADIATION

#### Measures to reduce the exposure:

- <u>Maximizing the distance</u> from sources of radiation, is your greatest ally.
- The <u>multiple and/or simultaneous</u> (from many sources), <u>frequent</u> and <u>continuous</u> exposure <u>increases</u> the risk. It is therefore mandatory to <u>reduce</u> the overall <u>duration and frequency of</u> use.
- The use should be inversely proportional to the age of the children.
  - Mobile phones should NOT be given to children under the age of 14 and preferably not under the age of 16.
- Preference should be given to <u>wired</u> devices and connections -<u>Turn off</u> Wi-Fi, Bluetooth, and mobile data when not in use, in particular when children are nearby.

## DO NOT EXPOSE CHILDREN AND FETUSES TO...



It is up to us to reduce the exposure, especially of our children, to non-ionizing radiation.

#### A. General Advice:

- We read phone manuals very carefully and follow all recommendations, especially the suggested distances to be kept. We take advantage of wired headphones and loudspeaker.
- We make use, as much as possible, of our Landline telephone. It is safer than our mobile phone and the cordless telephone.
- We do not use our phone in the car, especially in the presence of a pregnant woman or a child, unless we have an external mobile phone antenna and wired connection between our phone and the car system. "Passive exposure" is very High.

## Mobile phones, tablets, laptops: They are not toys or a means of entertainment for children.

They can be used by children only as simple devices, i.e. on flight mode and with Wi-Fi, bluetooth and mobile data turned off. Games, songs etc., should be downloaded and saved in advance by parents. However, their use must still be limited and proportionate to the age of the child. Minimum use for children at preschool age, and no use at all for infants and children below 2 years of age.





#### B. Protection of fetus and child

- Pregnant women should avoid or strictly restrict the use of mobile or cordless phones and always use wired headphones (hands-free) or loudspeaker, placing the mobile phone away from her, and especially away from her belly.
- Devices such as mobile phones, laptops or tablets with wireless connection must be kept away from a pregnant woman's belly or from breastfeeding women or from women holding children in their arms.
- We do not let young children listen to music or play games on the mobile phone when connected to the internet (when mobile data or Wi-Fi is turned on). Parents should always download from the internet and save on the device any games in advance. The mobile phone should be in flight mode when used by a child, with both the Wi-Fi and bluetooth turned off.
- We protect pregnant women and children from "passive exposure", keeping a distance of at least 1 meter while on the mobile phone. When using wireless internet (Wi-Fi or mobile data), the distance kept should be as far as possible. In general, when parents hold their children in their arms or when close to them, they should not use or hold their mobile phones. Furthermore, they should not place the mobile phone on or anywhere near the child's stroller. The risk is higher if the mobile device is a smartphone (connected to the internet via Wi-Fi or mobile data).

Beware of wireless digital intercommunication devices and baby monitors.

This long lasting radiation very close to the child's body, is a potentially dangerous because this happens in particularly active and sensitive period of the brain and nervous system development.. There is a risk of irreversible damage to the infant's brain. Analogue-type devices are considered less dangerous. However, the safest option is wired devices. In any case, the devices should not be placed in the child's cod, but at a distance of at least 2 meters!



#### C. Protecting teenagers

- Mobile phone use is not recommended for children under the age of 14 and preferably not under the age of 16. The use of mobile phones should be limited to absolutely necessary, with short duration calls and with Wi-Fi or mobile data turned off. You have to make the right choice of mobile phone depending on the teenager's age, without "unnecessary/ dangerous" internet access capabilities. In this way, the risk of increased exposure of children to radiation, as well as their exposure to serious psychological, social etc., harassment and exploitation is avoided.
- If teenagers use smartphones, adults must explain that the aforementioned need to turn off mobile data or Wi-Fi when they are not accessing the internet to drastically reduce their exposure to radiation.
- Boys should not put their phone in their front pockets and girls should keep it away from their arms or chest.
- They should never use their phone when in motion or in places with weak signal (e.g. in underground or enclosed spaces). In such cases, the radiation emitted by mobile phone increases.



- SMS texting instead of phone calls for exchanging short messages should be encouraged.
- Loudspeaker or wired headphones (hands-free) should be used. These two tools are preferable to using bluetooth as it also emits radiation. When the mobile phone is not in use, bluetooth should always be turned off.
- When the above precautions are not taken, they must at least share the talk time by holding the mobile phone on both sides of the head.
- •When they are on the phone, they should keep a distance of at least one (1) meter from pregnant women and children. They should also protect themselves, keeping the same distance from someone using a mobile phone or other devices, e.g. tablets. If, at the same time, the mobile phone is connected to Wi-Fi or 3G or 4G e.t.c., the distance kept should be as far as possible.



#### WIRED CONNECTION SHOULD BE PREFERRED

over wireless (Wi-Fi) both at school and at home



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A significant amount of radiation is emitted as a consequence of wireless connection to the internet via Wi-Fi. This radiation has a great impact on the user, as well as on those around him, during information retrieval and management on the internet.

The intensity of the exposure is multiplied if many devices are operated at the same time, especially in areas with powerful routers. In a classroom with Wi-Fi connections, the student is actively exposed to radiation through his/her own computer and passively through the computers of his/her classmates.

#### At school and playgrounds:

- Avoid installing and using Wi-Fi in nurseries, playgrounds and schools. If however, there is Wi-Fi at nurseries/ playgrounds and schools, such measures must be taken to as to eliminate the exposure of children:
  - 1. Wi-Fi routers should never be placed or operated in sleeping or playing rooms, or in adjoining rooms. The distance from the routers must be at least 4 meters and preferably 10 meters even if there is a wall in between.
  - 2. Wi-Fi at nurseries or schools <u>should be turned off</u> at the presence of children.

#### At home / office:

- Routers should not be placed in children or pregnant women's bedrooms or play areas, while the distances mentioned above should be kept. Routers should be kept off when children are present and generally when not in use. Definitely, it should always be kept closed during the night. Use the ON/OFF button to reduce unnecessary exposure time.
- Pregnant women, in particular, should avoid direct exposure to wireless connection via Wi-Fi or Mobile data, both at home and at work. If, however, it is imperative to use the internet at work, they should connect to the internet using a wired connection. Under no circumstance should a pregnant woman sit near a router or in between a router and her computer.

In general, wired telephone and device connections are SAFER in terms of radiation.

Furthermore, phone calls over the internet using wired connection are also recommended.



## USE TECHNOLOGY SAFELY: CHOOSE WIRED CONNECTION OVER WI-FI

"Nurseries, schools and homes, where children spend 60-90% of their time, should become an oasis of protection against the radiation emitted by wireless devices and connections"

I NEVER RISK EXPOSING MY
FETUS or CHILD to RADIATION
THAT MIGHT INTERFERE WITH
THE DEVELOPMENT AND
OPERATION OF THEIR BRAIN
AND OTHER BODY SYSTEMS AND
THAT IS POSSIBLY
CARCINOGENIC

Parents must have the last say when it comes to creating safe havens for the education, living and entertainment of their children.





Myrsini Manitaki Loizou, 5,5 years old

### Kindergarden children send their own message:

"If you love us then why do you expose us to radiation emitted by Wi-Fi and your mobile phones? We spend most of our time at nursery school and at home. We demand at least in these spaces that we love a lot, that you provide us with a safe radiation-free environment. We have the right to health and you can and must protect us!"



Anna Vasiliou, 6,5 years old

... Children have the Right to Health. Parents, you are responsible for protecting your children, especially at home, where the decision is yours and yours alone.

TURN YOUR HOUSE AND YOUR CHILD'S SCHOOL INTO "AN OASIS OF PROTECTION", KEEPING THEM BOTH FREE FROM THE RADIATION EMITTED BY mobile phones and other wireless devices and Wi-Fi.



#### For more information:

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